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3rd - 7th August 2020

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The 34th World Conference of ISME was planned to take place in Helsinki, Finland. An enormous amount of work went into the planning process. Accordingly, ISME wishes to recognise, in particular, Riikka Louhivuori and the management and staff of Confedent, the Helsinki Conference organisers.

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**NAMM (National Association of Music Merchants)**

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Foreword

It is my pleasure and honour to have had the opportunity to Chair the Scientific Committee for the 34th World Conference of the International Society for Music Education. I particularly want to thank our President Prof. Susan O’Neill for her support and guidance, and of course the seventeen expert Scientific Committee Theme Leaders and their teams of reviewers.

It hardly needs stating that 2020 has been a challenging year. In preparing these Proceedings I have been struck by the fact that this is a ‘pre-Covid’ group of papers – a snapshot of the challenges and issues facing music educators just prior to the pandemic that led to our World Conference, scheduled to take place in Finland, to being cancelled. Reading this collection now feels rather like looking back at another time, as we collectively face even greater challenges in advocating for the survival and development of progressive music education around the world. Yet, the issues explored in this collection - ranging through inclusion, equality and diversity to performance pedagogies, curriculum issues, issues around emotional and social development through music education, music technology education, career development in music education and more – are increasingly important.

With regards to the Proceedings for the 2020 World Conference, we have taken the deliberate decision to be as inclusive as possible, for example, giving authors the opportunity to revise their work as part of the peer review process; supporting early career researchers and practitioners in the development of their papers; and attempting to curate a collection of papers that represents the diversity within our ISME membership. As an international community of researchers and practitioners, we can be proud of the work represented here.

Andrea Creech
Chair, ISME 34th World Conference Scientific Committee

4 August 2020
New perspectives in didactic music games: Using synesthetic resources in an educational music minigame
Paula Fernanda Alfaro Barrales, G. Coutinho Natucci, & A. do Nascimento Araujo Mendes
State University of Campinas (Brazil)

Abstract
Characteristics of synesthesia have been recently implemented as a resource in digital games. However, there is a limited number of games designed for music education that use synesthesia. This phenomenon allows us to expand perspectives in different types of games and create complex relations and dynamic interactions between game and player. The intention of this research was to investigate the importance of the use of this phenomenon in the context of games for music education. In this work, different uses of synesthesia in arts are presented, specifically in the musical arts and in some music methods that use these characteristics. Also, some digital games, considered as popular, that use different characteristics of synesthesia as an essential feature will be examined. Then, it will be discussed if the number of music games intended for music education is sufficient or not. For this, the methodology includes content analysis of literature and videos on the subject. This, to find some relations between the concept of synesthesia and its use in digital games. Finally, some examples of uses of synesthesia in games will be contextualized in a music digital minigame proposal for music education, that uses the relation between color and sounds.

Keywords: music education, digital games, synesthesia, digital music games.

Introduction
Have you ever smelled something and remembered a place? Or, have you ever eaten something and thought of someone? These characteristics have to do with the phenomenon called synesthesia. Although “there is still ambivalence and debate about the essential criteria that define synesthesia” (Lynall, 2013, p. 959), we can say that for some people there is an innate possibility of mixing senses: vision, smell, taste, hearing, and touch as a response to different stimuli. This phenomenon, known as synesthesia, “comes from the Greek syn, together, and aisthesis of perception” (Morrison, 2000, p. 37). The study of this subjective phenomenon is related to how the mind coordinates the interaction of two or more senses simultaneously. The experience of synesthesia can be induced by stimuli and sensations like shapes, food, touching things, being in pain, among others. Being such a complex phenomenon, not all people know they have synesthesia, which can manifest itself consciously in some people only, and at different levels, according to Cytowic (2008):

It has been argued that: “synesthesia is actually a normal brain function in every one of us, but that its workings reach conscious awareness in only a handful… In synesthesia, a brain process that is normally unconscious becomes bared to consciousness so that synesthetes know they are synesthetic while the rest of us do not” (Cytowic, 2008,
Therefore, there may be people who are synesthetic and who do not know it, and people who could still develop synesthesia or synesthetic characteristics.

This phenomenon has been studied and described by science, by authors in the field of neuroscience such as Rouw and Scholte (2007) and Kadosh et al. (2005), and authors in the field of psychology such as Karwoski and Odbert (1938), among others. The psychological and biological understanding of synesthesia, as well as its dissemination in the media, has allowed to extend this idea to the development of applications, software, and games.

When talking about digital game development, one of the main goals is for a player to become immersed in the game (Pichlmair, Kayali, 2007). For Csikszentmihalyi, for example, the immersion is related to the flow experience that he defined as an exceptional moment that occurs when “what we feel, what we wish, and what we think are in harmony” (Csikszentmihalyi, 1997, p. 29). Also, for Ermi and Mäyrä’s, immersion is defined as “becoming physically or virtually a part of the experience itself” and “that takes over all of our attention, our whole perceptual apparatus” (Ermi, and Mäyrä’s, 2005, p. 4). In either case, immersion is a time when a person feels totally involved in an activity.

When talking about education, there are some activities or tools that can help us in the teaching and learning process. One of these activities is using technology and games. The resources used for video game development and creation have evolved over time. Sound has evolved, as well as visuals and imaging in digital games, and all these developments have allowed us to work with perception more engagingly and has allowed immersion more efficiently. These developments in technology bring new ideas like using synesthetic resources in digital games, which has been gaining strength in the last years with the rapid evolution of computer and imaging technology, creating interfaces that can interact in much more complex ways with players and surroundings.

This work presents ideas of synesthesia in the arts and synesthesia in digital games, which could be implemented in music digital games. Finally, the design of a minigame for music education, specifically for music memory and music score reading, is presented.

**Background literature**

**Synesthesia in the arts**

In the arts, we can observe different kinds of synesthesia applied. One common type happens when emotions are related to corporal senses and colors. Poets often use this resource to express their ideas. For example, it can be noted in Rimbaud’s poem “Vowels” (1871) the close relation between colors and letters, “A black, E white, I red, U green, O blue: vowels” (Duffy, 2013, p. 2). Rimbaud also makes a relationship between a sense and an action: “A, black velvety jacket of brilliant flies which buzz around cruel smells” (Duffy, 2013, p. 2), the smell being cruel.

Like poets, there are examples of visual artists and musicians for whom synesthesia has influenced their creative process and become an essential part of their work. According to Kevin Dann, “various artists who produced highly creative works, Kandinsky, Rimbaud, and Scriabin, were inspired in synesthesia” (as cited in Martino, Marks, 2001, p.62), experimenting with different types of it. Inspired by the music of
composers like Wagner, Kandinsky (1982), in his early years, discovered sound-to-color synesthesia or chromesthesia, where sounds automatically and involuntarily evoke colors:

The violins, the deep tones of the basses, and especially the wind instruments at that time embodied for me all the power of that pre nocturnal hour. I saw all my colors in my mind; they stood before my eyes. Wild, almost crazy lines were sketched in front of me. (as cited in Van Campen, 1997, p. 3)

For Scriabin, on the contrary, the synesthesia was color hearing; in other words, listening to sounds when seeing colors. According to Galeyev (2007), synesthesia in music can also be perceived when treble sounds are related to a bright image, and bass sounds to darkness. The same occurs when teaching the musical parameter of intensity, and it is said that a loud sound is big, and a soft sound is small. This association is simple to teach and understand because of its relation to the physical world, where consistently big is heavy and small is lighter in weight. In music education, these forms are widely used to explain the ideas and characteristics of music theory more graphically. So, by using these tools, it is easier for students to relate high pitch sounds with brighter colors, such as yellow or orange, and low pitch sounds with darker colors, such as black or blue. Thus, this allows us to understand music, consciously, or unconsciously, in a synesthetic way.

Bragança et al. (2015) highlights an experiment of Wolfgang Köhler, that associates words with geometric figures for the study of synesthetic perception, called “Kiki and Booba” in Figure 1. In this experiment, people are asked to associate the names Kiki and Booba to these two figures, without knowing anything else than what they see: color and shape. One of them (in the left) is orange and with an angular shape, and the other (in the right) is purple and with round shape. The experiment’s results showed that 95 to 98% of people chose Kiki for the angular shape and Booba for the round shape. Making clear, with these results, that people (not necessarily declared synesthetic) associates color, figures and words.

![Figure 1. “Kiki and Booba” experiment by Wolfgang Köhler.](image-url)
There are also methods of teaching music that uses synesthetic characteristics relating color and sound, as the example of the method called “Music in Colors”, created in the 1960s by Chilean composer Estela Cabezas (“Música en colores”, n.d), in which, a graphic system replaces traditional music writing, notation, and rhythms with colors attributed to musical notes: C blue, D green, E yellow, F orange, G red, A purple, B light blue, making, with this, music education more playful and imaginative.

Following are some ideas and examples of the use of synesthesia in digital games.

**Synesthesia in Digital Games and Games for Music Education**

The concept of synesthesia has not only been used in music education but also in digital games. For example, the Japanese game designer Tetsuya Mizuguchi created the game “Child of Eden”, in 2011. This game mixes music, rhythm, colors, and movement in a rail shooter style. The game includes motion because it works with a Kinect sensor (motion sensor) for Xbox 360. This game was created to generate a synesthesia experience for players. The game “Child of Eden” makes players experiment with senses, where the music, objects, and colors used are synchronized with the player’s movement and interactions with the game (TED, 2011, 04:01).

Another example of synesthesia in digital games can be seen in the game “140” (140 Game, 2013, 0:00–1:01). This game, developed by Jeppe Carlsen, is an experience of geometric figures, music, sounds, colors, and movement in a minimalist setting with colorful abstract graphics. In the game, it is important to have a rhythmic musical awareness to overcome obstacles controlled by an electronic soundtrack. These obstacles appear and disappear to the rhythm of the music.

We have noticed that there are digital games that use synesthesia and games that are interested in using music as its main part. Therefore, we would also like to ask what are the digital games that exist to teach music?

Some games have added music education perspectives to them, although it is not very clear if they have a real music education intention. An example of this is “Super Mario RPG” (released in 1996), which has a part in it where, by using a pentagram and allowing the player to write in it, it is possible to win cards to buy in-game products (Super Mario RPG, 2012 00:00–00:37), working, in this way, on musical skills such as pitch, reading, and memory. Another example of this is the game “The Legend of Zelda: Ocarina of Time”, released in 1998 for Nintendo 64, that includes minigames in which the player has to remember a melody that is written in a pentagram, where the notes are represented by commands on the joystick (for example, X, A, L, Y, R) gaining objects to buy different items within the game (The Legend of Zelda, 2014, 08:02–08:32).

Thinking strictly about music education, there is one website that has been gaining popularity in the last years, and that can be accessed easily by teachers for music education, called “Chrome Music Lab”. This platform has 13 different experiments, where the player or student can “explore music and its connections to science, math, arts, and more” (Chrome Music Lab, 2016). One important fact about this website, besides all the musical possibilities that it allows, is that characteristics of synesthesia are used in some of the modules. For example, the experiment called “Song Maker”, which is a melodic and rhythmic sequencer uses the same characteristic as the music teaching method described above “Music in Colors”, with the difference being that the colors used for each note are not the same. In this case, they use C red, D orange, E yellow, F light
green, G dark green, A purple, B pink, and for the rhythmic pattern, they use geometric figures: triangle and circle (“Song Maker”, 2016).

Though this website is one of the most complete for music education, there are only a few popular digital games that can establish a direct relationship with music theory that involves the player in the music experience.

It is a fact that music is a complex phenomenon and that there are still many questions about how we think and feel it. For this, music education involves many different variables that are difficult to teach, such as emotion, creativity, or sensitivity. However, with the development and use of technology for music classes, new perspectives of teaching and understandings appear.

Here we wonder how digital games and technology mixed with synesthesia characteristics could be used for a better understanding of music elements and parameters, generating active participation of students, immersion, and that could stimulate and educate musically.

In the following section, we present a general minigame model using characteristics of synesthesia for developing music memory.

**Music Digital Minigame Proposal**

This minigame proposal is intended as an application of digital game synesthesia to music education. It is part of a game that we are developing, for music creativity (Music Creativity Games, 2019), which comprises different musical moments that correspond with distinct characteristics of music. In this minigame, the player starts watching and listening to a melody written in a music score. The melody becomes progressively longer, as shown in the example in Figure 2 (on the top and in the middle). In order to have an interactive visual representation and a synesthetic approximation using the relation of sound and color, the notes written in the score have the same colors as the previously discussed game “Song Maker”. After having seen and heard the melody, a new screen appears where random notes, written in a score, will be falling one by one, as shown at the bottom of Figure 2. In this second screen, the player must touch the notes in the order that they appeared in the melody on the first screen. Then, the game returns to the first screen, where the melody is written, and the melody will be increased note by note, and so on. If the player chooses the notes in a different order, the game will be over, and it could be started again (access to the minigame in the link: [https://getucci.itch.io/simon-sings](https://getucci.itch.io/simon-sings)).
This idea is based on the model of the game “Simon” (Simon Game, 2013, 00:17–00:34), an electronic game for developing memory skills, based on a repetitive sequence of colors and sounds, where the player has to reproduce the sequence in the order given by the game, and that it increases over time. When the player fails, the game is over.

This game could be used for music education for working with memory, auditory recognition, and reading notes. With the use of colors and touching screens, new connections and understanding of music characteristics could be made.

**Final Considerations**

Synesthesia is a phenomenon that could be used as a resource for music education, facilitating the understanding of music. Particularly, the most common type of synesthesia, chromesthesia, could be used to associate colors with different musical structures and parameters, like pitch, harmony, melody, among others.

The proposal described in this paper can offer better interaction and immersion, because, on the one hand, the player is challenged in a playful way, and on the other hand, music theory is presented in a simple way through colors and sounds. Thus, the use of synesthesia in different arts disciplines gives us an idea of how this resource can be
interesting to use in music education. Moreover, with the inclusion of synesthesia in
digital games, we can see an opportunity to consider these tools in this context.

The minigame proposed can promote the understanding of music from a
perspective of immersion and connection with the senses using synesthesia, which can
complement traditional music education and be a path of initiation into the world of
music. Moreover, digital technology offers multiple forms of implementation, offering
possible new uses of synesthesia in future game proposals.

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Inclusive musical education: Searching for the ‘working with’ in social projects

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Abstract
The main aim of this study was to identify and understand the educational processes that emerge from the construction of social practice of inclusive musical education in the social projects: Artistic and Musical Practices with disabled children and adolescents: inclusion or interaction? and Seeding music for children and their family: searching for humanizing processes. The data were registered in field journals which were later phenomenologically analysed. In the results, we present the category Social and Musical Interactions – working with others. It was considered that inclusive musical education that was developed in both projects favoured the social-community and personal improvement of the participants, including that identified in musical learning as well as in inclusive educational processes, interpersonal relationships, cooperation and in the capability of performing daily tasks.

Keywords: educational process, music education, inclusion, dialogical pedagogy.

Introduction
Since 2007, a number of musical education activities for children and adolescents, disabled or not, have been performed in Brazil, in order to improve musical learning and also social interaction and inclusion. There are many possible practices in music education, which involve collaborative processes aiming at respecting differences and living in diversity to promote equity and inclusion. Community mobilization has occurred (students, teachers, managers, parents and legal tutors) in the process of (re)construction of performances (music, theatre and literature), interdisciplinarity and inter-institutional practices (universities, basic education, music and special education schools) in two social projects whose priority is inclusive music education social practice: Artistic and Musical Practices with disabled children and adolescents: inclusion or interaction? and Seeding music for children and their family: searching for humanizing processes., developed in São Carlos, a city in the state of São Paulo, Brazil.

Both projects are based upon inclusion (Sassaki, 1999; Arruda and Castanho, 2014), musical education (Koellreutter, 1997; Kaikkonen, 2016; Higgins, 2012; Martins, Joly & Gonçalves Junior, 2018), interculturality (Candau, 2008, Castiano, 2000) and dialogical pedagogy (Freire, 1999, 2005, 2008). According to Arruda and Castanho (2014) inclusion refers to not segregating any human being, granting quality of access and permanence for all, be it in schools or any social space, moving around the way they please. Sassaki (1999) understands that inclusion refers us to a necessary change in society as a whole to assure constitutional rights, as it involves unconditional insertion of disabled people in society. Brazil (2009), recovering principles confirmed in the UN Letter, acknowledges “[...] inherent dignity and values and equal inalienable rights for all members of the human
Family, such as the fundament of freedom, justice and world peace”. This statement leads us to Koellreutter (1997, p. 60-61):

Peace is a state in which common sense and freedom are not restricted for power interest, but developed in a new way. [...] freedom comes from awareness of an inevitable need and responsibility with the whole. [...] state which frees the necessary moral capabilities for overcoming problems and crisis. [...] to promote and preserve peace it is necessary to smartly manage what you have, develop and cultivate capabilities which were given to us by nature and mainly promote human empathy.

Koellreutter (1997), referring to music teaching, highlights that art is a means of preservation and strengthening of interpersonal communication, important for overcoming sadness and fear, usually present every day. Art and music may be factors for improving creativity and self-esteem.

Kaikkonen (2016) claims that appreciating, learning and making music are social experiences that everybody is capable of performing; eventual obstacles could be easily eliminated when working for that. For the author, music has the potential of impacting attitudes regarding diversity and then improving equity, connections between people, with disabilities or not, and the society, making the latest more stable and inclusive.

Higgins (2012) suggests the term community music and describes it as the one in which people articulate, engage, show needs, experiences and aspirations, learn from and teach each other to play, listen to and appreciate music considering the potential for music development and, above all, human development of the participants.

In total agreement with the aforementioned authors, Martins, Joly and Gonçalves Junior (2018) propose the expression of humanizing musical education for the individual and their specific characteristics, and at the same time, for the collective. Thus, meetings happen with those who are eager to learn and teach music in a shared way, communitarian, horizontal, dialogical, where groups acquire a broaden dimension, where everyone interacts and together build an identity, where the educator teaches and learns, where participants learn and teach, where they use their experiences for overcoming.

It is understood that living and sharing experiences, people interact with each other in interculturality, seen by Castiano (2000, p. 221) as “[...] a set of attitudes and predispositions necessary for a mutual involvement of two or more subjects when sharing their subjective experiences, critics and lived by them (while individuals or social groups) with others”. From this, it can be understood that knowledge results in sharing actions between people, in interculturality across time and space, in open dialogues, critical self-reflection regarding others and their culture.

However, Candau (2008) observes that social practices based upon interculturality are permeated with conflicts and negotiations (cultural and social), as knowledge is seen as complete and unchangeable, but [social practices] are under permanent construction for the cultural diversity of those involved, who might diverge, and through dialogue build new ideas, abilities and experiences.

As educators, we are always searching for new knowledge to understand and intervene with others in the world and there are many challenges. When choosing teaching, we decided to be with different people to teach and learn, learn and teach. Building paths in this search and being with learners prompts us to reflect upon differences, equality,
equity, possibilities, easiness, difficulties and moves us forward to search for being educated while we educate.

When joining in a social practice, a group, a community, a social centre, school, people acquire the values consolidated and shared there, knowledge taught, learnt and built in that environment, they also deal with eventual conflicts and respective resolutions in working with. It is explicit that working with is inspired by the philosophical propositions by Lévinas (2004) and the pedagogical ones by Freire (2008; 2005; 1999), therefore it is about working with others, not for others or about others, in this case the children participating in both social projects previously mentioned, as according to Freire (1999), the teacher’s work is with the students not with their own selves. Or according to Lévinas (2004), it is not enough to know the other exists, you must see them as a criterion to have an ethical posture about respect and recognition.

Freire (2008) also alerts us that hope is necessary for educating, people and the world, the verb hope for Freire is an engaged action seeking for transforming the individual reality and social injustice aiming at transcending, becoming more, dreaming, and utopia.

After this brief presentation of the social projects previously mentioned, it is explicit that the main aim of this study was identifying and understanding the educational processes emerging from the construction of the social practice in the inclusive musical education in them.

These social practices are understood according to Oliveira et al. (2014, p. 33) as deriving from and generating:

[...] interactions between the individuals and them and the environment [...] where they live. Developed within groups and institutions, aiming at producing assets, transmitting values, meanings, teaching to live and controlling it to maintain material and symbolic survival of human societies.

Educational processes are understood as by Gonçalves Junior, Carmo e Corrêa (2015, p. 176-177), that is:

[...] occur in a mutual learning relationship and not only in a teaching exchange, having as basis for its development, equitative dialogue and directed intent for cooperation, overcoming, becoming more, autonomy, decision and transformation possibility. Such conditions allow the involved ones to understand in context, values and group codes of where they live, making it possible to think critically about their own sense of belonging in the world with others, teaching and learning.

**Methodological trajectory**

Of qualitative nature, this study was carried out from the systematic register of observations in field journals of the social projects: *Artistic and Musical Practices with disabled children and adolescents: inclusion or interaction?* (AP) developed in the city of Ituiutaba, in the state of Minas Gerais, and *Seeding music for children and their family: searching for humanizing processes* (SM) developed in the city of São Carlos, in the state of São Paulo, Brazil.

It is highlighted that the activities in both projects counted on the participation of children from different schools of primary education and the musical education was developed by at least two educators. In the SM project, each child was supervised by a
parent or tutor, while in AP, the participation of family members was occasional. Nevertheless, a team of adults caring for the children, both individually or in interaction with other children and adults, in musical or daily activities, was present in both projects.

Field journals were written (from notes, photos and videos) of thirteen meetings (between August 2018 and August 2019), one per week of each of the mentioned projects, the one developed in Ituiutaba accounted for 18 children, ranging from 9 and 11 years old\(^1\). The one developed in São Carlos had eight participants, ranging from 2-4 years old\(^2\).

According to Bogdan and Biklen (1991) field journals are understood as written reports of what investigators, hear, see, experience and think during collection and reflection on the data of a qualitative study.

The phenomenological data analysis was guided by the thorough description of what had happened; later reading and (re)reading of the notes to identify the units of meaning, phenomenological reduction, organization of categories and construction of results (Gonçalves Junior, 2008). The participant children and their respective parents or tutors signed the Term of Free and Understood Consent, having their real names concealed and substituted for fictitious ones, which is part of the ethical concepts in human research.

The field journals presented here are represented by Roman numbers I, II, III etc., preceded by the acronyms of the projects (AP or SM) followed by Arabic numbers indicating the respective unit of meaning. Thus, “PA-IV-2” means that the excerpt presented concerns the Project *Artistic and Musical Practices with disabled children and adolescents: inclusion or interaction?*: field journal four; meaning unit two.

**Construction of results**

In the construction of results, we refer back to the aim of the investigation, identifying and understanding the educational processes which emerge from the construction of the social practice of the inclusive musical education in the social projects AP and SM, a category was created: *Social and Musical Interactions – working with others*.

The intention of promoting the inclusive educational process through music in the routine could be noticed in both projects, in SM, for instance, “[…] activities started with listening to instrumental music, during which a fabric ball was passed from one to another according to the rhythm of the music (Picture 1); then a song to greet each one individually, then as a group; later a round of musical activities, such as dances, movements, singing, toys and tales” (SM-I-1). In AP “[…] activities for socialization, miming, speaking circles, use and exploration of diversified musical instruments (caxixis, tambourines, cymbals, snare drums, xylophones, metalophones, clubs), body percussion, poem recitation, among others are carried out” (PA-I-1).

Although the in the first meetings of AP there were some conflicts when the activities involved use and exploration of different musical instruments, like: taking the instrument one from the other, crying, yelling, little by little this situation changed, as Miriã, an educator stated: “I noticed that the children liked it […] especially those who were always fighting” (PA-III-2).

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\(^1\) According to the legal documents registered in the special education school the children were diagnosed with: cognitive deficit, learning, concentration and conviviality difficulties, and one girl with Down syndrome.

\(^2\) According to medical registries provided by the parents or tutors, two children had been diagnosed with Down syndrome, one with Williams’s syndrome and the other five did not present deficiencies.
As seen in Candau (2008) social practices based on interculturality are permeated with conflicts and negotiations, and with dialogue we can build positive experiences founded by the ethics of respect for others, as inspired by the legacy of Lévinas (2004) and Freire (2008, 2005, 1999).

A student named Ferdinando commented: “It was good to know the children from other schools because they are nice and help us. I made mistakes and they helped me [...], working together [...] it is better, two is better than one” (PA-IX-6). While another student, Janísio, said: “It was good because it’s good to play the xylophone, learn the notes, they helped, they are nice (Picture 2)” (PA-IX-7), these excerpts identify the cooperation in the educational process.

Incorporating the foundation of both projects in the course of inclusive musical education, the participants showed their needs, experiences and aspirations, which involve teaching and learning with each other, sharing, in community, using their own experiences to overcoming. (Higgins, 2012; Martins, Joly & Gonçalves Junior, 2018)

An educator called Dinah stated: “I think it is really important [...] the engagement of the children [...] one couldn’t touch the other, now they do, interact, feel encouraged. They feel good to be here” (PA-VIII-7). Patrícia, another educator, had a similar perception: “I found it very interesting the children interacting and playing the instruments, I definitely think it’ll work. As I have trouble with motor coordination, I observed that they learn real fast, right? Of course, some don’t, they have trouble paying attention, but in general it’s quite interesting” (PA-XII-9).

Hilda, an educator who participated in SM, observed the strengthening of friendships and interactions between the different participants (educators, children, families) including conversations between the ones in charge of the children before the meetings who were talking about going to “the birthday party of a kid from the project” (SM-X-5).

In another field register, it was observed that: “The meeting started with the free choice of a toy, during which children and their escorts played in a different room, then the
children started throwing a ball to one another without any preference [...], the escorts encouraged them to play with each other and followed the same pattern of interaction” (SM-V-2).

Besides the social-community development, we could also identify the personal development of the participating children, as state the escorts of the children in a report recorded in the last meeting of the SM project in the analysis of this investigation, a small journal was given to each escort to register the most significant aspects they had observed in the children during the meetings in general or in situations away from them and “[...] families of the children with disabilities registered that the children under their care progressed in performing habitual tasks” (SM-XIII-12).

Educator Hilda also stated “[...] the capabilities of rhythm and melody comprehension broadened and children recognised each one of the activities and songs used during both semesters” (SM-XIII-15).

Referring back to Kaikkonen (2016) who claims that appreciating, learning and making music are social experiences that everyone is capable of performing being any obstacle overcome if you work for that.

Considerations
We consider that the results of this research may promote the reflection of educators in the task of musical teaching and inclusion both in social projects, as the ones studied, and in regular schools, contributing to discussions in the areas of musical education and basic education. It is also considered that inclusive musical education developed in both projects favoured the social-community and personal development of the participants, once the improvement of musical learning, inclusive educational processes, interpersonal relationships, cooperation and capability of performing habitual tasks were noted.

It is fundamental, however, to highlight that the existence of at least two educators in both projects in the musical teaching, at times supported by family members of the participants. This increased the potential for developing and including people with or without disabilities. Finally, as seen inclusion suggests change in society as a whole in guaranteeing constitutional rights, thus we should, in the most varied spaces, work consistently for inclusion of interculturality, acknowledgment and respect for diversity.

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Access to specialist music secondary schools: A case of differences
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Abstract
The New South Wales (NSW) Policy and Guidelines for Gifted and Talented Education (DET, 1991 revised 2004) recommends a balance of objective and subjective assessments for the identification of gifted and talented students in “recognition of degrees of giftedness and talent” (p. 7). This paper, representative of a larger study, examines criteria used in the case for successful entry to specialist music secondary school programs. Questionnaire and interview responses with adult stakeholders (n=10) associated with in-house entry test processes for a specialist music school in Sydney Australia, were compared. In addition, music aptitude and achievement tests were conducted with the 2013 student applicant cohort (n=73). The results in the applicant cohort scores indicated significant relationships between music potential and achievement, providing both predictive and diagnostic value. Of interest was that selected students were those identified not only on full entry requirements (Type 1) but also on partial entry requirements (Type 2). To add adult stakeholders perceived there to be narrow distinctions of skills levels and characteristics between both types by the end of the first semester. An important finding from this study was that musically gifted youth representing various developmental levels with much in common, share the drive to succeed in the transition from general to specialist music training. The emergent theme, optimal match to program stemming from the qualitative framework for this paper, suggests a combination of dynamic and specific music factors in the transition from musical gift to talents. Thus, the findings add to the scope of understanding for young musicians, teachers and policy makers in the context of identification and selection for specialist music secondary school programs.

Keywords: identification, music ability, objective and subjective measures.

Introduction
It is recommended that only students aged from 15 years and beyond are considered for specialist vocal training (Haroutounian, 2000; Subotnik & Jarvin, 2010). This was the case also for an Australian music specialist high school (referred to from hereon as Music High School or MHS) until 2012 when recruitment extended to voice as a major study area, in the context of partnerships with local prestigious choir groups. Dual-purpose entry and change of direction with the introduction of a junior vocal stream (Curry, 2012; DET, 2014) therefore initiated examination of MHS in-house criteria, based on the New South Wales (NSW) Policy and Guidelines for Gifted and Talented Education or GATE (DET, 2004) devised to identify and select musically gifted youth. The underlying issue was the capacity for identification measures to capture the right student for a program steeped in the Western classical music tradition.
Background

Endorsement and recommendations in comparative GATE policies

In Australia gifted and talented education strategies refer to state public and independent education policies guidelines. Recommended methods include a combination of objective and subjective criteria such as standardised measures of IQ, aptitude and achievement, scales of characteristics, class work and interviews to identify gifted and talented students within their populations (Slater, 2018). Globally, policy bound documents confirm a multifactorial, whole school, whole community approach (McClain & Pfeiffer, 2012; Mönks & Pflüger, 2005; NSW DET, 2017) involving a “mix of objective and subjective assessments” (DET, 2004, p. 11) and “recognition of degrees of giftedness and talent” (p. 7). Gagné’s Developmental Model of Gifts and Talents or DMGT (2003) defines giftedness as the possession and use of natural abilities (or aptitudes) in domains that influence the development of talent. Gagné (2003) notes that learning, training and practising process occurring in middle to late childhood and adolescence may be facilitated or hindered by the action of intrapersonal and environmental catalysts. He adds (2003) that accomplishment above the 90th percentile of same-age peers with similar levels of serious investment in fields (such as music) indicates successful transformation of potential to talent.

Ability

Music therefore is regarded as multiple intelligences with subsets of aural, cognitive, technical, musicianship, performance and learning skills (Gagné & McPherson, 2016; Hallam, 2006; Sloboda, 2005). While expectation of success in the context of audition initiates robust levels of deliberate practice, factors such as resilience and commitment underpin engagement (Bamberger, 1991; Heller, 2004; Lubinski & Benbow, 2000; O’Neill, 2011). As McPherson, Davidson and Falconer (2012) posit multi-dimensional capabilities involve a mix of aptitudes and individual differences that shape development towards initiation into a field of endeavour.

What makes the difference?

In the performance domain Ericsson, Krampe and Tesch-Romer (1993) note that differences in acquired individual technical skills, possibly due to the genetic proponent towards deliberate practice, are easily observed. According to McPherson (2005) practice accounts only partly for the variance in music performance wherein high achieving musicians engage in greater amounts of informal and formal practice than less successful peers. Tan, McPherson, Peretz, Berkovic, and Wilson (2014), in noting that while a large genetic contribution lies behind the will to practise music, the “genetic component to accomplishment is largely independent of the genetic component to practice” (p. 6). Simonton (2005) concedes that absolute loss of gift is possible, and variables such as onset differences illustrate inheritance factors of structured talent development, which may mask identification (Gagné & McPherson, 2016; Subotnik et al., 2012).

Talent Developmental models in the music domain

The focus for identification is linked to differences in music aptitude and learning pace (Gordon, 1989) and according to Gagné & McPherson (2016), influenced by “personal dynamic interactions” which are “responsible for the mastery gap between learning
peers” (p. 102). The Scholarly Productivity or Artistry SP/A framework, a model for talent development in the domain of classical music (Jarvin, 2017) refers to the spectrum of developmental stages, processes and timing, based on physical and personality attributes, performance media, background and experiences. Jarvin (2017) states that Subotnik’s perception studies involving students, faculty and gatekeepers from selective classical music conservatories and pre-Divisions such as the Julliard School of Music in New York reveal factors accounting for successful transition towards artistry. Factors included successful audition on admission and unique profile of skills, talents, personality and interests (Subotnik, 2000). Similarly, Manturzewska (1990) concedes that early musical development depends on increased periods of deliberate practice, performance and competition as well as motivational traits and the role of like-minded peers.

**Position of the audition as identification criteria**

While it is understood that the use of audition is predominant among criteria for the identification of musical ability, Sloboda (2005) cautions that skilled performance involves both technical and expressive components and that “dead-pan renditions sound mechanical and lifeless” (p. 398). In the context of audition Jarvin (2017), adds that “somewhat flawed” is preferable to a “push the play button” performance (p. 33). However, performance reproduction and hours of practice are hardly singular in the “making of a musician” (McPherson, 2005, p. 5). While musical potential associated with a range of skills and musical expression is more difficult to identify (McPherson, 1997) the “spark of potential talent” (Haroutounian, 2000, p. 145) is immediately recognised and all-telling. McPherson and Williamson (2016) in adapting the Gagné DMGT (2003) posit that the framework of musical talents including performing, improvising, arranging and conducting, encompasses common music intelligences not readily exposed within the playing of a single performance piece.

**Measurement, scales and tests**

Rating scales, inventories and checklists for the identification of musical potential and performance, such as those of Haroutounian (1993, 2000) and Hallam and Prince (2003) are recommended globally within gifted and talented educational policies and jurisdictions (DET, 2004; Hallam, 2006; Jarvin & Subotnik, 2010). Haroutounian (1993, 2000) sought perceptions on criteria associated with music ability from music teachers, music professionals and administrators. Group means on a 5-point scale (1.00 no importance to 5.00 essential) reported essential factors such as: “shows a sustained interest in music and performing” (M= 4.35), “is self-disciplined (M=4.25)”, “responds discriminately to rhythm, melody, harmony” (M=4.22) and “can perceive fine differences in musical tone” (M=4.17). Hallam (2006) in citing Haroutounian (2000) notes that, “perceptual awareness and discrimination; meta-perception; creative interpretation; behaviour/performance and motivation” are categories to determine musical potential (p. 427). She refers to her 2003 qualitative study with Prince wherein musicians and non-musicians were asked to define music ability. Seventy-one percent of the sample referred to “playing and instrument or singing” (M=3.37, SD= 0.88). Personal characteristics were similarly rated including “metacognition” (M= 3.37, SD= 0.82) and “motivation” (M=3.58, SD=0.89). Hallam (2006) concludes that the acquisition of both generative and aural skills “require high levels of commitment and motivation” (p. 431).
Gordon’s Advanced Measure of Music Audiation or AMMA (1989), the instrument for inclusion in the MHS project measures music aptitude through tests of perceptual awareness and discrimination. Schleuter (1993) reports an “AMMA composite mean of 58.2” (p. 61) in a study where subjects were drawn from a mix of undergraduate music majors. Gordon’s validity study (1989), with high school and tertiary musicians, noted high AMMA raw scores ranging from 72 to 78 (percentile 88 and above on national norms) while the lowest ranged from 44 to 55 (percentile 40 and below on national norms). According to Gordon (1989), a “high” composite percentile on the AMMA identifies musically gifted students such as “those with high music aptitude who have the potential to achieve high standards in music” (p. 34). To compare aptitude and achievement percentiles, Gordon’s Iowa Test of Music Literacy, ITML 5 and 6 (1970, rev. 1991) was also conducted with student stakeholders on entry.

Method
A three-phased mixed method approach began with semi-structured interviews providing insight to the issue through experienced voices (Bresler, 1992; Strauss & Corbin, 1998). Questionnaires about perceptions on factors of music ability and entry test tasks were then conducted with adult stakeholders AS (n=10) who were past and current music educators associated with the school and entry test processes from 1989-2014. Themes related to the research questions were translated from the coding categories assisted by NVivo software (Bazeley, 2007). Phases 2 and 3, through objective aptitude (Gordon’s AMMA) and achievement (Gordon’s ITML) tests conducted with the 2013 student stakeholder (SS) cohort (n=73), musically gifted youth (mean age, M=11.6), seeking entry to year 7 (first year of secondary school in the NSW education system), supported the qualitative data. The focus for this paper are research questions pertaining to music aptitude and achievement tests: To what extent do aural tests predict selection for entry to music specialist school programs and what implications can be drawn from past and current adult stakeholder perceptions on musically gifted and talented entry test processes?

Analyses and Results
Phase 1 questionnaires reported AS group means for music ability factors (n=20) informed by past in-house entry processes and the literature (Haroutounian, 1997, 2000; Hallam, 2006; Hallam & Prince, 2003; DET, 2004). The highest were for aptitude test (M=4.70, SD=0.46), aural test (M=4.40, SD=1.02), music performance/audition (M=4.30, SD=1.27) and music achievement test (M=3.70, SD=1.19) consistent with the literature.

The questionnaire also included qualitative responses in that participants were asked to explain reasons for the highest (question 7) and least ranked tasks (question 8). It was revealed that while audition and music aptitude tests were perceived as important entry test criteria, responses were not unanimous. For example, for audition, one respondent commented: “hearing the child play or sing to you is the biggest indicator of many things – musicality, pitching, ability, engagement and commitment” (questionnaire respondent AS1, October 2013). For music aptitude test, another respondent suggested: “it provides us with the sense of possible potential that can be achieved by students which is important for year 7 students when we have 6 years to reach that potential” (respondent
While four respondents perceived creativity tasks as valued ability factors, improvisation received a mid-group means of agreement (M=2.40, SD=0.80). Improvising was perceived to be: “easily taught if the student has the other skills” (respondent AS7, October 2013).

Phase 1b interview data (based on seven topics and numerous subtopics), organised as vignettes (Stake, 1995) was augmented in Phase 1a findings. Samples below refer to “test criteria”, “test changes over time” and “test deficiencies” (interview questions 3, 4 and 5 respectively). For example, AS5 elaborated on the task of sight reading:

It is an error to take someone who can’t read music […] I know of one who sang absolutely beautifully and had something really special, extraordinary – and I argued for her entry but she proved to be so behind in skills and her class that I think it was the wrong thing to do for her – even though she has potential it is too late […] you must have music experience before you get to music high school (AS5).

AS1 reiterated the importance of interpretive performance style within the audition: We do see and hear the musicality achieved in the performance through the interpretation, use of dynamics etc. We could go a step further and ask them to produce a style; this may show that we do value creativity (AS1).

However, AS4 noted that personality traits such as musical engagement and dynamic exchange with peers and mentors were difficult to assess and quantify in the context of former tasks such as creativity workshop:

They did show how students got on with each other in a group, playing music together, how they reacted and interacted with the teachers and with each other; this is now missing […] where the child’s focus was dynamic, interested, concentration with energy; truly interested in what they were doing? It was hard to quantify; some kids were confident with this and others were shy (AS4).

When asked about “year 7 characteristics” AS5 referred to factors that might diminish optimal student match to program:

some were absolutely outstanding, if I can say this – absolute music nerds – very passionate about it, talented, quick to pick up things; really passionate and obviously the […] is the right place for kids like that – others in the group, naturally gifted, but did not have a background in music were offered a place in a system where I’m not sure it was the right place (AS5).

Table 1 demonstrates the open to axial coding stage of analysis on “entry test process” wherein the theme, ideal optimal match, emerged:
<table>
<thead>
<tr>
<th>Open Code</th>
<th>Axial Code</th>
<th>Selective Code or Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry test process</td>
<td>Audition is essential to observe many music skills and innate factors; tonal quality is decider ODF not the key</td>
<td>Optimal match to program</td>
</tr>
<tr>
<td>Rigour in the components</td>
<td>Need to discriminate between applicants; broad testing MSF and ODF</td>
<td></td>
</tr>
<tr>
<td>Creativity</td>
<td>Is this valued? What, how to assess?</td>
<td></td>
</tr>
<tr>
<td>Specific to voice</td>
<td>Must sing in tune; Sight reading essential; Late development, technical skills</td>
<td></td>
</tr>
<tr>
<td>Specific to instr.</td>
<td>Early technical skills; Technical strength</td>
<td></td>
</tr>
<tr>
<td>Workshop</td>
<td>Creative activities product of past influenced by pedagogy; inequitable; difficult to assess</td>
<td></td>
</tr>
<tr>
<td>Measures</td>
<td>Objective tests and subjective audition essential for balance</td>
<td></td>
</tr>
<tr>
<td>Status</td>
<td>Competition among schools for Type 1; school unique (TC collaboration)</td>
<td></td>
</tr>
<tr>
<td>Identity</td>
<td>Students who want to engage, immersed in their music, resilient to obstacles; right for this school; whole musician</td>
<td></td>
</tr>
<tr>
<td>Deficiencies</td>
<td>Test without a creative element; goal of workshop based on ODF.</td>
<td></td>
</tr>
</tbody>
</table>

Notes. TC=tertiary conservatoire; Type1= successful entrants on full criteria; MSF= music specific factors; ODF=other dynamic factor(s).

**Table 1. Phase 1b: selective code, theme, “Optimal Match to Program”**

The same coding process was used for remaining topics and subtopics. To sum, AS interview data revealed a preference for a multi-factorial entry test process with a balance of ODF and MSF, as recommended in the literature (DET, 2004; Subotnik, 2000; Hallam, 2010).

Standardised objective measures such as Gordon’s AMMA (1989) and ITML (1970 rev. 1991) were used to examine relationships between potential and achievement represented by predicting achievement. Figure 1, a scatter plot, indicates a significant relationship with a correlation of student scores (n=73) on the AMMA and ITML 5:
Successful entrants (n=25) outperformed on the AMMA percentile mean (M=88; SD=1.5), and the unsuccessful applicant cohort (n=48) with percentile means (M=68, SD=1.9). Percentile means on ITML 5 were high for both cohorts (n=25, M=99; n=48, M=95). Outlier percentiles were indicated for both groups (see Fig. 1). High AMMA percentiles (M=84) were recorded for several of the unsuccessful applicants (n=16; and average AMMA percentiles (M=70) for a small number of successful entrants (n=4). It is therefore implied that while the tests offer a predictive value of potential and achievement levels, requirements for successful entry are considered not in isolation, but in conjunction with the complete individual data profile.

Discussion
The purpose of this paper was to examine perceptions of music ability and test criteria in the context of year 7 entry to a specialist music secondary school in the state of NSW, Australia. While it is not within the scope of this paper to report the full findings, it is suggested that the inclusion of objective tests benefits the identification of musically gifted youth in transition to specialist training. Accordingly, Phase 1a AS ranked group means for tasks music aptitude (AMMA) and music achievement (ITML 5 and 6) aligned with high “levels of agreement” in the qualitative textual data regarding potential and audition (Fitzpatrick, 2016, p. 285). The evidence presented here based on mixed method data convergence, suggests the value of music aptitude or potential in predicting optimal match to program in the context of the MHS.

Findings of interest are some outlier AMMA and ITML 5 scores, within both the successful and unsuccessful applicant cohorts, possibly influenced by criteria other than those accessed for this study. In terms of the selected student cohort AS interview data imply personal dynamic interactions and individually different paths possibly influence different test outcomes (Gagné & McPherson, 2016; O’Neill, 2011; Evans & McPherson,
Thus, the identification of musically gifted youth in the case of the MHS entry test represents an inclusive definition of giftedness to acknowledge a range of indicators.

Limitations
As the study has several limitations in terms of scope, and sample size representing the same, single site in NSW Australia, similar findings may not be returned elsewhere. In addition, while the Gordon tests of music aptitude and achievement were selected as reliable and valid, age-related and updated to computer-interactive platforms, norms are localised to US student populations of the 1990s. The results do not claim to be generalisable and findings may be skewed because of the small participant cohort from a single site. Nevertheless, depth and elaboration of thematic analysis enabled further understanding of how teachers conceptualise musical ability.

Future Directions
When the MHS study began in 2013 the entrant cohort was unique in that the process extended to musically gifted youth seeking vocal specialisation based on experience with performance oriented, aurally trained, quasi-professional local choirs. In 2019, vocal recruitment for year 7 continued within different collaborative modes. Future comparative investigation could be directed towards further clarification of aural aptitude, skills and testing in various contexts appropriate to the secondary school music syllabus. In terms of the entry test criteria, examination of remaining tasks such as improvise/creativity, audition/performance, sight reading/skills and moving/motor skills would further enlighten the findings.

Conclusion
In meeting the needs of musically gifted youth seeking entry to a specialist music secondary school in the state of NSW Australia, this paper has shown that the conceptual overview is characterised by broad-spectrum potential and achievement driven by a combination of music specific and other dynamic factors. Such implications regarding multi-factorial selection processes may serve policy makers, aspiring young musicians and music educators within the sphere of gifted and talented education.

References


Creating educational music for winds: Examining the parameters

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Abstract
The different ways that young musicians interpret sound and the varied levels of technical ability among them produce unique challenges for composers creating new music for students enrolled in elementary and secondary school music programs. These challenges cannot be resolved by conventional methods alone, that is through textbooks, score study and listening activities, but require problem-solving and contact with young performers. The New Sounds of Learning study explores the creative solutions that composers implement in generating new music for school-aged musicians. The research is based on the assertion that the development of high calibre works appropriate for young people is contingent on effective practice; that is, on successful engagement between composers and students in the creative process within classrooms, studios and rehearsal halls. By holistically examining the parameters of composing music for young musicians, that is the student composers’ background (questionnaire), the compositional process (reflective journal), the music itself (compositional analysis), and the student composers’ personal learning (interview), this study provides valuable insights and deepens our understanding of the parameters for composing new music for young musicians. This presentation will highlight the research findings from the composition of the wind works commissioned by the Ottawa Catholic School Board in collaboration with the University of Ottawa.

Keywords: music composition, musical creativity, educational music

Purpose
There is a lack of new Canadian music available for students enrolled in school music programs, primarily due to a lack of familiarity by many composers of the nature of educational music and very few commissions to compose new music for young musicians. New Sounds of Learning: Composing Music for Young Musicians, a Social Sciences and Humanities Research Council (SSHRC) project, seeks to obtain an in-depth understanding of how professional composers compose music appropriate for young musicians enrolled in school music programs and private music studios. The research, undertaken by the author at the University of Ottawa, involved two external partners - an arts organization, the Canadian Music Centre, and a school district, the Ottawa Catholic School Board. Both provided the funds to commission sixteen professional composers to create educational music.

Theoretical Framework
Creativity research focuses on assessments of the characteristics of creative individuals, investigations of the nature of the creative process, examinations of environments for promoting creativity, and evaluations of creative products (Amabile & Tighe, 1993; Woodman & Schoenfeldt, 1989). More specifically for music composition, these dimensions have been identified as the pre-requisites for composing (training, emotions,
context), *person* (characteristics, pre-dispositions, motivation), compositional *process* (strategies, techniques, sequencing), and musical *piece* (features, style, impact) (Andrews, 2004). This article focuses the parameters of wind pieces composed for young musicians.

**Method**

New Sounds of Learning focuses on the overriding question: “What are the parameters for composing new music for young musicians?” The researcher employs a multiple-perspectives method entitled Integrated Inquiry (Andrews, 2008). This involves nesting secondary questions within the four dimensions of musical composition and by adopting different research protocols to answer each one of them: *pre-requisites* – “How do prior experiences with young musicians influence the conceptualization of new music for them?” (questionnaire); *process* – “What compositional strategies are employed to reinforce learning? (reflective journal); *piece* – “What are the features of compositions for young musicians?” (compositional analysis), and *person* – “What do composers personally learn from the experience?” (interview) (refer to Figure I). This article will focus on the findings from the four research protocols of those eight composers who composed new wind works for young musicians in school-based music programs.

**Analysis and Interpretation**

The New Sounds of Learning study is based on pragmatism; that is, knowledge claims arise out of actions, situations, and consequences rather than antecedent conditions (as in post positivism). The concern is with applications and what works, and solutions to problems (Patton, 1990). It is the problem that is most important in contrast to the
method. Hence, researchers use multiple data sources to understand the problem (Creswell, 2003; Rossman & Wilson, 1985). Pragmatism as a basis for knowledge claims is derived from the writings of Pierce, James, Mead and Dewey (Cherryhomes, 1992).

In this study, the constant comparison was employed to analyze the data, identify patterns and integrate findings (after Stake, 1998). This approach is consistent with the pragmatic focus of the study; that is, the identification of parameters for composing for young musicians. Trustworthiness was achieved by employing multiple data sources (triangulation) contiguous with the four dimensions of musical creativity (internal validity). The participating composers and a multi-disciplinary research team were involved in reviewing the analysis and interpretation of the data (member checks).

Participants
The participants consisted of sixteen professional composers. Eight of them were affiliated with the Canadian Music Centre (CMC), and they responded to a call for proposals to compose a new string work for students studying music in schools and private studios. The commissioning funds were provided by the Ontario Arts Foundation and administered by the CMC. Eight other composers, a purposively sampled group of professional composers, were commissioned by the Ottawa Catholic School Board to compose a new wind works for students in school-based music programs. It is this latter group of composers which is the focus of this article.

Findings
Questionnaire (Andrews & Giesbrecht, 2013)
This research study focused on composers’ perspectives on creating wind music for students enrolled in instrumental music programs. The researchers examined how prior experiences with young musicians and their training inform the conceptualization of educational music. All of the wind composers commented that there is a limited repertoire of Canadian educational music and that there was a need for more Canadian music to be taught and performed in schools. The composers indicated that there is inconsistency in the compositions currently available for educational music. Specifically, they felt that music publishers focus more on the quantity of music produced and not on its quality, thereby resulting in similar sounding music that does not accurately reflect the students’ level of ability and challenge them to improve. The composers had no formal training composing for young musicians, but they were passionate about this vocation. They achieved their expertise creating new works for educational purposes through teaching and conducting music students in schools and amateurs in their local communities. They identified three major factors for writing effective educational music for winds: technical proficiency, musical challenge, and enjoyment. The composers concurred that “complexity” was the primary difference between composing for professional musicians versus young musicians. They found it challenging to compose for young musicians due to the limitations; that is, they had to write music that was within the musicians’ range and technical skill, while making the piece interesting and engaging for students.
Reflective Journal (Giesbrecht & Andrews, 2016)
Composers indicated that it was essential to meet with the students and their teacher to hear the ensemble at its best (i.e., not sight-reading new material). They employed a variety of compositional strategies. These included: a melodic hook to maintain interest; repetition to practice difficult rhythmic figures; dynamic contrasts to create excitement; varied articulations to develop tonguing skills; unison to focus on intonation; doubling to build the confidence of weaker players; solo opportunities across all parts to challenge players; irregular time signatures (e.g., 7/4) to develop meter skills; and naming the pieces to create ownership. The major challenges encountered by the composers were the nature of the ensembles for whom they composed, the technical skills of the students with whom they worked, and the lack of student engagement. The instrumentation of the ensembles was often inconsistent with that employed in concert bands and jazz ensembles with many instruments to one part or alternately, missing instruments altogether. With multi-grade classes there was a wide range of musical abilities and often a lack of student engagement. Adjustments to the compositions occurred during the project and after the premiere. These primarily involved technical changes both to simplify passages to ensure playability or to increase difficulty to create challenges. Composers and teachers also highlighted the importance of the student-teacher-composer dynamic that occurred throughout the project. Teacher feedback assisted the composers to refine their pieces and ensure playability.

Interviews (Wendzich & Andrews, 2019)
During the New Sounds of Learning Project the wind composers learned that in order to write pedagogically valid educational music: 1) a composer must desire to compose technically appropriate, challenging and enjoyable music for young musicians; 2) one must collaborate and have direct contact with students; 3) one must have a working knowledge of the instruments; and 4) The composer and music teacher should use a compositional framework, such as the Music Complexity Chart (MC2) (Author, 2011), to guide the composition. All eight wind-composers were trained to write complex works for professional musicians. This mindset of writing complex pieces is common among composers and dominates most of their musical thinking. When writing for professionals, they do not concern themselves with whether the music is meaningful or appropriate. Moreover, they do not worry about the professionals’ technical abilities. However – when writing for young musicians – the wind-composers expressed challenges associated with writing educational music such as creating meaningful and appropriate music. They used a ‘craftsman’ approach rather than a theoretical or inspirational one, and they were grounded and well versed in the practical nature of composition. Rather than solely knowing that music must be appealing, they had a deeper, practical understanding: they were aware of the reasons for writing engaging music; that is, if students are inspired, they will likely work that much harder at learning a new piece.

Compositional Analyses (Andrews, 2020)
Findings from the analysis of scores indicated that composers approached their works on both a macro and micro level consistent with traditional compositional practice. On a macro level, the composers predominantly composed in ternary form (ABA) and song form (AABC). In one composition variation form was utilized. On a micro level,
composers employed the use of polychords, harmony in 4ths, modes, off-beats, and alternative instruments (i.e., crystal glasses). The majority of the compositions also included a technical element which was the focus of the students’ musical skill development; for example, dynamic contrast, chromaticism, or the use of less frequent meters (e.g., 7/4).

**Educational Importance**

The New Sounds of Learning study extends the current research on composing new music for young musicians. An in-depth understanding of this process enables composers to more effectively compose new Canadian wind works appropriate for students enrolled in elementary and secondary music programs. The research also provides useful information to those professors teaching music composition at the post-secondary level. The findings will also prove helpful to composers in those jurisdictions with similar school-based music programs, and also to composition instructors teaching music in those post-secondary institutions where music composition degree and/or diploma programs are offered.

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**References**


The educative impact of study abroad programs in music What role does music play in achieving cross cultural understanding?

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Abstract

Enrollment in study abroad programs has increased remarkably over the past two decades as the educative impact of lived experiences promise long term benefits for participants (Dwyer, 2004; Gaudelli & Laverty, 2015; Paige, Fry, Stallman, Josić & Jon, 2009). How does this apply to music study abroad? Although music study abroad programs too have increased in popularity over the past few decades, little research has been conducted to understand the influence of these programs on the ability of participants to develop a sense of cultural intelligence and global identity. Therefore, the purpose of my study was to understand the role music plays in a music study abroad program and the ways in which music impacts cross cultural understanding.

I conducted this qualitative case study accompanying U.S. American music students on a trip to Malaysia where they collaborated with Malaysian peers in bamboo instrument-making as well as music-making in traditional Malay styles. Pre-trip interviews were conducted two months prior to embarking on the trip. During the program abroad over the course of three weeks, I interviewed four U.S. American music students, five Malaysian music education students, and both a U.S. and Malay music professor. Additionally, a focus group was conducted with the Malay student-participants. I wanted to ensure both the Malay as well as the Western perspective were heard and investigated. The findings revealed that the most important outcome was the relationships formed between the different cultures. Further, participants revealed that experiencing a foreign culture, rather than reading about it, was more meaningful and had a positive impact on their cultural awareness. The results align with the existing literature (Dewey, 1938; Gaudelli, 2016; SYTA, 2017). The data further showed that music played an important role as an immediate connector between participants and the collective music-making served as a strong bonding experience. The results from the following three themes will be further discussed: Theme 1: Music as a conduit for cross cultural understanding. Theme 2: Music as a means of bonding. Theme 3: Musical knowledge and skills acquired through this experience.

Keywords: global citizenship education, music education, study abroad

Introduction

Enrollment in study abroad programs has increased remarkably over the past two decades as the educative impact of lived experiences promise long term benefits for participants (Dwyer, 2004; Gaudelli & Laverty, 2015; Paige et al., 2009). How does this apply to music study abroad? Although music study abroad programs too have increased in popularity over the past few decades, little research has been conducted to understand the influence of these programs on the ability of participants to develop a sense of cultural intelligence and global identity. Therefore, the purpose of my study was to understand the
In speaking about cross cultural understanding and global identity, Gaudelli (2016) defines Global Citizenship Education as the process of addressing the intersections between globalization, education, and programmatic efforts to prepare young people to live in a more interdependent, complex, and fragile world. The intersections about which Gaudelli speaks became apparent to me when I organized an international trip with my former high school students to Europe. The educative impact and transformation this experience yielded for my students was groundbreaking. I was left wondering what the educative impact of study abroad programs specifically in music might look like and what precisely the role of music was. To answer that question, after conducting an exploratory study, I decided to conduct a larger study to investigate the role music plays in music study abroad.

**Study abroad programs: Historical context and literature review**

Education in conjunction with travel is a notion that has been in currency for centuries. The idea of student travel as education was formalized as early as the late 1600’s (Gyr, 2010). From the 17th to the 19th century, British men embarked on what was called the “Grand Tour” (Ritchie, 2003) in which they ventured across the great sights of Europe as a form of education. It was expected the young man travel to Paris to learn his manners and to Italy to learn about art and architecture (Porges, 2017). John Locke, the leading British philosopher of the Enlightenment, stated that “To establish good breeding, to form a good gentleman, book learning is secondary; primary is modesty, politeness, and knowing ways of the world” (Locke & Garforth, 1964, p.25).

In the 17th century it was the musicians who traveled from post to post, who, by combining the different customs they encountered on their journeys, produced a cosmopolitan musical life and style (Burkholder, Grout, & Palisca, 2014). Especially the Germans, who like the English studied abroad and traveled across Europe wrote music in almost all genres drawing on Italian and French as well as native styles and blending them into a cosmopolitan form. Thus making the experienced composer-traveler the most in demand musician amongst the courts in Europe.

**Music ensemble travel**

While there is a substantial body of literature related to study abroad programs in general, there is little research on what the educative impact and the role of music is specifically within music study abroad programs. There are some articles (Olsen 2010, 2008; Robinson, 2011) that primarily report on the mechanics of music ensemble travel related to the planning, fundraising, and execution of such trips. Robinson (2011) suggests group travel for band or orchestra as a means of outreach and promotion and thus through recruitment trips ensuring a band program’s longevity.

Similarly, Hagman (2010) describes the ways in which Missouri school district ensemble trips provided opportunities to teach students concert behavior, concert dress, and to observe orchestra rehearsals. She further elaborates how taking her fifth-grade students to see a drum corps show resulted in improved behavior during her own rehearsals with these students. While Olsen included quotes of band directors she interviewed, for example: “There is nothing like watching these young students’ eyes
open up for an experience they might never otherwise get; they feel a lot more mature and worldly when they come home” (2008, p. 34); “I’ve even considered going on a trip and not having them play, just going somewhere for the cultural experience” (2010, p. 43), there is no empirical evidence available based on Olsen’s reports as to whether such trips are fundamentally educative for the participants.

Helsel (2015) conducted a study looking at three Western Pennsylvania schools and their ensemble directors to examine both the advantages and disadvantages of engaging the ensemble in the travel experience. The study investigated whether travel was worth undertaking considering the loss of class time and administrative tasks involved in the planning. The results showed that these trips served as a relevant recruitment and retention tool for all ensemble directors. However, data showed that recruitment and retention were only a byproduct of travel while all participants agreed that there was so much more educational value in undertaking music ensemble trips. A recurring theme was how these experiences bring people together and create a bond not only amongst students but also between students and teachers. The ensemble directors attributed the relationships fostered during these trips as the main reason for the program retention as opposed to travel activities per se. In a musical ensemble where to blend is the goal, participants reported that having a bond among its comrades was very valuable. Consequently, rehearsals improved given the teacher-student bond leading to a more efficient way of reaching the students and thus improving the sound. Participants further stated that students gained real world skills such as sharing space with others and navigating a city but also gained a greater cultural understanding from travel (Helsel, 2015).

This is similar to several other studies that show a positive impact on life skills and a range of benefits as a result from educational travel such as personal growth and cultural awareness (Dwyer, 2004; Paige et al., 2009; Stone & Petrick, 2013; SYTA, 2017; Wanner, 2009). One participant reported that the cultural enrichment for the students complemented their natural growth as a musician and student (Helsel, 2015). Helsel further concluded that “knowing that travel helps with life skills and that it does pertain to recruitment and retention is useful to the profession” (p. 18). Even more crucial perhaps, is the fact that bonding and extracurricular learning occurs during travel.

**Method**

**Research Questions**

The purpose of this study was to explore with a group of music educators their perceptions of how leading music programs abroad shapes the potential for their students to become global citizens and with a group of students the program’s educative impact particularly looking at the role of music. To carry out the purpose of this study, I addressed the following research questions:

1. What is the role of music in a music study abroad program?
2. What role does music play specifically in achieving cross cultural understanding in a music study abroad program?
3. How are perceptions of global citizenship influenced by studying music abroad?
Participants
The participants included: four U.S. American music students, five Malaysian music education students, one U.S. American music professor and one Malaysian music education professor. All eleven participants were aware of the researcher’s intent and agreed to participate.

Study abroad program
This three-week course took place in three locations: at Mululay University in the outskirts of Kuala Lumpur; in Georgetown on Penang Island; and in the rainforest in Kelantan, northeast Peninsular Malaysia.

Data Collection and Analysis Procedures
Data collection consisted of 20 semi-structured interviews, detailed field observations, and a focus group. In addition, I conducted pre-trip interviews two months prior to embarking on the trip with each of the four U.S. American student-participants.

Data analysis took place after all interviews were completed and transcribed and was based on Creswell’s (2018) five-stepped process: 1) data collection; 2) data managing; 3) reading and memoing; 4) describing, classifying, and interpreting; and 5) representing and visualizing.

Results
Based on the research questions, six major themes under two large categories were obtained from the in-depth individual and focus group interviews, the two large categories are: 1) The Role of Music and 2) Perceptions of Culture, own and another, and Notions of Global Citizenship. This paper will focus on the first three themes, related to the role of music, which are the following:
Theme 1: Music as a conduit for cross cultural understanding
Theme 2: Music as a means of bonding
Theme 3: Musical knowledge and skills acquired through this experience

Findings
Theme 1: Music served as a conduit for cross cultural understanding.
The participants discussed how music serves as a means to communicate, understand, and connect with one’s environment.

There is an opening with music. There is that...we communicate without words, and sometimes with our eyes and our bodies. Yeah. It's a space maker. It provides a space, and then it's what we do with that space. So I think the space that was provided was like a very fertile garden for us to grow in. That was a big takeaway for me. Being with someone, a couple of practitioners, we couldn't communicate because I didn't know Malay and they didn't know English, but they could show me everything. There was a lot of smiling going on and a lot of body language. Communicating that way was just somehow really wonderful. (Paul)

Similarly, Cathy spoke about the ways in which music has served as a gateway into understanding the world and the unknown around her. She explained how through music
she discovers various facets of life and consequently also culture, specifically as it related to her experience on this trip.

I think music has been my doorway into everything new. Music is my door to understanding just about everything. Music is my connection to learning about the history about where those traditions come from. And then I hear something else that I love and I have to, why do they sing like that? And, why is their scale like that? And then that takes me into culture because culture influences all those things, right? When we were playing with those gentlemen and we played for them and we were dancing and that kind of thing right there, that's why I make music. (Cathy)

She further shed light on how music for her is a conduit to not only understanding but also connecting with people and to places, and perhaps the self.

Music is more about how I understand…it's about connection. It's about connection about me and here, it's about connections with people. It's about connection to place. And it's about connection to source, whatever you want to call it. (Cathy)

Theme 2: Music served as a means of bonding.
A majority of the participants reported how sharing their music among each other served as a crucial connecting factor and as a means of bonding. Lucia reported that “on one of our karaoke nights, they put a lot of dance music. So, we were all dancing together and understanding how we dance, and what we do when, and then what kind of songs they sing.” Lucia further described how learning the dances and the cultural context within which these dances are performed, provided her an insight into the musical and social traditions of Sabah (Borneo). It was evident that these bonding moments through music were fundamental to the friendships that were formed.

In considering the role of music and the ways in which it played a part in the study abroad program, Aqil provided the following conceptualization: “Okay, so for me, if I could make, if I could have one thing to represent the music, it will be a glue, it's the one that kept us together.” His metaphor exemplified a compelling analogy. Given the fact that all participants shared the field of music and music education and the profession as the commonality among each other, music was indeed the cohesion, or “glue” as Aqil put it, that provided a bonding foundation.

Theme 3: Musical knowledge and skills acquired through this experience.
Several participants reported that through participation in this program they acquired musical skills ranging from: instrumental technique, improvisation, traditional performance praxis, and creativity, to instrument making skills, listening skills, and ultimately knowledge about traditional Malay music styles. The notably different approach to musicking and the instruments themselves in traditional Malay styles compared to the ways we are taught in Western schools and conservatories was fascinating to the U.S. participants. Learning about traditional Malay music prompted Isabella to be more open-minded towards other music she generally wouldn’t have listened to before.
In terms of listening, I feel like now I might be more open to things that before were like do you want to listen to this CD of like whatever traditional music and I'd be like "oh thanks, but no"; now I might be like, okay I'll give it a try. Now that I'm enlightened, I feel that I will be more open to listen to new, different musics.

Discussion
Music and Cross Cultural Understanding
The participants articulated the ways in which music served both as a conduit for cross cultural understanding as well as a way to communicate non-verbally. Music making provided a space within which different cultural habits were expressed, observed, and perceived. The participants further shed light on how music provided an insight into cultural customs and in return contributed to a better understanding of the foreign culture. Through experiencing a foreign culture, the participants’ perception about their own culture also shifted both musically and non-musically. This is similar to several other studies (Paige et al., 2009; SYTA, 2017; Stone & Petrick, 2013) that show personal growth and cultural awareness as a result of educational travel.

Bonding through Music
“If I could have one thing to represent the music, it will be a glue, it's the one that kept us together.” The participants overwhelmingly concluded that music served as a means of bonding in various facets as illustrated by Aqil’s quote above. Both the instrument as well as music-making moments provided a strong bond amongst the participants. This coincides with Helsel’s findings (2015) who reported how these travel experiences bring people together and create a bond amongst the music students. Compared to a study abroad program for example in macroeconomics, relationships formed through musical activities seemed to provide a deeper bond as illustrated by the participants.

Music skills and Musicianship
Engaging with different musical styles and performance practices provided the participants an opportunity to acquire new musical skills. Through various classes and workshops students were able to dive deeper into traditional Kelantanese music and in return gained further experience in improvisation and instrumental technique as well as creative strategies and listening skills. This is similar to Helsel’s study where a participant reported that through cultural enrichment the students complemented their natural growth both as musicians as well as people.

Conclusion
In an ever-growing interdependent world, it is crucial that young people develop a sense of cultural intelligence in order to better navigate a more complex and fragile world. Dr. Khalish spoke to this point by highlighting the fact that collaborating with other cultures helps you understand their understanding of our culture. In other words, one must understand the counterpart from a different culture in how they are understanding our own culture in order to interact perhaps more truthfully with one another. This experience illuminated how study abroad programs and music in particular might offer a space and play a central role in cross cultural understanding.
Study abroad programs in music provide multiple educational opportunities for participants. Perhaps the most salient benefits are personal growth, bonding and friendships, acquired music skills but also a more contextual understanding of cultural customs and habits. The participants’ experiences illustrate how they became more aware of both their own cultural habits and traditions as well as how their perception of other cultures and customs was influenced by participating in this study abroad program.

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A creative transdisciplinary proposal of musical education to install visions of equity and diversity

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Abstract
The artistic-scientific intervention proposed here can be installed inside an educational establishment or ideally in a public space. The dynamics of the work presented are open to children and adolescents of different levels, so that they work together or, at least, in a common project. In Chile it has been implemented through Curriculum Integration and Creativity Workshops. The epistemological and aesthetic opening is achieved through Dialogic Artifacts (audiovisual, kinetic and interactive sculptures). This paper discusses the scaffolding that constitutes these Dialogic Artifacts and presents the limits of their testimonial, aesthetic and cognitive capacity. The Dialogic Artifacts project an established intentionality, which incorporates rationality in the expressive message, intentionally broadening in relevance towards other disciplines in addition to music education. They transcend the sense of sculptures, these are installations or instruments with a certain utility, beyond contemplation objects. In their visual expressivity they are also completed by incorporating - as in sound art works – movements and /or sounds that acquire multiple characteristics of kinetic art. Together, it is combined in an orchestra composed of sound multi objects, with visual behavior. "Dialogic" refers to an interactivity in two senses: with Nature as a subject, by incorporating in its expressiveness the kinetic feasibility derived from the use of self-sustaining energies (mechanical, hydraulic, solar, among others) and with the observer subject, who is encouraged to acquire an active role, changing from spectator-auditor to interpreter-interpreters. In parallel, they can establish a correlate produced by the action of wireless sensors, impact microphones and other administrators that conduct their signals to computerized equipment. These signals, received by various operating systems or other computational components, are susceptible to artistic and/or scientific readings, either for their feasibility in the composition of electroacoustic or mixed works or for the observation of physical phenomena that can be altered material and/or digitally with both specific. Through a program shared by members of as many subjects as possible, this expressive artistic look, and at the same time of scientific and technical rationality, can be channeled into principles that grant a decisive role for learning that emerges from curiosity, experimentation and creativity. It taxes a foundational stimulus since all, without exception, are genuinely treated as composers and researchers.

Keywords: Creativity, equity, diversity, curriculum integration, interculturality.

Background
This paper is the result of a long experimentation initiated in 1996 at an Experimental School of Music in Chile. It has been brought to the attention of the teaching staff that the students did not display a particular interest in the repertoire they performed in the orchestras and symphonic bands (mostly from the European Classic period). They
listened, instead, to strident music coming from the media. To better comprehend this situation, we interviewed students through focus groups. We concluded that indeed a parallelism coexisted; a functional subsistence between the repertoire that the School imposed as valuable and another, which students regarded as their own, characterized by an aggressive sonority, yet constructed in a conservative way: its structure being based on the song form and harmonic flows of type I - VI - IV - V - I.

To address this situation, we found it appropriate to broaden the students' perspective towards a variety of musical expressions. We planned listening activities with repertoires-other excluding music they knew. We began by presenting works of acousmatic music. Among many others that we listened carefully to pieces such as the "Variations for a door and a sigh" by Pierr Henry (1963), "Amacatá" by Juan Amenábar (1972) and "Andean Heights of Cotacachi" by Chilean composer (1993). For a semester, we wrote down their appreciations on the board, as a brainstorm exercise. Given the diversity of opinions and the installation of labels such as: "mystery music", "science fiction", "humor", etc. or of closed responses of the type "I like" or "I do not like", we encouraged students to sharpen their listening. It was necessary to distinguish three instances in this repertoire: repetitions, contrasts and variations. Students soon showed learning results. They recognized formal qualities through maps that they devised to iconically represent the sound behavior and its quality. Then, we applied these categories to listening to Chilean folklore, through musical expressions that, although seemingly closer to students than for example acousmatic music, they continued to place those in the field of music-other.

Students had made an important leap: they were able to listen to diverse repertoires moving from the emotional sensory, to the analysis of poetic (creative procedures) as well as aesthetic factors. As a result of the thoughts and observations they assumed with unusual interest, they reached a consensus: that without realizing, they had not been participants of the signs and metasigns that those repertoires produced in cultural, social and geographical terms. We were able to conclude then, that they confirmed to be under the heteronomic influence of an imposed repertoire: either by their school or by the media. The objective of broadening students’ aesthetic sensitivity had been achieved and they were aware of the existence of a problem. However, there were two other major problems: students declared they needed a guide and we, their teachers, who had accompanied them on this journey, only had questions, not answers.

In search of answers
To what extent would a musical education based on the students admit their status as subjects of education? This question revealed another problem: to overcome the unveiled reproductive curriculum of our school it was necessary to overcome precisely the still modern vision of Subjects of Education that we had. We relied on the Cartesian cogito, which differed from the sound object they placed within reach, regardless of any otherness.

The problem was greater in the daily context, in the world of life. This space was occupied by music from the media and commerce, whose purpose obviously does not correspond to formative topics, but to produce as efficiently as possible, messages that stimulate consumption.
Faced with this situation, equity and musical diversity are in tension. How does this globalizing tide that makes musical diversity invisible, manifest? There is evidence that the problem manifests from language itself. In Chile, at the institutional level, the Ministry of Education designates the subject of Musical Education, with a single word: “Music”. We can infer that it does not escape a hegemony that transcends nations. It becomes clear when a single way of conceiving, listening, writing and, above all, of imposing on students an adult’s ways of thinking, is reproduced. In the Chilean popular sphere, in order to identify a person from another of the same name, it is common to put a definite article in singular form before the name, so as to indicate he or she is already known “by all”. This peculiarity graciously distinguishes Chileans from other Spanish speaking countries: colloquially designating Juan, as “el Juan”, María, as “la María” or Pedro, as “el Pedro” thus differentiating them from other Juanes, Marias and Pedros … But, now, coming from outside, from the Western Culture, it also imposes us genitive terms that come along with precepts which demand everybody’s knowledge of them. Thus, we find singular expressions: "the" Art, "the" Music, "the" Painting, "the" Dance, or even beyond the arts themselves, "the" Medicine, "the" Philosophy, invoking a nominal metanarrative that, in itself, is exclusive, since it is devoid of feelings and knowledges-Other. Although in the genitive, the preposition “of” added to the nominatives, makes certain contexts and subjects visible, they cannot avoid a colonializing univocity, since the colonized concept remains ideologically indelible.

To become open to diversity and equity does not imply ignoring the works of great composers. But we cannot ignore the tension that occurs due its nature: they are univocal, they require levels of competence to access the ontology of their message. They expect nothing from the listener and its reception is exclusive, aimed at a few who must have the knowledge that supposes its reception. In such a condition, the passive listeners, wait for it to provoke an effect over them without the freedom of interpretation. The ontology of their message is static, not dynamic. In the twentieth century, in the proliferation of the idea of Art for Art, these musical expressions increased massively, yet the population did not have a training to accompany contrapuntal dialogues, distinguish timbristic displays, modular processes, detect polymetries, among multiple possibilities corresponding to the aesthetic reasonableness of Western music. But they had learned to worship these works, like the boys and girls of the School … without understanding them. Therefore, it is about widening the perspective; respectfully open visions towards a diversity of possibilities offered by different cultures, without being overshadowed by the hegemonic univocity of "The" Music.

So: How to strengthen the diversity of musical expressions in a postmodern, globalized, multicultural and digitally connected context? And at the same time, how to embody identity signs in the musical production of the subjects of education, denoting in some way their cultural environment?

An antidote to answer this awkward question would be to define one's music as all musical expressions the subject consumes and manifests through it, regardless of its origin. In this way, the concern for the hegemonic origin, installed in a non-place, would be overcome, without requiring inclusive signs in musical expressions. But our educational condition transcends a problem of repertoire … and consumption.

We found that music production should exceed the assembly of works designed by others. If the interest lay in the students; in strengthening their self-esteem and capacity of
agency, it was necessary to appreciate their environment. The production had to move towards active participation in musical creation and from there, understand how, with what and what they would signify. We cared to arouse curiosity in them, the need for experimentation with diverse materials.

The proposal should be relevant to the postmodern, globalized, multicultural and digitally connected environment in which we live; where the sciences and the arts are nourished in a continuous multiplicity of theorizations, practices and projections. In this context, the radical school-subject-tourism in which we find ourselves, gave no answer. It was necessary to travel through expressive domains, rationalities and technologies. We opted to accept that they included in their works extra musical elements. From that perspective, the image contributed significantly to express identity signs. We started a project to expand expressive resources in the first place, towards the image. As they had already become familiar with the acousmatic music, we suggested that they incorporate, through digital recordings, sounds of the environment.

With the software *Punto y Tono* which allows you to transform audio files into MIDI and vice versa, students composed pieces by integrating images into the sound discourse. In addition, they freed themselves from the rigor of isochronous digitalization (quantifying their music in units of time and pulses) and of specific sinusoids (musical notes) by incorporating mostly messages, real-time noises or audio files (specific noises, their own voices and laughs, etc.) proposing pieces with a strong relationship with themselves mixing images and sounds familiar to them.

With *Punto y Tono*, we managed to establish in epistemic terms, a way of composing and representing that did, in broad terms, refer to the environment of those who created these small works: the students. However, the excessive use of the software generated communication problems with the students, and among themselves. Although they exhibited achievements in the interaction between images and sounds, at first glance there was clearly a disconnection that caused them to remain self-absorbed in front of the computer screen.

On the other hand, music emerged exclusively from the speakers without leaving spaces for choral and instrumental interaction. In order to overcome this weakness, we devised the Dialogic Artifacts.

**A creative, transdisciplinary and didactic proposal to install visions of equity and diversity based on Dialogic Artifacts**

This proposal consists of an artistic-scientific intervention. It can be installed inside an educational establishment or - ideally - in a public space. The dynamics of work is open to children and teenagers of different levels, so that they work together or, at least, in a common project. In Chile it has been implemented through Curriculum Integration and Creativity Workshops. The epistemological and aesthetic opening is achieved through Dialogic Artifacts (audiovisual, kinetic and interactive sculptures). Its name provides and exhibits its scaffolding; It presents the limits of its testimonial, aesthetic and cognitive capacity. It projects a well-founded intentionality, which incorporates rationality in its expressive message, intentionally explained to broaden its outlook towards other disciplines, from music education.

More than sculptures, it is about equipment, installations or instruments with a certain utility, beyond objects of contemplation. In their visual expressivity they are...
further enriched by incorporating - as in sound art works - movements and/or sounds that have been simultaneously acquiring characteristics of kinetic art. Together, they constitute an orchestra with visual behavior. The second part of its name: "dialogic", refers to an interactivity in two senses: with Nature as a subject (Habermas, 1987), by incorporating in its expressiveness the kinetic feasibility derived from the use of self-sustaining energies (mechanical, hydraulic, solar, among others) and with the observer, who is encouraged to acquire an active role, changing from spectator-listener to interpreter-interpreters. In parallel, they can establish a correlate produced by the action of wireless sensors, impact microphones and other gadgets that conduct their signals to computerized equipment. These signals, received by various operating systems or other computational components, are susceptible to artistic and / or scientific readings, either for their feasibility in the composition of electroacoustic or mixed works or for the observation of physical phenomena that can be altered material and / or digitally with both purposes. Through a program shared by members of the largest possible number of school subjects, this expressive yet rational approach, can be channeled into principles that grant a decisive role for learning that emerges from curiosity, experimentation and creativity. It produces a foundational stimulus since all, without exception, are genuinely treated as composers.

**Operating systems of ramps and kinetic sculptures**

The ramps consist of gutters of different materials that extend from the top of a hill (or metal structure) to its feet. Through them, spheres of 15 centimeters move, obeying the force of gravity. When they finish their journey, these spheres are deposited in a lift that brings them back to the summit for the circuit to repeat itself. The ramps allow the installation of sculptures that are designed, created and articulated by children and teenagers, taking advantage of the kinetic energy of the spheres that is transformed into mechanical energy. Through their journey the spheres trigger dialogic devices, causing interactive sound, visual and kinetic events.

As an example, we present some of the categories of Dialogic Artifacts that can be installed, depending on the available spaces:

**Wind Forest.** These are metallic stops from which various artifacts hang that, due to their movement, either provided by wind energy or by the recreational action of the observers, emit tenuous frequencies, swaying and balancing together. In sound terms, they provide random frequencies similar to melodies, easy to distinguish. It can measure approximately 20 meters and has more than 100 or many more Dialogic Artifacts from various instrumental families.

**Bongoes Square.** Its extension is configured in an area of 30 meters long and 16 meters wide. It consists of pvc pipes of 20, 30, 40 and 50 centimeters of different heights, located in an area of the installation. In the upper part, they have a cover that transforms them into percussion instruments similar to a bongó or a ‘tumbadora’ (type of drum). They emit sounds when the audience stands over them.

**Hanging textures.** These are wooden installations that allow users, through a wooden tunnel, to produce sounds from different materials while they walk through it.
Sustainable energies. The system includes various energy production processes, all characterized by their autonomy and sustainability obtained by mechanical action and through handlebars and levers. For example, what has been called the Central Circuit can be compared with an operating system, but instead of a virtual reality where programs are installed, sound materials are placed on the ramps.

Rotary and random wind dialogical artifact. A tube of a random multifrequency wind organ, made up of another 24 similar tubes, between 2 and 6 meters high. They emit different frequencies and timbres. These sonorities change in height (frequencies) due to the action of the spheres that move along the ramps, activating them by means of a gadget specially placed for circulating on its side. However, such behavior can be intervened and enriched by observers (who, in this case, acquire a role of expressive interlocutors) through a tuning handlebar. Its sound disappears if the wind is less than 8 kilometers per hour (4,3 knots).

The dialogue with Nature that, precisely, gives the name to the Dialogic Artifacts, is produced by incorporating in its expressiveness the kinetic feasibility derived from the action of the wind, or other behaviors originated in the use of energy (mechanical, kinetic, hydraulic, solar, among others). They contemplate a double story or correlate that is transmitted simultaneously. It is produced by the action of wireless sensors, impact microphones and other gadgets that carry signals to computer systems. In turn, these signals when received by various operating systems or other computer components allow artistic and / or scientific readings: either for their feasibility in the composition of electroacoustic or mixed works, or for the observation of physical phenomena that can be altered materially and digitally.

Conclusions
The complexity to which these devices and facilities that begin in Musical Education refer, transcends their aesthetic function by broadening their eyes towards a convergent rational and scientific observation. In their aesthetic introspection they emphasize a provocative intentionality with which they invite or rather, they challenge the viewer to abandon such a condition and become a participant of the work, to complete it with her own ways expression through her action, to satisfy her curiosity, which should consequently generate new questions and hypotheses, which are binding with different areas of knowledge.

Under this didactic and artistic perspective, Musical Education is installed in the center of the school curriculum, transversal to different subjects, giving an aesthetic vision of the various scientific and humanistic phenomena. Although, the works they generate are unique and situated -since they refer to the region where the conditions for their operation are given- the listener abandons her passivity and participates in the syntax of the work ... she is part of it. There is no remoteness with the work, the subject of education is rescued and acquires genuine existence by integrating into it, as part of it. The same goes for Nature, whose random and unstable designs are part of its expressiveness. Nature ceases to be the object of observation, study or exploitation: it is part of the work. If developed in places with rivers, they will take advantage of hydraulic energy; in deserts, solar energy; in buildings, wind energy; and if it is on a hill or side of a
building, they take advantage of the transformation of kinetic energy into mechanics to set the Dialogic Artifacts into motion. They promote, through creativity, disciplinary dialogue and dialogue between students by agreeing among themselves the dynamics of the different artifacts in the installation and ... diversity and equity when installed either in rural or urban spaces, where the protagonists are girls and boys, young people or adults.

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Developing Simpson’s taxonomy theory to construct assessment guidelines for music competency within the psychomotor domain
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Abstract
Assessment is a very important part of the learning process. Bloom, Simpson, and Krathwohl have developed a taxonomy of learning outcomes in three domains, namely cognitive, psychomotor, and affective. This taxonomy has been used as a benchmark in compiling various standards related to evaluation. The cognitive domain represents the ability associated with the intellectual aspect which was developed by Benjamin S. Bloom, Hasting, and Madaus. Psychomotor domains are skills related to motor abilities developed by Elizabeth J. Simpson. The affective domain is associated with attitudes developed by David R. Krathwohl, Benjamin S. Bloom, and Bertram B. Masia. In areas that require the need for practice such as music, assessment of each student’s achievement should arguably pay more attention to the psychomotor aspect. However, the psychomotor aspect level developed by Simpson is not very well known.

This study aims to develop a psychomotor taxonomy as part of the standard assessment of psychomotor abilities in music based on Simpson's taxonomy, which has not been further developed so far in Indonesia. This research was conducted in Indonesia, the Netherlands and France. The study adopted a quantitative approach and was carried out over three years. Research procedures included observation, documentation, and interviews. The steps of the research were: 1) studying the literature to find out the indicators that construct the common ground of music abilities; 2) identifying the musical abilities of students in many countries; 3) analyzing the level of music competency based on Simpson taxonomy; 4) developing guidelines for psychomotor assessment levels in the field of music and; 5) identifying students' psychomotor abilities based on age and grade level.

The results show that there were eight levels of psychomotor levels, namely perception, set, imitation, guided response, mechanism, complex overt response, adaptation and originality. Based on observations, students aged 4 to 6 generally reached an imitation level; elementary school students in grades 1 to 3 achieved imitation and creativity; elementary school students in grades 4 to 6 achieved imitation by singing or playing music according to the rules and guided response; junior high school students in grades 7 to 9 achieved guided response and mechanism; high school students in grades 10 to 12 reached mechanism, and university students achieved complex response and adaptation. Originality can only be achieved by highly-skilled and experienced artists.

Keywords: Bloom’s theory, Modification, Music assessment, Psychomotoric, Simpson’s taxonomy
**Introduction**

Assessment plays a very important part in the learning and teaching process. Errors in grading can result in smart students being judged as not good, and students who are not good at being rated as better. Bloom, Simpson, and Krathwohl have developed a taxonomy of learning outcomes in three domains, namely cognitive, psychomotor, and affective. Until now, in Indonesia although teachers understand that learning achievement consists of three such domains, its implementation by teachers has only been deployed with Bloom’s cognitive domain. For example, many teachers who develop skills in the natural sciences actually develop thinking skills that are in the realm of the cognitive. Likewise, many teachers categorize affective domains into skill aspects. For example, while the ability to care about the natural environment is included in the psychomotor domain it also belongs in the affective domain. In areas that emphasize practice, such as the arts, sports, and techniques, the achievements are given more attention within the psychomotor aspect. However, since the psychomotor aspect level developed by Simpson is not very well known and understood, the psychomotor aspect uses more of the rating scale which tends to be relative in nature so as not to provide a definite assessment decision.

The implications of Bloom’s taxonomy revision in music encouraged Hanna (2007) to introduce four new knowledge domains to describe procedural and metacognitive knowledge that are integral to music learning. In addition, the new taxonomy elevates creativity as the most complex of the cognitive processes, which has positive implications for the field of music education.

Although Hanna has developed Bloom’s taxonomy in music, her work still emphasizes on the cognitive domain and not the psychomotor and affective domains. Considering that the psychomotor is the dominant domain utilised to play music, this present study attempts to further apply Simpson’s theory by developing the psychomotor aspect for the field of music. This level of psychomotor ability can be used by music teachers as a reference in determining the sequence of learning materials and performing appropriate evaluations so that learners can learn in the right direction.

**Literature study**

**Competency standards**

Mursell (2007) states that a good evaluation should make the learners firmly aware of learning outcomes they have achieved and that learners should also know the knowledge or skills that have not been mastered and must be mastered for the next stage. Astuti (2017) found evaluation examples that were performed in the Netherlands where learners demonstrated the ability to play music and articulated the process of achieving their abilities, in terms of easy and difficult parts, and the most preferred part. Other students noted the advantages that were achieved and provided input so that future learners could provide a better appearance. The teacher provided a resume evaluating performances by the learners.

An increased ability by learners progresses somewhat quickly when the purpose is clear and likewise at the gradation level of achievement of a capability or competence. Therefore, what is required is a clear and measurable standard to provide guidance for learners to be able to learn effectively. The standard definition is a technical requirement...
and includes procedures and methods developed based on the consensus of all relevant state government and international decisions.

The definition indicates that the standard setting should also be based on present and future developments. Thus, it is necessary that the standard setting for each level of education should be based on empirical and accurate data. In music, the empirical data collected should really represent the musical abilities of the learners in the field. Given that music brings a wide variety of styles, it is necessary to find a standard of competence that can accommodate various genres of music.

The standards must also pay attention to all parties, including those at the international level. The standards should also involve the international community, whereby the standard of music competence takes into account the musical ability of students from many countries.

Common ground
As previously noted above that music comprises various types and levels, wisdom is required in preparing competency standards. Ganap (2000: 2) states that the setting of minimum competency standards can be overcome by finding common ground as a starting point toward integration as is done in Japan. The common ground in the music is the essence of musical substance that can explain the phenomena that appear in various forms and genres. Thus, the common ground is something essential, not only as an accessory that can only explain musical phenomenon in a particular genre, but rather to explain the musical phenomenon in various forms.

The taxonomy theory of Bloom, Simpson, Krathwohl, and Anderson
In 1956, Benjamin Bloom led a group of educational psychologists who developed an important classification system and levels of abilities in the learning process (Sosniak, 1994). Bloom sees six levels and ways of categorization, each requiring a level of abstraction from learners. The six categories are C1-C6: the abilities to recall, understand, apply, analyze, synthesize, and evaluate, while Krathwohl (1964:88) developed the affective domain which consists of internalizing, conceptualizing, valuing, responding, and receiving. From 1964-1967 Simpson et al (1971: 2) realized the need for the development of psychomotor aspects suitable for industrial education, agriculture, home economics, business education, music, art, and physical education. Meanwhile Carol Hudson (in Simpson, 1971:18) explains that for the psychomotor domain in music, the goals are, for example, to develop correct arm, hand, and finger positions in holding and playing a violin in response to aural cues.

The taxonomic theory of learning outcomes
In 1967, Piaget (via William, 1969) wrote that there is a close parallel between the development of the activity and that of the intellect’s function. Meanwhile, Michaelis relates the cognitive and the affective. Guilford developed the structure of the intellect model, but never connected his discoveries with the curriculum. Furthermore, from 1966 to 1968 Williams (via Simpson, E. 1971 p. 92) modified Guilford’s intellectual structure model to develop students' thinking and feeling skills in the classroom.

According to Driscoll (2005), from 1965-1985 Gagne based his work on the taxonomy theory of Bloom, Simpson, and Krathwohl, and developed a learning outcome
consisting of these cognitive, psychomotor, and affective aspects in the learning. Through Gagne it is known that Simpson had developed psychomotor aspects not only as a complex response, but added adaptation and originality. The development of learning theory by Gagne has inspired Driscoll (2005: 373) to construct a model of constructive learning. A further discovery led to the development of the National Music Education Standards and Adherence to Bloom’s Revised Taxonomy by Coleman (2013). This discovery still emphasized the cognitive domain, and not the psychomotor. The most recent research led to the implementation of the Model Corner Stones Assessment as a tool for the measurement of music ability by Richerme (2016).

Music Competency Standard (MCS)
The basic elements of music are rhythm, melody, and harmony. Kamien (1988, 2) stated that the essence of rhythm is the recurrence of tension and release, and time. Ki Hadjar Dewantara (1977) said that for early-stage children, learning should be encouraged by the game method. Meanwhile, Piaget explained that children 8-12 years old fit within the pre-operational stages, while teenagers 12-18 years old are in the operational stage. Based on this theory, the MCS of 1st to 3rd graders is knowing, feeling, and practicing the basic elements of music; the MCS of 4th to 6th graders is understanding and practicing basic rules of music; the MCS of 7th to 9th graders is the ability to display artwork in accordance with the techniques and procedures; and the MCS of 10th -12th graders is implementing art as part of local, national, and international society and social life.

The psychomotoric level of Simpson’s theory
Simpson (1971:25) classifies the psychomotor ability into five levels, namely perception, set, imitation, guided response, mechanism, and complex response. Perception is an essential first step in performing a motor act. It is the process of becoming aware of objects, qualities, or relations by way of the sense organs. Perception is a mental process where appearances cannot be seen, but can be detected by observing the response of the subject when presented with a particular object. For example, mentioning the taste qualities of sweet, salty, or bitter. Therefore, the psychomotor aspect cannot be separated completely from the cognitive aspect because when tastes are mentioned, this involves aspects of knowledge gained based on previous experience. Furthermore, it can be said that a person who can do something well, whether consciously or unconsciously, is related to a theory that is already known. Set is a preparation adjustment or readiness for a particular kind of action or experience (Simpson,1971: 27). For example, possessing the ability to show how to hold the violin bow, show correct hand position in playing the piano, and to show the correct sitting position playing the guitar.

Guided response is the overt behavioural act of an individual under of guidance of the instructor. There appears to be two major subcategories- imitation and trial and error (Simpson, 1971: 29). At this level the subject takes a specific action as instructed by the instructor.

The mechanism for subject level learning response has become habitual. At this level, the learner has achieved a certain confidence and degree of skill in the performance of the act, for example, the ability to make ingredients for a butter cake (Simpson, 1971:30). What this means is that the ability achieved at this stage has not become a
habit, but that the doer is in the process of achieving the habit for playing music and has the ability to display various techniques, but is not yet very smooth.

The complex overt response is the ability of the subject to perform motor actions that are considered complex because of the movement pattern required (Simpson, 1971:30). At this stage the individual can combine various techniques, is very adept and the motor act has become a habit.

As mentioned previously that through Gagne, it is known that Simpson added the psychomotor aspect with adaptation and originality. Adaptation is the altering of motor activities to meet demands of problem-solving situations. Meanwhile origination is the ability to create new motor acts or ways of manipulating materials using skills, abilities, and understandings developed in the psychomotor area.

Simpson’s psychomotor taxonomy levels are the basis for educational experts to develop psychomotor ladders in various fields. Although the gap is not exactly the same the outline offers nearly the same hierarchy. One researcher, Sirait (1989, 104) developed the psychomotor stage in mechanical engineering. Gaps in mechanical engineering were developed by Bistok Sirait and have similarities with the hierarchy of abilities in music. The difference is that in engineering there is more emphasis on the skill level of difficulty or complexity of skills and speed, whereas in the art of music there are aspects of “taste” that can be achieved through the process of empathy, contemplation, and interpretation to produce expression.

The development of the music psychomotor level of Simpson’s theory
Based on the stages of psychomotor abilities by Elizabeth Simpson which was later developed by Sirait, researchers developed a theory of psychomotor of music in eight stages: 1) perception, 2) set, 3) imitation, 4) guided response (response counseling), 5) mechanism, 6) complex response, 7) adaptation, 8) originality.

Perception is the ability of the individual to use the five senses to understand or respond to aspects of music such as tone, rhythm, melody, and harmony. Set is the ability to show or demonstrate a particular movement such as how to hold a violin, finger position, and articulation in singing. Imitation is the ability to mimic a particular technique as in the example of following a teacher or instructor. For example, learners sing song notes as exemplified by teachers or instructors, learners play chord progression as exemplified by teachers, and learners play the scales with the techniques of escape as also exemplified by teachers. Guided response is the ability of the learner to combine various techniques with the guidance of teachers or instructors. For example, learners sing a song or play a musical instrument by combining various techniques with teacher guidance. Mechanism is the ability of the learner to combine various techniques without guidance, but who is not yet proficient. For example, learners play songs by combining techniques without the guidance of teachers or instructors. Complex response is the ability to integrate a variety of music playing techniques with advanced skills. At this stage various techniques of playing music have been mastered very well. Adaptation is the subject’s ability to sing or play a musical instrument to suit the expected demands. For example, a subject who can accompany various songs. A singer is able to sing various types of songs, or an artist is able to sing according to the characteristics of the audience so that his or her performance gives satisfaction to the audience. Originality is the highest stage and is the ability of the artist to develop new techniques and/or patterns
that characterize their identity. A famous and successful artist strives to achieve this originality. By just hearing a song without having to see the singer or the music player, the audience can identify the artist because the artist has a distinctive character. Originality is what artists aspire to accomplish.

**Methodology of research**

**Research procedures**

The research procedures were: 1) study literature to find indicators that construct the common ground of music ability; 2) identify the musical ability of Indonesian, French, and Dutch students and; 3) analyze the appropriate common ground with empirical data. Marzano (2003, p. 3) stated that after finding out the common ground, the next step is to construct the standard competency that serves as a benchmark. The final step is to try out the music standard competency.

**Data collection method and research site**

The method of data collection was literature study, observation, interviews, and documentation. This study conducted observations at schools from the kindergarten level to universities in Indonesia (Yogyakarta Special Territory and Central Java), France (Poitiers Province), and in the Netherlands (Utrecht and Den Haag Province).

**The result of the research**

The research results are based on the observations of the students attending Kindergarten ABA Temanggung, Islamic Primary School Lukmanul Hakim Kota Gede Yogyakarta, State Primary School 1 Kranggan, Temanggung, State Junior High School 2 Temanggung, Junior High School Muhammadiyah 1 Wonosari, High School Depok Yogyakarta, the Department of Music Art Education FBS UNY, Conservatory Den Haag, the elementary school of Dacosta Hoograven Utrecht, Junior High School lyceum Montessori Zeist, Cals College Nieuwegein, Hoogeschool Voor De Kunsten Utrecht, and Poitiers University.

The results of the research show that music psychomotor aspects were strongly associated with cognitive aspects. For example, kindergarten level learners could play a song but basically at a rote level. In playing the musical instrument, learners played the tone with the basic tone do = A, but they did not understand the meaning of the basic tone. They have not been able to decide for themselves the notes played besides the notes indicated by the instructor. At the elementary school lower levels, learners enjoyed participating in experiments by exploring various aspects of music especially with simple musical instruments while the upper level elementary school students have begun to realize the importance of the rules in playing music to produce beautiful music. At the college level, affective aspects such as the ability to organize were emphasized so that prospective music teachers were able to organize learning.

In the learning process, learners have not reached the stage of origination because this stage can only be achieved by those who are highly experienced in the field. It takes a relatively long time to achieve this origination level such that learners generally are not yet able to achieve origination.

In general, it can be said that the level of psychomotor ability achieved by students in kindergarten up to the elementary school level (4-9 years) was the imitation stage.
Upper elementary school students (10-12 years old) reached the stage of guided response. The learners in junior high school and high school levels achieved levels made possible by a mechanism of involving cognitive and creativity aspects. The college level students showed a complex response rate with abilities connected to affective aspects at the organizing level.

**Conclusion and Suggestions**

In learning music, some psychomotor aspects were related to cognitive and affective aspects. At the level of kindergarten learners, the imitation ability in the psychomotoric domain was connected to memory and therefore related to the C1 level in the cognitive aspect. Imitation at the lower elementary school level was related to exploration ability involving trial and error. Upper grade primary school students had reached the level of guided response by obeying the rules of playing music to produce good music playing skills. Junior high school students reach the stage of mechanism while at the high school level, learners achieve the complex response ladder. At the college level where learners had chosen their field in accordance with willingness and interest, the level achieved was a complex response and adaptation. The new origination stage can be achieved when students have pursued the field intensively, which requires a long time of practice and can generally only be achieved when and after they have graduated from college. The findings obtained from this study are: 1) the level of ability to play music is not dependent on age, but on intensive training and good talent that can accelerate the ability of learners; 2) That in unison singing, the right intonation is more dominant so that no improper tones or discordant voices are covered. This is evidenced by the discovery of children who sing in a discordant voice when singing individually. For this reason, it is necessary to conduct research to develop a theory of elimination of discordant notes in a unison singing study.

**Acknowledgments**

Our deepest thanks go to the Directorate General of Higher Education (DRPM) of Indonesia for funding this research; Joost Schilings, Servaas Schreuders, Christianna Nieuwmeijer, Marianna, Ezie Ladage, Christian Boel, Marco Oede Molemann from Hogeschool van de Kunsten Utrecht who allowed us to observe the learning process and interviews in the college; Elleke Bijsterveld and the Sabel Tim from Koninklijke Royal Conservatorium Den Haag who gave researchers the opportunity to observe the music learning process for children in the conservatorium; Ms. Sherly Vrede, Ms. Bellinda, the school principal, the Utrecht DaCosta school teachers, the teachers at De Kom Nieuwegein; Dr. Malene Belly and Chantal Pelbale from Poitiers University and the Poitiers Conservatory for allowing the research team to observe the music learning process; teachers of elementary school, junior high school, and high school in Yogyakarta and Central Java who were involved in this research.
References
Matching timing and change of tempo: Difficulties and strategies for piano beginners playing four-handed-piano

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Chubu University

Abstract
Matching one’s musical timing with other people’s musical expression is a necessary skill for student-teachers who will one day have to accompany young children’s singing and playing. Previous research shows that the piano duo task is an effective practice tool for nursery and kindergarten teacher courses on various points. Therefore, a four-handed-piano duo program was set for 82 undergraduate students. Case 1 (beginners) and Case 2 (experienced performers) were set an extra task to “change the tempo” in their performance (e.g. ritardando at the end of the music). Two methods, (1) text mining analysis on questionnaires from 80 students, and (2) statistical analysis of performance evaluation of two cases by piano teachers were used.

The results of the text mining analysis showed different strategies were used for practice by the experienced (whether they noticed mismatching or not). Experienced piano performers had a greater variety of practice methods than beginners. The performers who could not notice mismatching timing did not have any strategies of their own other than using a metronome for practice. The Co-occurrence network of top 30 words and well-used words list showed that the benefits of the piano duo task found in previous researches were re-confirmed in this study.

The results of the statistical analysis of performance evaluation did not show the difference between evaluation perspectives. However, there was a notable tendency that tempo had a higher point than the other perspectives such as dynamics, balance, composition, and wholeness. It might have occurred because of the piano teacher’s advice to change the tempo deliberately. However, the difference was subtle, not significant because of the good performances were supposed to be well balanced in all aspects. To sum up from the results, it was found that the first difficulty of the piano duo task was depicting the musical tempo in their performance. Performers need to change the tempo to match to the partner’s timing, but to do so, they needed to establish their own tempo they want to play. The beginners pair took a longer time to decide the tempo by themselves and keep it while performing, but once they could do it, they became able to change tempo, to do ritardando at the end of the music. It was confirmed that the “Change the tempo” task could be good stimuli for designing and setting the timing to accomplish the piano duo task for both beginner and experienced performer duos.

Keywords: piano, musical timing, musical expression, practice strategies, practice methods, performance.

Background
Piano performance is a skill required for nursery and kindergarten teachers in Japan, even though most of university and/or college students on teacher-training courses have had
little previous experience playing the piano. Matching one’s musical timing with other people’s musical expression is necessary for students to accompany young children’s singing and playing. Therefore, piano duo tasks were set for undergraduate students, who were acquiring the ability to listen to others and match their performance timing with others.

Previous researches show that piano duo tasks were effective for nursery and kindergarten teacher courses in achieving various things, such as nurturing cooperation (Hosaka, 1996), providing collaborative learning (Wakaya, 2013), musical performance with awareness of others (Takagi et. al., 2008), enhancing willingness to learn music (Tanaka, 2015), developing sensitivity towards music (Morimura et. al., 2016), making students able to enjoy music and playing the piano (Yoshida, 2017).

Playing with other performers is a very difficult task for these piano beginners. Difficulties with receiving their own tempo and accommodating their partners’ tempo, were severe. Students could not see what made it difficult, but teachers identified that the reasons lay in a lack of a sense of beat, meter, or tempo. Therefore, the changing tempo task was set for two pair of students; (1) 2 beginner pairs, and (2) 2 experienced piano performers.

Method
The study consists analysis of two parts; Analysis 1: text mining on questionnaires, Analysis 2: statistical analysis on performance evaluation.

Analysis 1: text mining
The analysis 1 (questionnaires) were carried out on 82 undergraduate students who attended the piano duo classes. The first five lessons were observed by a piano teacher and lesson notes were made. The presentation day was set as “piano duo concert” one week after five lessons and recorded. The first questionnaire was taken on the day of the piano duo concert (16/05/2017), and the second analysis was made on the last day of the course (18/07/2017). The analysis method was text mining, which used the student’s original writing style. KH Coder software was used for the analysis.

Questions
<Questionnaire 1>
Q8: What did you keep in mind while practicing
Q10: What did you learn throughout the piano duo task?
<Questionnaire 2>
Q1: Have you ever take any private piano lessons?
Q3: Did you notice a mismatching the tempo?
Q4: How did you practice?
Q6: What sort of advice did you receive from the piano teacher?

Analysis 2
The analysis 2 was a performance evaluation made by 8 music teachers from the recordings. The teachers were asked to mark the performance on a scale of 0 to 10, from five different perspectives; dynamics, tempo, balance, composition, and whole. 8 music
teachers were asked to mark the performance on a scale of 0 to 10, from five different perspectives: dynamics, tempo, balance, composition, and wholeness.

Participants
Analysis 1
The 82 university students (19-20 years old) who were taking a “young children’s music” subject at a nursery and kindergarten teachers training course. One class of 90 minutes length, taking 8 (out of 15) class for a piano duo task (from 11th of April to 16th of May 2017). The last class was finishing up concert.

Analysis 2
2 cases were chosen for analysis 2 (performance evaluation). Case 1 was a beginner’s pair, played Itsumo Akaruku from Aruhi no Beyer Kumikyoku. Case 2 was an experienced pair, played Radetzky-ish Snail March. The lesson notes of two case studies of piano duo lessons were provided by a piano tutor in the music subject. Both pairs were set an extra task to “change the tempo” in their performance (e.g. ritardando at the end of the music). The recordings of the two cases were used for performance evaluation. 8 music teachers were asked to mark the performance on a scale of 0 to 10, from five different perspectives; dynamics, tempo, balance, composition, and wholeness.

Results
Analysis 1: text mining
The top 5 words of each part of speech from the answers of Q8 (What did you keep in mind while practicing) and Q10 (What did you learn throughout the piano duo task?) from the Questionnaire 1, Q 4 (How did you practice?) and Q 6 (What sort of advice did you receive from the piano teacher?) from the Questionnaire 2 are showed in Table 1 below.

<table>
<thead>
<tr>
<th>Rank</th>
<th>名詞</th>
<th>noun</th>
<th>名詞</th>
<th>noun B</th>
<th>名詞</th>
<th>noun C</th>
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<td>partner</td>
<td>練習</td>
<td>practice</td>
<td>音</td>
<td>sound/note</td>
</tr>
<tr>
<td>2</td>
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<td>myself</td>
<td>一緒に</td>
<td>toether</td>
<td>人</td>
<td>others</td>
</tr>
<tr>
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<td>テンポ</td>
<td>tempo</td>
<td>息</td>
<td>breath</td>
<td>気</td>
<td>mind</td>
</tr>
<tr>
<td>4</td>
<td>メトロノーム</td>
<td>metronome</td>
<td>一定</td>
<td>fixed</td>
<td>音</td>
<td>music</td>
</tr>
<tr>
<td>5</td>
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<td>rhythm</td>
<td>演奏</td>
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<td>47 words</td>
<td></td>
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<th>verb</th>
<th>形容動詞</th>
<th>adjective verb</th>
<th>形容詞</th>
<th>adjective</th>
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<tbody>
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<td>1</td>
<td>する</td>
<td>do</td>
<td>大切</td>
<td>important</td>
<td>難しい</td>
<td>difficult</td>
</tr>
<tr>
<td>2</td>
<td>合わせる</td>
<td>a</td>
<td>違う</td>
<td>trouble</td>
<td>速い</td>
<td>fast</td>
</tr>
<tr>
<td>3</td>
<td>弾く</td>
<td>h</td>
<td>大変</td>
<td>terrible</td>
<td>好きな</td>
<td>fun</td>
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<tr>
<td>4</td>
<td>聞く</td>
<td>listen</td>
<td>大事</td>
<td>important</td>
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</tr>
<tr>
<td>5</td>
<td>なる</td>
<td>become</td>
<td>きれい</td>
<td>beautiful</td>
<td>早い</td>
<td>fast</td>
</tr>
<tr>
<td>total</td>
<td>102 words</td>
<td></td>
<td>22 words</td>
<td></td>
<td>19 words</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Top 5 words of each part of speech from the answers of Q8 and Q10 (Questionnaire 1), Q4 and Q6 (Questionnaire 2)
The top 5 words of each group indicated the student’s approach and attitude towards the practice, and what was on their mind. The most used noun was “partner” (appeared 78 times in their writing). The second noun was “practice” (62 times). From these, most of the students wrote about the practice with the partner. From the top 5 adjectives, it could be seen that the students felt the piano duo activity was a difficult task but enjoyable. “tempo” (19 times), “metronome” (14 times), “rhythm” (14 times), “together” (15 times), “breath” (10 times), “fixed” (8 times) suggest what they were in mind to practice. Those words indicated the difficulties they felt in playing in time with a partner. And they spent time to practice for playing in fixed tempo.

Other results from the two questionnaires were shown Co-occurrence network figures. The words in figure 1 show the students’ feelings towards other duos’ performance, and to the piano duo task itself (Subgraph 01, 04 and 07). Subgraph 01 shows that the students thought and tried to improve their own performance skills at matching their timing with partner. Subgraph 04 and 07 shows that the students found the solution, which was “listening” in order to match and stabilize the tempo.

From the Figure 1, the good effects of piano duo task which previous researches showed were re-confirmed; such as nurturing cooperatives, provide collaborative learning, musical performance with aware of others, enhancing the willingness to learn music, pulling out the sensitivity towards music, making students to be able to enjoy music and playing the piano.

Figure 1: Co-occurrence network of top 30 words from Q8 and Q10 (Questionnaire 1), Q4 and Q6 (Questionnaire 2)
A use of different strategies was found between beginners and experienced piano performers. Those who answered ‘yes’ for Q1 (Have you ever take any private piano lessons?) had 10 more words to answer Q4 (How did you practice?) and Q6 (What sort of advice did you receive from the piano teacher?) (Figure 2).

![Co-occurrence network of Q4 and Q6 (Questionnaire 2), biased by Q1 piano experience](image)

Co-occurrence network of Q4 and Q6 (Questionnaire 2), biased by Q3 notice mismatching the tempo showed clear difference (Figure 3). Students who did not notice the mismatch had only one tactic, use of metronome, to cope with the piano duo task, while others had various methods to try. Students tried various tactics for practice, such as video recording, using a metronome, and practicing together a lot. Using a metronome was the only method for those who did not notice mismatching tempo.

**Analysis 2**
The results of ANOVA showed clear difference between Case 1 and 2 (p=0.00027, <0.05), but no difference among the five evaluation perspectives (p= 0.37268). The evaluation by music teachers were clearly high on the experienced performers pair. However, the average points of five evaluation perspectives were not significantly different in both cases (Figure 4 below).

Case 1 (2 beginners) had lower points on dynamics (average 4.88), but other perspectives were tempo (5.75), balance (5.63), composition (5.63), whole (5.88). The results suggest they could improve their performance if they could do more work on changing dynamics.

Case 2 shows the all the five perspectives average points were similar; the lowest was “balance” (7.38), the highest was “tempo” (7.63). It means their performance was well-balanced, not lacking any perspective.
In both cases, tempo had higher average points. It was because the piano teacher set the main task for both duos to set the tempo and match the changing the tempo.

Figure 3: Co-occurrence network of Q4 and Q6 (Questionnaire 2), biased by Q3 notice mismatching the tempo.

<table>
<thead>
<tr>
<th>average point</th>
<th>dynamics</th>
<th>tempo</th>
<th>balance</th>
<th>composition</th>
<th>whole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case 1: Beginners</td>
<td>4.88</td>
<td>5.75</td>
<td>5.63</td>
<td>5.63</td>
<td>5.88</td>
</tr>
<tr>
<td>Case 2: Experienced performers</td>
<td>7.50</td>
<td>7.63</td>
<td>7.38</td>
<td>7.50</td>
<td>7.63</td>
</tr>
</tbody>
</table>

Figure 4: average points of performance evaluation
Conclusions
For Students, there is some difficulty in the piano duo task matching their own musical tempo with that of the performance of others. To improve their ability to do, performers have to have their own sense of beat, meter and tempo. By properly acquiring this sense, they can notice what tempo they are making, and perceive their partner’s temporal design of performance, then gradually becoming able to synchronize the tempo of their own piano duo performance.

Additionally, the tempo change task for piano duo could illuminate other perspectives of their performance. For example: balance, composition and whole. These dynamics could be other aspect without paying attention to constructing better musical performance. Especially, beginners needed advice from teachers to pay attention to it.

To sum up, set a tempo is the first thing for piano duo task and changing the tempo could be a good tactics for students to improve their performance, but it is necessary to pay attention to dynamics to make it perfect. “Change the tempo” task could be good stimuli for designing and setting the timing to accomplish piano duo task for both beginner and experienced performer duos.

References
The use of artistic research in a case study of preparing for a violin recital

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Abstract
This work aims to discuss the relevance of artistic research for music performers. The first part consists of a bibliographical review on the development of artistic research and its implications, based mostly on the view of Lopez-Cano & Opazo (2014) and Benetti (2017). The second part is a study case built from documenting the preparation process of a violin recital in a practice diary. This work resulted from the questioning on how one can apply the principles and tools of artistic research to daily practice and turn the routine of preparing for a recital into a systematized, and yet reflexive, academic study. To answer such question, after defining literature, repertoire and deadlines, the chosen methodology was the autoethnography using a violin practice diary as the main tool to document the practice routine, organize data, and finally write down inquiries and thoughts about the preparation process. In conclusion, it was understood that artistic research is important in two levels: in an individual matter, it makes daily practice more enriching, as it provides structure and organization, leading to self-analysis and a goal-oriented practice; in a global context, it brings the opportunity for sharing your musical work in an academic level, thus contributing to the music research community and fellow musicians.

Keywords: Artistic research; autoethnography; practice; performance; violin

Introduction
A musician can use himself as a research object when critically observing and analyzing his own practice. If properly documented, this process can later be transformed into an academic work. However, this is a rather recent approach to performance studies. Given that music profession and activities meet different scenarios in each country, it is also important that the individual musician finds and elaborates research material in his own language. For this reason, this study intended to use several Portuguese writing authors, as it was carried in the Brazilian context.

To begin this discussion, let us consider the following statement of Lakatos & Marconi (1991, p. 83),

All sciences are characterized by using scientific methods; on the other hand, not all study lines that use them are sciences. From these affirmations we can conclude that the use of scientific methods is not exclusive of science, but there is no science without the use of scientific methods.

It is true that most likely musicians do not consider themselves “scientists”, but we can compare the thorough work of daily practice to a scientific research, once it takes methods, systematization processes, reflection, and contemplation or analysis of results. Hence the possibility of viewing individual practice as a research object.
As the discussion of artistic research appears to be so enriching to long term practice, this study emerged from the following inquiry: how can one apply artistic research principles in a short or medium length project under pressure, such as an important recital? Thus, this study has a twofold goal: first, to bring forth a bibliographical review about artistic research and musical performance as a study object; second, to make use of this review by applying it into a personal study case – the preparation for a violin recital planned for ending a Master of Arts program in Music Performance.

To carry this work, a practice diary was developed for daily registering violin practice. The format, structure and goals of this diary shifted continuously as bibliographical research advanced, revealing other and more effective possibilities. Also, these changes reflected the maturity and development of the preparation path for the recital. This tool was extremely relevant for the study, as it served a cyclic purpose: it was both the space for registering daily experience and also the source of necessary data for reflection; the conclusions acquired were systematized and lead to new guidelines for further practicing plans.

**Artistic research and autoethnography as choices for the performer**

In his thesis, Valter Kakizaki (2014, p. 4) affirms that “we can understand music methods as didactic and functional documents which aim to show all stages of musical formation in a progressive and encompassing manner, contributing to the resolution of problems”. Therefore, we can consider that music methods undergo phases and processes of study which can be compared to scientific methodologies. The statement of Cardassi (2006, p. 56) suits well this discussion,

I believe that documenting the learning processes of a musical work is one of the most enriching experiences for the research performer nowadays, and the records of his practical experiences will undoubtedly come to ease the path for future students and produce the desired deepening in music performance research in Brazil and in the world.

Music performance research has a recent historical trajectory. By the end of the 20th century there was a broader opening to scientific study of instrumental performance, but only after the 1990-decade did the music performer gain intrinsic relevance by placing himself within his research. Hence, the music performer could finally appear as the goal of his own study, as a researcher of his own practice, leading to the development of new categories of scientific investigation such as “musical analysis, technical and mechanic preparation for performance, techniques of study and practice, reflexivity and creativity in interpretation, historically based performance, physical gestures and movements, processes of memorization, collaboration between composer and interpreter” (Benetti, 2017, p. 148).

Alfonso Benetti (2017) also highlights that the detailed investigation carried by a performer towards his own repertoire is a lot alike the process of other scientific researches. Though the intense closeness of the author’s self in his own text can cause some awkwardness in academic approaches even among musicians, Benetti (2017, p. 150) states that the musician should engage in research activities by investing in his personal doubts and difficulties and turning those into a source of study. Through this
attitude one can also validate his own practice as research and carry a refined instrumental work.

Artistic research, as it is called by Benetti (2017) and López-Cano & Opazo (2014) emerged from combining traditional scientific research with the needs and possibilities of music performance. This type of investigation keeps the structure of academic research, while relating to the processes and building elements of musical preparation. It also accepts the empiricism of the musician as an authority to speak about his own experiences in his musical activities. In artistic research, “what matters is precisely the cumulus actions the author himself develops” (López-Cano & Opazo, 2014, p. 134).

Considering all the care and caution necessary for the foundation and validation of this type of work, Benetti (2017, p. 152) states that “one of the main challenges is to develop and use research tools that are adequate in the universe of the performer as an instrument player, and at the same time provide pertinent data in terms of empirical research”. In this regard, the author considers autoethnography a relevant method, once its aim is to describe and analyze systematically “a certain personal experience in the sense of understanding it culturally”.

Autoethnography, which was used in this study, is a method also discussed by López-Cano & Opazo (2014, p. 138-140), shortly defined as an approximation between autobiography and ethnography. According to these authors, though the extent of its use can be controversial, it gives the performer the opportunity to analyze his behavior and study in its own personhood under the light of his characterizations and cultural belongings. The uneasiness that might be found in the acceptance of this method lies on the balance of personal matters versus cultural, technical musical considerations. While some consider that an account or record of personal experiences are enough for an autoethnography, others believe it is necessary to have systematization, theorization, data organization or reflections that bring the work to a cultural, social or historical approach.

Understanding such doubts and dubious paths, this work also sought a combination between honesty and transparency in the personal accounts and practice records, along with the research resources found in violin pedagogy and practice literature. However, Benetti (2017, p. 152) confirms the importance of personhood in the core of artistic research when saying autoethnography should emphasize “the interaction between researcher and study object, which involves the description and analysis of personal experiences”. In a deeper and poetic way Ellis affirms that “autoethnography is one of the approaches that recognize and accommodate subjectivity, emotion and the influence of the researcher in the research, instead of hiding these topics or assuming they do not exist” (Ellis, Adams & Bochner, 2011, p. 2).

**Organization and preparation for this study**

To carry an artistic research study, López-Cano & Opazo (2014, p. 123–130) present four types of practice: 1) informative practice – that which provides information for the investigation; 2) reflexive practice – when practice stimulates ideas, concepts and solutions; 3) experimental practice – a space to test and evaluate different procedures in practice; and, 4) vehicular practice – when the practicing or performing act becomes a communication channel for the results of the investigation.

One might notice that the types of practice listed form a growing sequence of a developing critical approach towards individual study. They are like phases of a process
in which a performer, regarding his practice, begins to look at himself, create records and documents for observation, reflect upon his own work, experiment new paths and finally get a new outcome of his performance, resulted from a close look at his daily practicing habits, attitudes and emotions, added to his technical and interpretative knowledge and development.

Thus, while a study can focus mostly in one of these phases, it does not usually fit exclusively in one category. Based on the definitions of Lopez-Cano & Opazo (2014, p. 128–130), the present work focused primarily in informative practice, which aims to “inform the investigation”, bringing us information about practice we must know as data. Later it moved on to reflexive practice, which is to “think and comprehend something through musical practice”, or “think acting and act thinking”.

For this matter, a practice diary was made to register the daily routine of violin study. The records were first done in a small notebook, filled during practicing time, and later typed into a digital document with further comments. The following step was to use the information provided by the diary and begin to turn daily practice into an intense self-critic and reflexive activity. These steps and its conclusions were also described in the diary, and through this documentation it was possible to more accurately make pragmatic decisions for enhancing individual practice.

The phases of experimental and vehicular practice were not focused in this work, though they are present and can be noticed along the progress of the diary. Violin techniques and methods, for example, were not much experimented, the testing occurred rather on the most adequate structure for practice time, as it will be discussed later. As for vehicular practice, that with communicating purpose, by the end of the study a detailed analysis about the final recital was made in the diary to conclude the understanding of the preparation path.

The study case: development and evolution of the practice diary
In February 2019 the professor determined the final recital’s repertoire would be composed by: Partita n. 1 for violin solo, J. S. Bach, Allemande-Double, Bourrée-Double; Concerto no. 4 for violin and orchestra, W. A. Mozart, 1st movement with cadenza; Spanish Symphony for violin and orchestra, Edouard Lalo, 1st movement. As the recital took place in November 20th, there were approximately eight months for preparation, from the first sight readings to interpretative and performative approaches.

During classes the professor observed that most of the performative problems derived from an ill, unbalanced or messy thinking during practice time. Poor thinking had become a habit while playing in general and lead to stressed, uncanny and frustrating performances in recitals, masterclasses or even regular lessons. Hence, artistic research came not only as an appropriate academic format, but as a great opportunity for change through self-analysis and reflection. Though it might sound simple and subjective, along with all technical-interpretative features, honesty and personhood were key elements to document the practice hours.

It must be said that the habit of maintaining notes on the time spent in daily practice already existed, but it did not serve a specific purpose, it was simply a control tool and did not encourage any progress in long term practice. So, for this study the daily documentation moved to another level and became an actual diary: noting technical and mechanical problems, feelings and thoughts which occurred while playing, music lines
left undone, and even facts of the day that interfered in obtaining a successful practice time.

This phase of the diary lasted from March to July 2019, when it was time to evaluate the achieved results. The daily narratives provided a lot of information about what kind of emotions and thoughts triggered negative effects during practice, besides revealing issues on personal management for daily planning. It was also possible to notice which violin technique aspects were found more difficult. Performance, however, did not have much improvement except that which organically resulted from time, so a new attitude was necessary to aim at progress in interpretative and performative matters.

According to Walter Kakizaki (2014), it is fundamental that a violinist, or any musician, plans clear goals for the practicing sessions of the day. While medium and long-term goals such as mastering a technique or accomplishing a music piece are very important, the daily goals are determinant for visible and rationalized progress in practice routine. Also, one should plan the time to be spend on each practicing day and distribute it in each session. Hence, the diary was changed into a more practical format. Instead of descriptive-narrative texts, a table was made containing music piece, goals, difficulties, time planned, and time actually spent – these elements were to be filled in reference to each practice session.

After a week the feeling of organization brought new liveliness to the practicing hours. Still seeking for improvement in the practice routine, the works of Carl Flesch (2000) and Ivan Galamian (1985) were studied. They present a similar division of practice time, both in three parts. Flesch (2000, p. 100) proposes: 1) Basic technique; 2) Applied technique, the study of technical aspects present in the repertoire; 3) Music performance. Galamian’s division (1985, p. 95), which was preferred, has a slight difference in the second part: 1) building time, devoted to fundamental technique; 2) interpreting time, the construction of parts of the musical piece, both technical and musical; 3) performing time.

The common line between them is the relevance of practicing performance, getting ready to play whole concertos or long pieces, and getting over the mistakes and lack of concentration. Thus, the daily practice table was later organized based on the three-part division of Galamian (1985).

**Final thoughts**

As the end of the study approached, a goal-oriented practice along with time management and objective planning appeared to be the essential for building a successful practice routine. One should know at the beginning of the day precisely what must be done and know at the end of the day exactly what was achieved during practice. The challenge which comes before and after practice is to make good judgement about organizing the practice hours.

The habit of keeping record of your practice routine can be very helpful for personal organization and collecting information about your own practice and musical development. However, reflexive attitudes such as those derived from a practice diary will determine the path to follow from acknowledging the present situation. Santiago (2009, p. 138) also states that teachers can use high level researches to lead students in their effort and search for excellence. Therefore, artistic research tools, such as those found in this paper, can also suit instrument teachers and music educators, encouraging
the teaching of critical thinking to music students and building their self-analysis intuition and reflection abilities in their practice and understanding of music.

Cardassi (2006, p. 56) remarks that Brazilian academic literature lacks the publication of works in music performance, also that many teachers and students do not recognize the relevance of registering and perpetuating their work and do not consider systematic research pertinent to their carrier. By viewing artistic research as a relevant tool, not only can they enhance the opportunity to validate their personal efforts but also collaborate with the musician community by sharing experiences and discovering new strategies for the art of music study and performance in national and international scenarios.

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References
Digital technologies in the music classroom to support equity and inclusion in secondary school

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Abstract
Digital technologies have become a part of society in Western countries, and the governments of these countries have implemented a range of public policies regarding their implementation. Teacher training and funding for digital infrastructure in schools have been among the guidelines for most countries, including Spain. However, the literature indicates that teacher training is insufficient and is not focused on the most important areas: the training is techno-centered and seems to lack the pedagogical and content elements that the TPACK model suggests. This study, which confirms the existing literature, is a case study of two schools. One of these schools seems to be on the right path: thanks to the institution, all students have access to ICT, and the music teacher uses digital technologies to help students with special educational needs. The second school seems to have made insufficient effort: technological infrastructure is inadequate, and the use of new technologies is exclusively technological without being pedagogical. No changes have been made in teaching methodology, and the environment in the classroom needs to be improved. On the other hand, teachers in both schools are digitally competent, although teacher training has had nothing to do with it. Teacher training for current and future teachers needs to be examined, and both schools should organize training sessions for their teachers based on their particular needs.

Keywords: digital technologies, ICT, music education, inclusion, equity.

Introduction
Digital technologies have become a part of everyday life in Western societies, causing the biggest social change since the Industrial Revolution, with technologies that were unimaginable 20 years ago (Bosco, 2013; Chrysostomou, 2017; Roig & García, 2014), caused by globalization (Lum & Marsh, 2012). The technologies we use nowadays are in constant development (Chrysostomou, 2017), which is why they have become an important subject of research, due to the changes they have caused at work and in social relationships, including ways of learning, what is learned, ways of accessing culture, and the culture that is accessed (Foro & Saura, 2002, as cited in Roig & García, 2014). The integration of these technologies in the classroom and in the curriculum has become one of the main goals of educational policies, not only in Spain but also in Western and Asian countries (Cejas, 2018; Leong, 2017); moreover, it is one of the most important elements of education development for the OECD and the European Union (Chrysostomou, 2017).

A definition of new technologies is not easy, according to Román (2017), because, in the past, technologies included photocopiers, whiteboards, CD players, and the like, which cannot be categorized as such nowadays. Currently, new technologies include computers and any other devices that allow us to use applications to work collaboratively and share our work over the internet.
Digital technologies—not only computers, but also tablets and smartphones (Dourish, 2004, as cited in Nijs & Leman, 2014)—offer the possibility of using new methodologies in the teaching–learning process. This change has social consequences, and Sampedro (2016) argues that it is necessary to educate society to manage the access we have to an enormous amount of information. Despite this, many teachers do not yet use technological media as part of their work methods, according to Fundación Telefónica (2009) (as cited in Vílchez, 2014).

Current law, Spanish and Catalonian, establishes that “digital competence” needs to be developed by students across all courses. In addition, Catalan law adds TAC (the acronym for ‘Technologies for Learning and Knowledge’ in Spanish) to the Music curriculum. Moreover, many countries, including Spain with its 2009 program “Escuela 2.0.,” have developed plans to support the implementation of ICT in schools (Cejas, 2018).

On the other hand, Cabero (2008, as cited in Sampedro, 2016) considers that technology transfers not only information but also values and attitudes. Because of this, Sampedro (2016) defends its use to support a sustainable society and to reduce inequality, a consequence of globalization, which has encouraged transnational attention towards education, understood as a global public good and one of the fundamental human rights (Leong, 2017). In this regard, UNESCO (2013, as cited in Leong, 2017) reports that ICT can be a tool for empowerment; Sultan (2010) makes a similar argument. UNESCO focuses on people with disabilities, who stand to gain easier access to information and knowledge, although limitations to this access can be caused by financial circumstances, and its inclusion needs to fulfill two perspectives, pedagogical and social, for this empowerment be realized (Area, Cepeda, & Feliciano, 2018). The origin of this “digital breach” is financial, on two levels: between countries and between social strata (Chrysostomou, 2017; Leong, 2017). This digital divide can make it difficult to help teachers feel comfortable with ICT, especially in the first level (Akuno & Ondieki, 2017). On the other hand, they can ease teachers’ task because they can help them take on different roles: mentor, trainer, instructor, informer, guide, socializer and motivator (García, 2006, as cited in Vílchez, 2014).

Designing a methodological change towards new technologies is complex; there is no agreement about how this should take place due to the great range of possibilities they offer, and the real effectiveness of the current proposals needs to be evaluated (Vílchez, 2014).

**Theoretical framework**

**Legal context**

Appendix 7 of Decret 187/2015 of the Generalitat de Catalunya (2015) establishes the contents and competences in the artistic field within Compulsory Secondary Education. There are 10 competences, and ICT is frequently mentioned in relation to at least three of these competences.

Furthermore, the Spanish Decree establishes as one possible criterion on evaluation the use of different technological resources, showing a basic knowledge of the techniques required to record, play and create music and simple media productions (Gobierno de España, 2015). On the other hand, it also mentions several cross-curricular key competences in which digital competence is included.
Musical competences

Although, as mentioned before, Catalan law establishes several competences, these are not always specific to music, and, furthermore, there is at least one that is based exclusively on local culture. Moreover, they also tend to be, at times, ambiguous. Better lists of musical competences can be found in the works of authors like Vernia (2016) and Vílchez (2014). The following list is based on their contributions: rhythmic; aural; vocal; reading and writing comprehension; interpretative and body expression; learning how to learn; Music History; knowledge of musical instruments; and technological, cultural, artistic and musicological competences. This list can help to facilitate the articulation of uniform criteria because music education is revealed in unique and different ways depending on context, which is conditioned by its own political, social, cultural, geographical and financial circumstances (McCarthy, 2012).

Teacher’s digital competence and education policies

Knowledge society includes mass media, computers and social networks in all possible areas (Suárez, Arévalo, & Gamboa, 2016). Education is not an exception, although the integration of technology in education is progressing more slowly than in other contexts (Bosco, 2013). However, technology has the potential to help students in their learning process and reduce school failure (Roig & García, 2014).

Teacher training is extremely important to achieve ICT integration in education. Digital competence is considered a core competence in the contemporary world by many institutions, including the European Commission, and it is known as a set of skills and basic knowledge of the use of ICT to face the new challenges of the knowledge society (Cejas, 2018; Suárez et al., 2016). Despite this, in developing countries, digital competence has not been a priority because of other important issues like the education of qualified teachers, especially in Central America and Africa, where Music is not taught by specialists (McCarthy, 2012). In Europe, there has been a series of European policies that each country has adapted to its own context. In Spain, education is mostly managed by the regional governments, so an analysis of its implementation is complex.

The measures taken by the governments have addressed two important aspects: teacher training and providing a technological infrastructure within schools (Area & Sanabria, 2014; Cejas, 2018; A. Gutiérrez, 2008; Sánchez-Antolín, Ramos, & Sánchez, 2014). During the last three decades, Spanish educational policies have promoted ICT training for new and existing teachers (Sánchez-Antolín et al., 2014), but they have focused on teaching how to use devices and programs instead of focusing on the pedagogical possibilities that should be at the center of such training (Cejas, 2018; A. Gutiérrez, 2008). According to A. Gutiérrez (2008), teacher training offered by the different governments has not answered all the teachers’ needs and has not had real effects on the professional activity of teachers; on the contrary, the training has even led to rejection. A recent study conducted in the Autonomous Community of Madrid concludes that, although European and Spanish policies have focused on teacher training for innovative use of ICT and on transformation in educational practices, these objectives have not been fulfilled because the offered teacher training is centered on creating more attractive content and information seeking, although all studies conclude that “technocentered” training needs to be abandoned (Sánchez-Antolín et al., 2014). Teacher training
is crucial to reach a real integration of ICT in education, and this training needs to focus on curricular content and methodology (Tárraga-Mínguez, Sanz-Cervera, Pastor-Cerezuela, & Fernández-Andrés, 2017). Barberá and Fuentes (2012), in addition, warn that ICT is commonly used as a helper in a master class by changing only the support: it is used as a technological rather than a pedagogical tool. Area (2008) (as cited in Bosco, 2013) takes a similar approach but also mentions other basic uses, such as interactive exercises of low cognitive complexity, information seeking and office automation.

In addition, according to Bosco (2002) (as cited in Barberá & Fuentes, 2012) and Area and Sanabria (2014), although computers are needed, it is not enough to give computers to schools. The Spanish government developed a program called “Escuela 2.0” that followed the model of one computer per student (Area & Sanabria, 2014); however, the program was cancelled in 2011 because of budget cuts. Nevertheless, many schools found ways to retain the program. Although the goal was to produce a methodological change, this did not take place (Sánchez-Antolín et al., 2014). Bosco (2013) considers that time and space management is key in the inclusion of ICT in the classroom. The position of the tables and the use of materials are important; they usually involve tables looking towards the teacher and blackboard, a textbook playing a prominent role and digital technologies as secondary sources.

An interesting contribution has been the TPACK model (Figure 1), which establishes three types of knowledge: technological, pedagogical and technological (the last of these included by Shulman). For a full integration of ICT, all teachers need to master all three areas of knowledge (Cejas, 2018; Suárez et al., 2016). Cejas (2018) considers that this model is incomplete because it works from knowledge and not competences and does not clarify when a teacher consolidates the TPACK.

![Figure 1: TPACK model](http://www.tpack.org) (as cited in Cejas, 2018)
Focusing on music education, Román (2017) thinks that all music teachers need to master the following software: music sequencer and score editor with MIDI support.

**Digital resources in music education**

New technologies in music education are based on computers and connections to the network as the center of all possibilities, online and offline (Román, 2017). They can be classified in terms of:

1. Access (online or offline)
2. Distribution (paid or free).

Román (2017) emphasizes that education should focus on open-source and free software.

On the other hand, technology allows us to reach any gender at any time (Horsley & Waldron, 2017; Lum & Marsh, 2012), which can be a great help in repairing an ethically questionable Western-centered music education. McCarthy (2012) considers that music education needs to recognize all cultures to support the integration of immigrants. Moreover, one of the greatest challenges globally is to achieve an inclusive classroom (Philpott & Wright, 2012), and ICT can be a facilitator in fulfilling this objective because it promotes inclusive practices such as collaborative work, especially if the software used is online (Román, 2017).

**Methodology**

This research, a case study of two schools, applies the comparative method (Gerring, 2007; Stake, 1995). In School 1, two classrooms were analyzed. School 1 is a public school located in an urban area. It offers secondary studies (mandatory and non-mandatory) and vocational training. School 2 is a charter boys-only school located in the suburbs. It offers preschool, primary and secondary (mandatory and non-mandatory) studies.

The main objective of this research is to analyze the use of ICT in Music in the first course of Compulsory Secondary Education in two schools in Barcelona province. To collect the data, classroom observations, focus groups with students, questionnaires for students and in-depth interviews with teachers were utilized. All data is qualitative. To analyze the data, Table 1 was used to categorize it. To create the data collection instruments and analyze the collected data, the criteria of Báez (2009), Callejo (2001), Gibbs (2012), J. Gutiérrez (2008), Krueger (1991) and Verd and Lozares (2016) were applied.

The following circumstances affected the data collection:

- Too many participants in the two focus groups organized in School 1.
- Questionnaire was given on paper in School 2 and online during class time in School 1. None of the students in School 2 answered the questionnaire.
Students in School 1 report that they like using computers. Every student has his or her own laptop, suggested by the school and mandatory to have. Classroom B had a better classroom environment, and respect between students and towards the teacher was obvious. Classroom A had some bad behavior from students. The teacher generally penalizes these attitudes, and the school has an online platform, GESTIN, through which parents and reference teachers can be informed. The teacher uses a website where exercises are linked at different levels so that each student can work at his own pace.

School 2 has a bad environment, not only in the class analyzed but in general, at least in the secondary school building of the institution. It can easily be seen inside and outside classrooms. Master class is the rule, and students are required to take notes. Most of them get bored easily and do not take notes, deciding instead to do something else. Students showed indifference about ICT when asked.

Digital technologies: access, students’ digital competence and technological resources used
Students in School 1 have access to ICT. Many resources are used in class because of the teacher: Kahoot, Quizz, Blinklearning (where the digital textbook is stored), Moodle, Google Classroom and the teacher’s website are used. The website is the resource preferred by the students because of the many different activities available there. The teacher said in the interview that most of these are links to third-party resources. Although some students did not have money to pay for their laptops, the school and the parents’ association help in providing laptops for students in difficult financial situations.
Students in School 2 are wealthy, so they can easily afford the newest technologies. However, students in the focus group revealed that this access is limited by parents at home. Moreover, at school, computers are rarely used, and, although the institution offers a platform called Clickedu, it is not commonly used. This software allows teachers to share content, create exercises and activities and create work groups of students; however, the use of it is limited at best, and nonexistent in most cases. The platform also allows a digital textbook to be stored, although none of the teachers in the institution has decided to use this feature.

Musical competences
As already mentioned, a good list of musical competences can be made based on the work of Vernia (2016) and Vilchez (2014). In School 1, some of the musical competences are developed with ICT. Based on observations and students’ comments, the following competences (at least) were improved by ICT: rhythm, aural, reading and writing comprehension, interpretative and body expression, learning how to learn, and technological. In School 2, nothing of this kind was mentioned or observed.

Teachers’ commitment and digital competence
Teachers in both schools are strongly committed to their task. Both use ICT in class, although in School 2 it is used only as a support for the master class. Based on observation and the interviews, both teachers are digitally competent, but the teacher in School 2 lacks the pedagogical knowledge to integrate ICT in his classroom. Both teachers are self-taught in the use of ICT. For example, when interviewed, the teacher in School 1 mentioned several times, while explaining various activities he has tried, that he checks what has been done in other schools and conducts research online. However, no course for teachers or resources from the public administration were mentioned as part of this process. This does not mean that the teachers had not taken any such courses, but, if they did, they seem not to have been affected by them, which reminds us of A. Gutiérrez (2008).

Teaching methodology
The teacher in School 1 combines several teaching methodologies. Although master class is used, it is combined with other methodologies. It is also used as a resource to help students work at their own pace and not strictly marked by the teacher. This is helpful for students with learning difficulties or special educational needs. This teacher showed real concern about students’ learning processes and their inclusion in the classroom. For example, he mentioned in the interview that not only the resources, but also the language, is important: it is not the same to say “Do the following exercises, except you should do only the first two exercises” as to say “There are five exercises, each more difficult than the previous. To pass, you need to do at least the first two exercises.” The shift in vocabulary can help students to feel more integrated in the group.

The teacher in School 2, as mentioned before, prefers to use master class in all his lessons, which can be an obstacle to ICT integration, as mentioned before (Bosco, 2013).
Summary and conclusions
The teacher in School 1 used ICT to promote the learning process of students and to try to achieve inclusive classrooms. On the other hand, thanks to the institution, all students had the chance to own a laptop and learn to use it, although some of them would not have been able to afford it without help.

Teachers in both schools need further training in the use of ICT. This training should focus on the pedagogical aspects and not be “techno-centered,” as the latter does not seem necessary; the literature seems to agree with this approach. The TPACK model could help in the design of this training.

School 2 needs to take ICT integration more seriously. Having a computer lab in the building that is infrequently used, and never used in the music course, is obviously not enough. Changes in teaching methodologies and investments in digital infrastructure are needed: master class and a digital blackboard have no effect in achieving the innovation desired by public institutions.

References


Activating voices: Vocalizations of identity and philosophy within the historical narrative of Jazz

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Abstract

Rather than being a survey of jazz history, Jazz Historiography is a course sequence that aims to develop an awareness of the ways the music’s history has been constructed by examining the voices that have told the story and seeking out voices representative of communities and issues that have either been absent from the narrative or viewed as not necessary to our overall understanding. Moving beyond the foundational materials and research approaches offered at the outset of the course, students aim to contribute newfound knowledge through their involvement in a second semester oral history interview project where they were in conversation with jazz musicians who had the opportunity to be in control of their own historical narrative and contribute to a better understanding of the narrative of the history of jazz.

This paper will share excerpts from student interviews with trumpeter Graham Haynes and saxophonist Rudresh Mahanthappa on such topics as identity, influence and learning, Butch Morris and conduction, and the meaning of jazz. The seven graduate students in the course conducted 23 interviews with participants they selected, including Tia Fuller, Barry Harris, Bill Saxton, Edsel Gomez, Gregg August, Luques Curtis, Bobby Watson, Robin Eubanks, and Oran Etkin, among others.

A major consideration when designing this course sequence was finding a way to create a dialogic space where students could engage in critical examination of readings, film, and recordings that were representative of various attempts at unpacking the music, values and principles of jazz that have existed over time. In so doing, the students would be in dialogue not only with important issues, but also with each other, thereby allowing for a multiplicity of voices to be represented.

The participants in the Jazz Historiography course sequence were first-year graduate students enrolled in a Master of Music program in jazz studies at a public state university. Grading for the course was based on a letter grade method of assessment of A through F with each semester lasting fourteen weeks. Class members included a trumpeter, trombonist, baritone saxophonist, pianist, drummer, and 2 double bassists. Their ages ranged from 22 to 36 years of age.

Keywords: Jazz historiography, interview, historical narrative, voice, identity, philosophy

Jazz Historiography and Narrative Voice

Historiography is concerned with the writing of history based on the critical examination and evaluation of evidence from historical data and investigating the various ways history has been documented and written about. By extension, jazz historiography has been defined as “the history of writing jazz history” with the recognition that our perceptions of the jazz tradition have been influenced by how it has been written about since the late
One common way the history of jazz has been conceptualized is with a view towards a logical linear development of jazz styles, complete with the rationalization that one style seemingly succeeds or supplants another. Coupled with this is the perspective that jazz is “built on a well-established canon – rather than as a complex of musical forms and cultures in a perpetual state of collision, revolution and redefinition.” (Harlos, 1995, pp. 131-132).

Jazz Historiography is also about the examination of voice and the voices that represent communities and issues that have either been absent from the narrative or viewed as not necessary to our overall understanding. In this way, one’s voice can be viewed as a vocalization of one’s identity and reflective of one’s ideas or philosophies and is capable of sounding in reaction to differing perspectives or ideologies. Emerson (1984) notes for Mikhail Bakhtin, each citizen’s voice represented,

[N]ot just words or ideas strung together: [but] a “semantic position,” a point of view on the world, it is one personality orienting itself among other personalities within a limited field…How a voice sounds is a function of where it is and what it can “see”; its orientation is measured by the field of responses it evokes (p. xxxvi).

As students explored the readings, music and film examples found within the areas of focus for this course, engaging in dialogue was found to be central to their learning while the dialogic space of the classroom was viewed as a place where different perspectives meet and “critical conversations occur” (Savin-Baden, 2008). It was also a setting where: opportunities for sharing and exchange were provided; the diversity of perspectives/voices were acknowledged; individual identities interacted; and new insights emerged.

Our investigation into the practice of interviewing was guided by an examination of The Art of the Interview: A Guide to Insightful Interviewing (Perlich, 2007). Here, Perlich talks about such concerns as preparing for the interview, listening, connecting with your subject, the opening question, follow-up questions, the hard questions, the “bingo” question, summarizing, troubleshooting, and logistical considerations. Students were asked to be critical in their assessment of the various interviews they read and to pose questions of themselves. Did the interviewer: listen to the subject and what they were sharing; provide good follow-up questioning; try to develop a connection with their subject? How did they adjust to an interviewee who may have been uncomfortable with some of the questions or with the interviewer’s approach?

**Findings**

**Graham Haynes Interview by Steven, drummer/Master of Music candidate**

Graham Haynes is a trumpeter, cornetist, composer, and producer with an eclectic career in many styles of music. He was born in Queens, New York in 1960, son of prolific jazz drummer Roy Haynes. Similar to his father, his career is one of constant progression, always adding new influences and skill sets to his work. He has worked extensively in the genres of acoustic jazz, jazz fusion, drum and bass, ambient music, West African music, and Indian classical music. Notable collaborations include those with Roy Haynes, Steve Coleman, Vijay Iyer, Tyshawn Sorey, Jaki Byard, Bill Laswell, Meshell Ndegeocello, Hardedge, Butch Morris, and Pharoah Sanders, just to name a few. Although this
interview was conducted over the phone across two continents while Graham was in Brazil, he was extremely generous with time and gave invaluable insight into his experiences and his philosophies.

Steven: Did growing up around so many great musicians of that generation inspire you to take the directions you did? You’ve taken your music very far outside of what most people would call “jazz,” but you were brought up in the world of jazz.

Graham: I think the biggest influence on me was Miles at the time that I started to play. When I started playing the trumpet, there were certain trumpet players who were very popular, but the one I gravitated towards was Miles. And that’s because there was something in his music that to me was beyond music. There was something in Miles’ music to me that went beyond music. He had put his finger on something that had created this beyond musical dimension. And it was actually following him that led me to a lot of these “extra jazz” approaches and ideas, because Miles was drawing from everywhere.

He didn’t consider himself a jazz musician at that point. And so, I figured, well if he didn’t, then neither would I. Of course, I had to learn all of the rules before I knew how to break them, because the thing was, I heard Miles live in 1970, with Tony Williams and Wayne and I think Chick and maybe it was Jack – I don’t know, I was a kid, my mother took me to Central Park, he was playing a concert. Then I heard him again in ‘74, live, with Pete Cosey and Al Foster and Mtume and all those guys, and Michael Henderson and David Liebman. I heard that group, and that completely blew my mind. So, I had it in my head that I didn’t want to play what most people think of as jazz, I wanted to create another world, the way Miles created another world.

I was also very much interested in Sun Ra too. Because Sun Ra I’d see a lot. Sun Ra would be playing in New York at festivals on the street, like the Harlem Day Festival. Sun Ra would play for Boys and Girls High School in Brooklyn…Sun Ra was around everywhere. So, between Miles and Sun Ra and all this other stuff I was hearing in New York – these funk bands – all this was happening at the same time when I was learning how to play the trumpet. So, growing up in New York in the 1970’s, this is what I was exposed to. And I kept my mind open and just tried to soak up everything. But I had to learn the rules before I could break them.

Steven: So, if you were not directly learning electronic music from him [Robert Moog, professor of electronic music at Queens College], what was your process for learning how to get into that kind of music, both performing and writing?

Graham: There were jam sessions in Queens, there were jam sessions in Brooklyn, in the Bronx, all over Manhattan, Harlem, people’s houses, university streets, lower east side – about four, five, or six places just on the lower east side. And Steve [Coleman] knew all these places and he was playing in all of them. He would be in one place playing, then he would leave one
jam session and go to another place and play, and then he would go to the Vanguard and sit in with somebody and go up to Harlem. And I started running with him and doing that all day. And then when he’d have time off, he’d be writing these compositions and I was amazed that he was writing without using the piano. Like, “how do you do that?” Cause I was taught to compose from the piano. But he wasn’t using piano. He told me that harmony doesn’t exist. Harmony only exists as a result of melody and rhythm. And I thought that was kind of arrogant, but after many, many years of really deeply observing it, that’s true. Harmony exists as a result of melody and rhythm together. The harmonic series is just sound that exists and if you put the rhythm and the melody together and keep distilling them, then eventually you’ll come up with the harmonic system.

So, I realized that this guy had a lot going on that was a little bit ahead of the curve of what everyone else was doing at the time. So, I just kept hanging out with him and he started a street band that played on the street, but then we started Five Elements. The street band actually became Five Elements.

Steven: Speaking of the melding of these styles and musicians who have had the courage to innovate, I would like to know what it was like working with Butch Morris, and now conducting the Nublu Orchestra, which he used to conduct.

Graham: Butch would say – when he would conduct the Nublu Orchestra – there were always a lot of comments and feedback, and there was negativity, not a lot, but sometimes there was, and Butch would say, “You guys are never gonna know what this is like until you do it. Then you’ll be in the hot seat.” Now I know what he’s talking about. But it’s such an exhilarating thing to conduct through conduction. The greater the musicians are, the greater the thrill is. I can imagine it’s a thrill to conduct a Stravinsky piece, or Mahler or Beethoven or anything, but it’s never gonna be the same thrill as doing a conduction with an orchestra. Because a conduction with the orchestra is unknown and uncharted. It’s never been done. Stravinsky – Rite of Spring, Petrushka, or even some of his more obscure pieces – they’ve been done. All of Schoenberg’s music has been done. But, conduction has never been done. A conduction is only done when it’s done. Every time you do a conduction, it’s a completely new piece of music, [and] to me, it’s really interesting. I kind of got into a debate on Facebook with Greg Tate. Cause Greg and I used to follow Butch around a lot and we both took our conduction ideas from Butch. Greg was trying to say, “well Butch really thought of himself as a jazz musician.” Butch was not a jazz musician. He never liked using the term “jazz.”

But in a way, what Butch was doing was closer to jazz than 95% of most of the jazz that’s out here today. Because everybody talks about how spontaneous jazz is, and how jazz is made up in the spur of the moment, but it’s not. Actually, it’s the antithesis of that. What jazz has become is the antithesis of what I just said. That open, spontaneous – you never
know what you’re gonna play next from one bar to the next – “what’s gonna happen?” Jazz has become just the opposite of that. But conduction is closer to that. It’s closer to that. And that’s what we say jazz is…I think that what he was doing was closer to jazz.

But I also think that he did not want his music categorized. He didn’t want his artistry boxed into one category which would be called “jazz.” But he did understand. Butch had a very analytical sense of what jazz is, or was, and the elements that make up jazz. I don’t know if you read his book on conduction, but he talks about it in his book. He breaks it down. He talks about propulsion, and swing, and those ideas in his book. And it’s very much the same way Wynton Marsalis does. Except Wynton has taken it and put it into a box called “jazz.” What Butch did was work from the opposite direction. To me what Wynton has done, is he’s taking music and narrowed it down to something you can call “jazz.” What Butch did was he took music and started from a small space and expanded and expanded and expanded and expanded it outwards. And that’s what he called music. But he talked about jazz and he talked about the same elements of jazz. The elements of jazz are the same things he uses in conduction. And it’s the same theory and terminology that Wynton uses when he talks about jazz. Propulsion and swing and dynamics and any other number of things.

**Rudresh Mahanthappa Interview by Nathan, bassist/Master of Music candidate**

Rudresh Mahanthappa is an acclaimed alto saxophonist, composer, and bandleader. After growing up in Boulder, Colorado, Mahanthappa attended the University of North Texas, Berklee College of Music, and DePaul University. Mahanthappa then began freelancing in Chicago and recorded his debut album *Yatra* (Red Giant Records, 2000). He then moved to New York City and soon after began a musical partnership with pianist Vijay Iyer. Since then, he has released fourteen albums as a leader and co-leader.

Nathan: How did you create projects like *Gamak* (Act Music, 2013) and *Birdcalls* (Act Music, 2015)? What led you to your style that is so distinct and unique?

Rudresh: When I was in between my freshman and sophomore year at North Texas, I went back to Colorado and I called my old teacher and said I wanted to take lessons again. He said don’t take lessons from me, take lessons from this other guy. You know every town has their really monstrous unknown player…this was the guy. His name was Chuck Schneider, a great tenor player. But these lessons were more like kind of advanced theory lessons. We talked about altered Pentatonics or we looked at pitch cells, but every week we looked at a different thing and it wasn’t like, “oh, master this and go practice this.” At the end of the summer, I was armed with a bunch of different concepts that I could practice for the rest of my life. So that’s what I did. I went back to North Texas playing that stuff much to their disappointment. Students were like, “what the hell was that?” And teachers were like, “well that’s not mixolydian.” There was always a sense
of, “oh, you are not really ready to do that.” And I think you will never be ready to do any of it. You just have to do it and find your voice. So, a lot of what I play is still very much rooted in what I learned that summer of 1989. I still think about that stuff and go back and check it out. I even teach classes that are essentially teaching what I learned that summer. Simultaneous to that was this investigation of identity. Well, I feel Indian, I feel American, I feel both, I feel neither, how does that work? I spent most of my time in Boulder just kind of pretending to be white, but then I went to North Texas and saw a huge African American population for the first time and realized I wasn’t White, but I wasn’t Black either. You know, I’m going to be 48 in a couple of weeks, and I think it’s my generation of Indian Americans that was the first to be, I don’t know, really just on the ground doings lots of different things.

Nathan: Is that what you identify as now?
Rudresh: Yes. It’s my generation that’s in movies, we write books, we are in all the industries. We are not just in academics and computer sciences. We really branched out and blazed a lot of trails and have allowed other marginalized minorities to come out and pursue things that they weren’t previously “allowed to pursue.”

Nathan: Was that identity always there for you or did you have to go back and seek it?
Rudresh: No, I kind of had to think about it…A lot of people thought I was an expert on Indian music just because of my skin and my name. That was completely unfair. I didn’t really even grow up with it in the house. I mean there was a little of it, but not a lot. I was listening to Bird and Trane and all that. My parents listened to some western classical and a little Indian music. The problem with that was there was this pressure to be this expert, so I just avoided it entirely. I didn’t want to engage it at all, and I would rather just not think about it. It just made me nervous. Kind of coming to that music through a cultural interest and a musical interest and then being very careful over the years like, how does that…Well there are a lot of crappy projects that integrate eastern and western music…I really waited a long time because I wanted to know more about it and also wanted to know a lot more about jazz and figure out how these two things can inhabit the same space. Also, for me to just mature and grow into this identify and find peers and good friends like Vijay Iyer, of course. I mean when we met we kind of couldn’t believe that there was another Indian American jazz musician, number one. And number two, we were kind of into the same things, like Bird and Monk, but we were also into Steve Coleman. That’s how we met actually. Steve Coleman introduced us back in like 1995 or something. So, having like a partner in crime who kind of shares the same confusion, the same angst, and maybe history of being discriminated against.

Nathan: After all that, do you consider your music to be a blend of jazz and Indian music?
Rudresh: No, I mean I consider myself to be a jazz musician. It’s just that I think that jazz has picked up and absorbed a lot of stuff along the way. What I’ve done is just part of that story. You know Latin jazz is like a genre, but I think most Latin musicians would just like their thing to be called jazz. It’s kind of funny. It’s like what do you call a woman-president? You call her president!

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Musical environments of equity: Through the lenses of diversity, mentoring and collaboration.

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Abstract
The intersection of city-based artists and a thriving regional arts hub provides multiple benefits, both for students, visiting artists and the region overall. For students these include exposure to current urban expertise in areas such as songwriting, production and performance. This paper examines two firmly established externally funded mentoring programs that provide and create innovative opportunities fostering an environment of equity and diversity in the Contemporary Music Program at Southern Cross University (SCU), Lismore, Australia. The APRA Songwriting Workshops (including an Artist in Residence Program) and the Higher Education Equity Support Program (HEESP, now Women in Music) work together to foster and support an environment of equity and diversity. The paper explores the beneficial elements from these programs that enrich curricula across the Contemporary Music degree, spotlights the creation and establishment of the innovative equity program and website for Women in Music, and investigates some of the specific findings from the Artist in Residence ‘Undone’ Program.

Keywords: collaboration, mentoring, songwriting and visiting artists.

Context

Location
Australia is an urbanised nation. In 2019 its capital cities accounted for 67% of the overall population, a figure reflected in the rich and distinctive contemporary music scenes associated with these cities. Southern Cross University (SCU), Lismore, where the the Contemporary Music Program is based, is situated in a regional area on the far north coast of New South Wales. This region covers an area of 20,895 square kilometres, extending south from the Queensland border along 300 kilometres of coastline. The region is renowned for its beaches, rainforests and its sub-tropical climate. The region also has the highest concentration of creative industry practitioners outside the capital cities of Australia.

APRA Songwriting workshop program
For the past fifteen years, the Contemporary Music Program at SCU has provided industry-relevant mentoring to students through the Australasian Performing Right Association (APRA) Songwriting workshop program. APRA manages royalty distribution for over 87,000 Australian songwriters, composers and publishers. As part of its charter APRA promotes the use and recognition of music by its members by funding projects including the mentoring program at SCU.

Mentor relationships have a well-established role within the training of musicians. The 'one-on-one' relationship between mentor/teacher and student/protégé has long been
a foundation of ‘classical’ instrumental, vocal and composition study, and has also been incorporated into jazz and popular music education. There is also a long tradition in which musicians develop their own skills by observing and studying the techniques of those who have already mastered their crafts.

The Songwriting workshop program benefits both students and participating artists by exposing a large cohort of regional students, local APRA members, staff and guests from local industry to each songwriter’s work. The program includes professional critique sessions with songwriters, question and answer interviews, live collaborative performances, and a space for students to reflect on their own creative songwriting processes and performance practices.

The workshop format commences with an informal interview where artists discuss their early career and music education pathways and inspiration. Artists are available to students via email for direct access. One-to-one instrumental or songwriting lessons can also be conducted in addition to the workshop. Artists often give concerts within the local area at the time of the workshop, which affords students the inspiration of live performance outside the formal University environment.

The workshops have had a flow-on effect by enhancing my teaching experience; in many of my subsequent classes – particularly songwriting and vocal performance – I have an abundance of examples to draw upon from visiting artists’ revelations about their own musical journeys. Students learn multiple approaches to songwriting associated with theoretical and practical solutions: how to self-direct their own learning by performing with the artists, asking questions and speaking directly with each visiting artist about their specific problem-solving techniques, sharing their work/songs, gaining direct feedback, and gaining realistic and inspirational insights into the music industry.

The pedagogical benefits of the workshops were initially conceived as an add-on to the degree course curriculum; a program that would not be internally funded. However, the visiting artists have helped to establish an authenticity to the degree program, and the experiences they deliver have been integrated with units and topics that students study. After several years of successful workshops, the SCU Contemporary music program now attracts applications to present workshops from prominent artists with an Australia-wide touring profile, including larger ensembles, and nationally successful bands.

In consequence, over the last seven years the workshops have been effectively embedded within the curriculum, functioning as a pivotal part of the weekly two-hour Performance Workshop class, part of a Specialist Studies Unit (comprising audition-only instrumental and composition majors). Attendance is compulsory.

For example, in 2019 two quartets, Bungarribee (Sydney) and Spirographic (Melbourne VIC), were scheduled to give workshops in the second half of the teaching year. The Bungarribee quartet featured cello, bass clarinet, accordion/piano and a variety of Indian folk percussion – instrumentation that many students had not previously been exposed to or composed for. In contrast, the Spirographic quartet featured more standard instrumentation with acoustic double bass, electric guitar, drums and piano. Students were assigned to compose for either group and were supported with weekly individual composition classes discussing instrumentation, suitable ranges, techniques and articulation. Students were also encouraged to use self-directed learning to familiarise themselves with the individual performers and to investigate the particular types of skills they possessed. Two weeks
prior to the workshop, student scores were submitted to the studio composition lecturer for review and comment, then the scores were distributed to the groups. It is important to note that each group was on tour and was not able to review the students’ scores until the morning of the workshop.

Composition students comprise singer-songwriters and electronic music producers, all using notation software. The opportunity to compose and have one’s music performed live by professional musicians demonstrating high levels of ability to sight read often complex (or complexly notated) parts, and exposure to mature and sophisticated musical interpretation was highly valued. One second year student commented, 

*the APRA workshop in wk 9 with Bungarribee was an amazing experience for me as a composer ... to hear a professional band play my work live and craft it into their own musical interpretations of the score. I hope there can be more experiences like this in the future.*

**Higher Education Equity Support Program (HEESP) and the Women in Music (WIM) website**

At the beginning of my teaching career in 1998, finding myself isolated and unsupported in my aspirations I created and developed the “Women in Music Visiting Artists program” (herein referred to as HEESP - Higher Education Equity Support Program). The HEESP program is funded by the Federal Government as an activity that removes barriers to access for disadvantaged students, promoting equality of opportunity in higher education. In keeping with SCU values, this innovative project embraces new ways of teaching with an emphasis on mentorship that befits a contemporary, progressive university.

Research in the higher education sector (predominantly in UK universities) has established that contemporary music education practices often do little to rectify the marginalisation of women composers in music education and composition classrooms. The music higher education environment is ‘governed by a certain type of masculine behaviour, language and culture, which women have to adapt to’ (Bogdanovic, 2015, p. 12).

In a recent key report, ‘Australian Women Screen Composers: Career Barriers and Pathways’, Strong and Cannizzo (2017) identified that at the time of the research ‘higher education music students were 54% male and 46% female. Given the existing imbalance between males and females in the music industry, this trend is concerning and should be monitored.’ The report goes further: ‘lecturers in composition (screen-specific and otherwise) revealed that females make up a quarter to a third of students in their courses across the board. This suggests women are being discouraged from pursuing composing before reaching higher education. This is in contrast with other music courses, such as performance or courses labelled as “songwriting”, where female students were enrolling in equal numbers to males.’ (Strong and Cannizzo (p.g.8) 2017).

The HEESP initiative offers music students a program of national and international, female visiting artists, who provide mentorship and support through live performances, workshops, private lessons, and open forums. To complement the program, I created and co-designed a website which provides additional national and international mentors, alumni updates, current news, grants and links to relevant educational sites. This demonstrates the vibrant, creative and diverse contribution women musicians have made to Australian music and culture, including graduates and students from Southern Cross.
In a regional area especially, women students in non-traditional areas often lack support, and this website is one way of providing them with information, resources, contacts, mentors, and inspiration.

The Visiting Artists program and Women in Music website provide a focal point for women studying Contemporary Music at Southern Cross University and improve the representation and experience of these women students. Many accomplished women musicians and administrators have been happy to be associated with the website as role models, supporting women students who struggle with some of the difficulties of becoming better musicians, furthering their education, and succeeding in the industry.

The university has been committed to improving equity and access for women students in Contemporary Music through this program.

**HEESP environment of equity**

The HEESP project supplements normal course tuition by scheduling artists to perform who are specialists in the musical genre in which both male and female students are currently studying. The primary aims of the HEESP contribution are: a reduction in isolation of regional and rural music students by connecting them with an international community of inspirational artists, thereby assisting them to conceptualise and find their place within the music industry; targeting and redressing gender imbalance in contemporary music participation by providing mentorship and role models for female students; normalising women musicians’ involvement in the academic environment, illustrating the convergent practices of HEESP and the APRA program; and enhancing the professionalism of SCU graduates. In summary, the HEESP project serves as an inspirational model to students; it is a non-assessable task and the performance workshops are open to everyone within the Contemporary Music Department.

The HEESP initiative has influenced student learning in a myriad of ways, such as increasing motivation for independent self-directed learning; offering contextual understanding of the relevance of tertiary study for entry into the music industry; and deepening a sense of one’s own potential. A key factor in these learning outcomes is the rare opportunity provided by HEESP for student mentorship by national and international artists. As student Joel Cook explains: *I’m studying Latin music at the moment, so it was helpful to see a professional singer who performs Latin music come and teach us about it. I learnt a lot from this workshop about Latin music and I think it was run perfectly.*

The HEESP program and website not only offers students at a regional university an unprecedented level of respect and support in their development as original artists, it continues to support their development well beyond their time at university. Many graduates now working in the music industry are invited to return to SCU as visiting artists to offer support and mentorship to the current cohort, such as SCU graduate Martha Baartz: *In a country like Australia, so far from the rest of the world, and especially in areas isolated from the cities, it is crucial to encourage important information to be accessible. I had previously made many trips to New York and Pennsylvania in order to study Saxophone Technique and Improvised Music from great musicians with first-hand information.*

The gender equity aspect of the HEESP Program and website initiative is key, given that the music student population, music faculty, and music industry, are all areas traditionally defined and predominated by men. APRA (Australasian Performing Rights
Association) reports that only 21.47% of their members are female while SCU department statistics similarly reveal that women’s participation in the Contemporary Music Degree remains consistent at approximately 21%. Consequently, the need for role models, mentorship and support for female students at SCU is significantly higher than that of the male students. This is true even for established female artists who experience the male-dominated industry as an obstacle to overcome, often feeling alienated by the lack of female role models and support.

Dr. Sandy Evans, one of the program’s visiting artists, concurs: *Sadly, there is still a marked gender imbalance in the jazz and improvised music scene, and programs such as HEESP make an invaluable contribution to increasing the skills, knowledge and confidence of female musicians. The performance opportunity was also very important to my own artistic development. I am proud to have been part of this program and hope that it continues for many years to come.*

In summary, the HEESP program and website is a pro-active strategy that helps to break down the barriers women face while also offering support to all students at a regional university in their development as original artists.

Professor Philip Hayward from Macquarie University notes: *The HEESP initiative was the first significant gender equity program in Australian popular music education and is a model for other programs. While this recognition of success is welcome, the initiative’s continuity is, to date, dependent largely the author’s ongoing commitment to organize the program. Gender equity is not as yet normalized or embedded into the course structure in a fully sustainable way.*

The author initiated a new pathway to address equity within the program by redesigning the APRA Songwriting workshop grant with an application for funding for a female Artist in Residence to engage in a collaborative project.

‘Undone’: A Model for Creative Collaborative Performance as Pedagogy

The environment of a tertiary music institution fosters the building of skills and knowledge that are useful to the aspiring music professional, but are limited by conventions of curriculum, teaching methodologies and repertoire. Students’ learning experiences are intensified, and their musical education is qualitatively improved when they are exposed to mentorship by music industry figures from outside of the academy. Through this engagement, they experience music-making practices aimed at audiences from beyond the academy.

‘Undone’ proposes one type of model for intensive learning in a range of skills and knowledge areas that are essential components of a tertiary, conservatorium-based contemporary music education. The model is predicated on the pedagogical benefits of engaging students in a range of creative, collaborative processes necessary to develop and stage a musical production at a standard fit for public viewing (i.e. for audiences within and beyond the institution). A particular stage show – ‘Undone’ – serves as a case study for the model.

Tertiary music programs that operate under a conservatorium model offer students a blend of theoretical and practical studies designed to equip them with sufficient skills and knowledge to be able to function effectively as professionals in their chosen musical field(s). Aspiring composers, performers or sound technicians follow a set curriculum,
within the physical – and theoretical – boundaries of their institution, supposedly to emerge ready for success in the ‘real world’ of the music industry. However, sitting examinations in theory, and performing music from the standard repertoire associated with their chosen instruments to a captive audience of teachers and peers, is arguably not sufficient to prepare them for the rigorous demands of a viable career in contemporary music. The latter requires not only high levels of musicianship, but also professionalism, good communication skills and above all, the ability to collaborate at many levels.

Notwithstanding the availability of units such as The Portfolio Career Musician and Music Business, and the fact that many students do engage in professional music-making activities outside their courses, there is a strong pedagogical case to be made for bringing the ‘real world’ to students by engaging them in creative collaboration. If this is done in settings that surpass the boundaries of the academy, then learning is intensified.

‘Undone’: Collaboration and Pedagogy

Collaborative processes underpin so much of what constitutes music making: performance, recording, rehearsal, composing, event management and business, to name a few. Moreover, there is firm evidence that collaborative processes aid learning itself – by enabling “the promotion of learning through positive social relationships” (Abrami, Chambers, Poulson, De Simone, D’Apollonia and Howden 1995, p. 9). Collaborative projects accelerate learning because in their making, webs of dependency are created: others are relying on you to get up to speed, learn your parts, pull your weight, etc.

The ‘Undone’ project formed part of the Visiting Artist program funded by APRA, and supported by Southern Cross University. The Program was designed to augment the Contemporary Music curriculum, and provide students’ access to practicing artists and the opportunity for aspiring composers, performers and sound engineers to develop practical skills and experience through collaborative ‘real world’ creative projects.

The ‘Undone’ project was the initiative of the author who coordinated the APRA Songwriting Visiting Artists program, following discussions with Inga Liljeström. A Southern Cross University graduate, Inga Liljeström has established herself as a leading talent in the field of experimental contemporary music and securing her services as Artist in Residence was an excellent opportunity for students to work with an international artist who crosses genres, delivers innovative workshops, embraces all art forms and pushes the boundaries in contemporary music.

The project was offered to students across the School of Arts and Social Sciences as an option for their Arts Project Unit as well as an addition to their studies that was non-assessable. The project ran over three weeks with one public performance.

The main objective was to create a multi-media performance by music, art and film students under the direction of Inga Liljeström, focusing on fostering skills in collaboration and co-writing; providing a space for students’ original songs to be showcased; exploring multi-media production; and to providing experience in the production of a show. The title, 'Undone', raised questions about when a work is finished. Students were asked to come to the workshop with a piece of their own work ‘undone’, not yet quite finished or complete, so as to allow students from other mediums to collaborate and inspire in order to create a work to be performed in a live scenario for the performance.
The project resulted in a positive educational experience for all concerned, exposing many contemporary music students to interdisciplinary collaboration for the first time, such as designing and making a film. Other outcomes included new collaborative compositions, a balance of gender involvement, effective rehearsal strategies and live performance experiences.

Concluding Thoughts
This conference affords me the opportunity to reflect on where we, as women artists and educators are today, where we need to be, and how best to get there. What are we doing to make sure that we best equip, not just women, but the next generations, to continue to make progress towards equity?

As this paper has shown, the HEESP Program and website, and the APRA workshops commenced as separate projects but developed into a complementary pair, giving benefit to both male and female students, and articulating a more mature and inclusive type of equity. This vision of equity has arisen in response to the academic environment and music-industry experience, motivated by self-preservation. Programs such as HEESP and the APRA workshops will be deemed a success when they are no longer needed, and an idea of equity that supports the needs of all parties is embedded in the academy.

References
Perceptions of modeling strategies in Korean piano studios

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Abstract
Teaching applied music frequently involves one-on-one instruction given in the context of private studio lessons. This unique educational setting has been examined for its effectiveness in music teaching and many studies have identified the use of modeling strategies as a crucial component of teaching private studio lessons. Studies addressing the effectiveness of modeling strategies have been broadly related to studio voice or instrumental teaching. Some of these studies take a narrow focus, selecting and comparing one or two modeling strategies in fixed settings to look for effectiveness. However, there are very few studies done using comprehensive observations, exploring characteristics of modeling strategies commonly used in private studios. There are even fewer studies exploring modeling strategies used in private piano studios involving international educational settings.

The purpose of this study was to explore modeling strategies in piano studios in Korea. Case studies of three renowned Korean piano teachers were conducted by observing twenty-seven hours of piano lessons and, administering Video-Stimulated Recall interviews with the teachers and their adult students. The lesson observations were done to determine which modeling strategies were used by the Korean piano teachers. Interviews with the participants along with field notes were analyzed for matching or conflicting perceptions of modeling strategies used in the Korean piano studios. The study found that there was often agreement among the teachers in the current use of common types of modeling strategies including a new strategy. These strategies included performance modeling, vocal singing modeling, visual modeling, conducting, and spoken rhythmic rendering. Since this study involved experienced teacher participants, future research on student participants or novice teachers are recommended for additional insight into the use of modeling strategies in piano studios. It is also recommended that further research be conducted on the new strategy to evaluate its use in piano studios.

Keywords: modeling, piano, Korea, studio lessons, video-stimulated recall interview

Introduction
Modeling strategies are often utilized as a pedagogical technique in applied music teaching (Yarbrough, Green, & Parker, 1993). Studies have indicated that teacher modeling is a supportive component (Duke & Simmons, 2006; Henley 2001; Rosenthal, 1984; Sang, 1987), and have examined its effectiveness in applied music instruction (Colprit, 2003; Duke & Simmons, 2006; Parkes & Wexler, 2012; Speer, 1994). The positive relationship between teacher modeling abilities and the quality of student musical performances has been investigated (Dickey, 1991; Sang, 1987), and studies show that experienced teachers often display an optimum model of an ideal performance to their students (Duke & Simmons, 2006; Grimland, 2005). Researchers generally agree that performance demonstrations are a type of modeling strategy. Teacher performances
followed by student imitations would generally be categorized or defined as “modeling” (Rosenthal, 1984; Dickey, 1991; Haston, 2007). Other definitions of modeling involve teachers imitating incorrect pupil performances and also providing musically correct models (Parkes & Wexler, 2012), students imitating a given model (Woody, 2003, 2006), and finally teachers providing an exemplary musical performance (Duke & Simmons, 2006).

Auditory modeling has been defined as “instructional activities that require students to listen” (Grimland, 2005, p.4). In many cases, the effectiveness of auditory modeling has been examined in controlled settings, often focusing on its positive impacts on performance accuracy. It seems that as technology progresses, the use of recording devices has evolved from the use of cassette tapes (Rosenthal, 1984) and compact discs (Henley, 2001), to computer software (Cash, Allen, Simmons, & Duke; 2014; Yarbrough, Speer, & Parker, 1993). Although studies covering auditory modeling often rely on controlled settings for consistencies by measuring their effects, the availability of auditory modeling may increase some degrees of expressive elements (Woody, 2003, 2006). Auditory modeling may also serve as an effective method for students learning an unfamiliar piece of music (Hewitt, 2001; Haston, 2010) by providing rehearsal goals (Morrison, Montemayor, & Wiltshire, 2004).

Research-based investigations of visual modeling used in applied music education settings focus on physical gestures and postures (Grimland, 2005; Parkes & Wexler, 2012), movements (Juchniewicz, 2008), and body cues that are musically related and often non-verbal in nature (Thompson & Luck, 2012). Not only do these studies explore how musicians use visual modeling in applied studios, but they also discuss their functions in music instruction. Grimland (2005) categorizes visible modeling as physical gestures or conducted cues when investigating the characteristics of teacher-directed modeling with high school choral conductors (n=3). The findings of that study revealed conductors utilizing visible modeling in their rehearsal sessions. Physical gestures were considered to simulate musical ideas by converting audible models into visible models. Facial modeling included the use of expressions reflecting the interpretations of musical texts and served as performance cues. This type of facial modeling served as a reminder of a cue during performances.

There are various points of view when defining modeling strategies that are mainly nonverbal in applied studios. Duke (1999) defines “singing, clapping, counting, conducting, and other means of producing musical sounds or movements” (p. 6) as performance approximations. In concurrence with Duke’s study, Colprit (2000) observed 12 Suzuki string teachers conducting 48 violin and cello lessons and described performance approximations as any performance of rhythms or pitches that is not performed on a stringed instrument, including singing, clapping, chanting rhythms, or dancing. However, it appears that not all scholars agree when categorizing performance approximations. In an investigation of the instructional behaviors of choral conductors (n=3), Grimland (2005) categorizes speech, spoken rhythmic rendering (chant), rhythmic rendering (clapping, tapping or other percussive reproductions of notated rhythm) as audible models as opposed to performance approximations.

The use of vocal singing has been observed as a modeling strategy in other instrumental families, including the piano, as well as vocal or choral music studios. Benson and Fung (2004) investigated teacher verbalization and modeling behaviors used
prior to student performance units in piano lessons in China and the United States. The study revealed that teacher modeling included the teacher playing alone, the teacher playing with the student, gestures, gestures with student play, singing, singing with student play, multiple modeling, and multiple modeling with student play.

The use of modeling strategies in applied music instruction has been characterized and categorized (Dickey, 1991; Grimland, 2005; Haston, 2007), however, rather than unfolding the variety of modeling strategies that might exist in applied music instruction, there remains a lack of evidence regarding the variables of a modeling strategy of instruction in its entirety. In addition, most of these studies were conducted or investigated in the U.S. educational context and do not necessarily represented a wider population (Wang, 2009). This study sought to reveal the modeling strategies in Korean applied music studios by examining teaching strategies in their entirety, rather than extracting limited numbers of modeling strategies for investigation. Therefore, the study aims to answer the following research questions;
1. How do the Korean piano teachers identify and characterize the modeling strategies used in the piano studio?
2. What modeling strategies are employed by the Korean piano teachers in teaching adult pianists?

Method
A qualitative approach was undertaken to explore and identify the teachers’ modeling strategies (Crewsell, 2007; Crow et al., 2011). Specifically, three case studies were carried out to examine renowned Korean piano teachers with their adult students. These three teachers have had experiences studying in Korea, the United States, and Europe, and been teaching at multiple universities in Korea for an average of nine years. Data collection included 27 hours of lesson observations, taking field notes of the lessons, and semi-structured interviews with the teacher participants. Lesson observations were video recorded using a Gopro Hero 4 Silver (41x59x30 mm) and a lesson observation checklist was utilized to provide a consistent baseline of relevant modeling strategies.

For the semi-structured interviews, the Video-Stimulated Recall method was used as an aid for the participants to reflect or describe their perceptions on the documented video footage (Hafeli, 2000; Nguyen et al., 2013). The observed lessons were edited and preselected by the researcher to create video footage which contained seven to eight video segments for the Video-Stimulated Recall interview sessions. The interviews were audio recorded, transcribed verbatim, and translated from Korean into English. Interview transcripts along with field notes were analyzed and coded line-by-line, then extracted and organized into categories using Excel Spreadsheets. The data was then analyzed for relevance to the research questions as themes took form through this process.

Findings and discussion
Identification and characterization of modeling strategies
When asked to identify modeling strategies in the piano studio, the first teacher in the study, Mrs. Kim stated, “Modeling to me means imitating students’ performances by playing the piano.” The purpose of Mrs. Kim imitating students was to have them evaluate their own performances more objectively by “watching and listening” through a mirror image of the performance. She also stated that she uses this modeling strategy “as
many times as possible” in her teaching. She considered imitating student performances as an “immediate and fast way of learning” the piano and said that imitating her students was “the most frequently used modeling strategy” in her studio. Vocal singing was also used to “imitate students’ incorrect performances.” She explained that through vocal singing, she “can directly express the music with more details” when teaching piano, “such as the mood of the music and delicate expressions.” She also indicated that another modeling strategy was “visually showing hand positions or how to shape certain hand motions, while not playing the piano.”

Ms. Nari, the second piano teacher in the study, referred to modeling strategies, as “musical behaviors, sometimes with or without verbal instructions.” Ms. Nari’s approach for using modeling strategies in the piano studio was related to “showing musical behaviors” to students. She added, “This would be done physically, sometimes accompanied by verbal instructions.” When asked about modeling, Ms. Nari stated:

First, I think modeling is a musical behavior. And when you think about musical behaviors, this would be singing, playing, or clapping right next to a student…yes, I think these are modeling…performing for my students, plus physical movements like conducting. All of these are musical behaviors. It is modeling.

Ms. June, the third teacher in the study, considered modeling strategies to be, “a way of explaining music which words can’t do.” When asked to identify modeling strategies used in her studio, she stated, “playing for my students.” She also added that she “would play the entire piece” for her students if she was capable of doing so, but she is “not able to perform every music piece written.” Ms. June said that “there are limited numbers of pieces” that she can perform for her students from beginning to end. Therefore, her “modeling may be limited as well.” Ms. June also stated that “vocal singing” was another modeling strategy she used in her piano lessons for her students.

**Types of modeling strategies**

According to the lesson observations, the three Korean piano teachers shared many commonalities in using modeling strategies with their adult piano students. All teachers used performance modeling as a modeling strategy in the piano studios. They also showed a remarkable correspondence in subdividing performance modeling into four types: (a) teacher imitating student performance (Duke & Chapman, 2011; Duke & Simmons, 2006; Grimland, 2005; Parkes & Wexler, 2012), (b) teacher playing for student (Duke & Chapman, 2011; Duke & Simmons, 2006), (c) teacher playing with student (Benson & Fung, 2004; Persellin, 2006), and (d) teacher performance followed by student imitation cycle (Dickey, 1991; Haston, 2007; Sang, 1987; Woody, 2003, 2006). When the three teachers used performance modeling by imitating students’ performances, they showed an accurate imitation of the students’ performances. Their imitated performance also focused on elements of students’ performance that the teachers had identified as “incorrect” to aid in student self-realization. In some incidents, the three Korean piano teachers imitated their students’ performances in an exaggerated manner, trying to emphasize the point of their instructions.

The three Korean piano teachers played for their students to provide an exemplar. However, the teachers did not consider expressive content in their performance, but
rather focused on performing with correct dynamics, articulations, rhythm, tempo, and phrasings as a modeling strategy. When the three teachers played with their students simultaneously, this was done to guide students in appropriate rhythm and tempo. This was also done to guide students in performing correct delayed or rushed phrasing in the music. Another use of playing with students as a modeling strategy was to guide the dynamic levels performed by the students. However, this factor was only observed in Ms. Nari’s piano studio.

Vocal singing modeling was observed in all 27 lesson observations (Benson & Fung, 2004; Duke, 1999). This type of modeling was used to imitate their students’ incorrect performances or to provide suggestions for student performances. The use of vocal singing modeling was used as an assistance to guide phrasings, breathing points, or for adjusting tones in the students’ performances. The three teachers also used vocal singing modeling in conjunction with performance modeling or conducting to emphasize their instructions. For instance, Mrs. Kim stated, “...I think my students can hear the loudness and the softness in my voice immediately...the human voice is more direct and up close. With the piano, I feel limited in expressing dynamics.”

The three teachers used visual modeling by showing hand and finger motions. Visual modeling was based on what the students visually saw in the lessons. Mrs. Kim and Ms. Nari would imitate students’ hand and finger motions to promote student self-realization. All three teachers provided suggested hand and finger motions to their students and the students were expected to imitate their teachers’ physical examples.

The three teachers used spoken rhythms with nonsensical syllables as a modeling strategy. This was intended to assist students in understanding rhythmic values. Spoken rhythm is a newer finding that was not mentioned in the literature. All three teachers eliminated the melodic line of the music phrase and only provided rhythmic structures to their students as guidance for adjusting to correct rhythms. It seemed that the three Korean teachers made a deliberate effort to simplify the modeling by not using speech as one would use when chanting.

When students did not show immediate or positive improvements after being presented with one modeling strategy, the three teachers would immediately replace the modeling strategy with another of the modeling strategies. For example, Ms. Nari first modeled a performance by imitating her student Hyree’s “incorrect” dynamic performance. Not seeing immediate improvement from Hyree, Ms. Nari replaced the modeling strategy using vocal singing modeling. The modeling strategy was then replaced with Ms. Nari playing on the piano with accurate dynamics. The replacement of modeling strategies was done in no particular order until the teachers were convinced that the students had shown some degree of improvement.

The Korean piano teachers in the study referred to the use of smartphones as an aid for modeling strategy. The use of smartphones enables both the teachers and students to view examples of performances done by professionals or other students. The three teachers considered viewing other professional performances is a positive form of modeling strategy. In addition, smartphones also serve as an audio and visual recording device in assisting student self-realization. Although all the teachers and several students mentioned that smartphones were used with modeling strategy in the interviews, the use of smartphones was not observed during the 27 lesson observations.
The level of student performances was also a factor that influenced the use of modeling strategies in the piano studio. For the less experience students, Ms. Nari stated that she showed more technical skills and visual modeling compared to the experienced students. She stated, “...but if I am teaching younger students like middle school or high school students, I have to show more things, I think I show more technical drills or performance modeling.”

The teachers in the study also explained that the current stage of their students’ performances influenced how long the performance modeling strategies were used. For instance, the performance modeling used by the teachers was twice as long in length for the students who were in a polishing stage compared to those in a working progress stage. The teachers were also observed breaking down modeling into smaller, more manageable units for the students who were struggling in their performances. It was also shown that the types of modeling strategies used also differed depending on the students’ current stage in their performances. The teachers often used vocal singing modeling when assisting students refining phrasing and, alternatively, tone qualities with students who were in a polishing stage. Conversely, teachers imitating student performances was observed when students were not secure with accurate notes or rhythms.

**Conclusion**

The findings concurred with studies that identified modeling strategies as a supportive element in music instruction not only in U.S. educational settings (Dickey, 1991; Rosenthal, 1984), but also in the Korean piano studios. The common modeling strategies used across the teachers’ instruction was performance modeling, vocal singing modeling, visual modeling, and spoken rhythmic rendering. The teachers considered performance modeling as a strategy in assisting student self-realization. Specifically, the teachers imitated students’ performances by highlighting incorrect elements of the performances and used them as a playback system. On some occasions, the imitation was executed with exaggeration to emphasize the point of the instruction. Vocal modeling was needed to aid students in understanding phrasings or breathing points in piano performances. Visual modeling was used by the teachers for displaying hand and finger motions to assist in technical aspects of piano playing. Finally, spoken rhythm, which was not mentioned in the literature, was a new modeling strategy that created a performance approximation modeling category. This was simplified by eliminating melodic lines, dynamics, and phrase lines to only display the raw material of the rhythmic structures with nonsensical syllables. The findings in this study may provide information to novice teachers as a basic guideline on how to use modeling strategies in the applied music piano studio. The researcher suggests reexamining the use of the newly identified strategy, spoken rhythm, to either support or oppose the findings of this study.
References


Investigating performance career making and career transition through the lens of Australia's elite classical singers

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Abstract
Investigations pertaining to career trajectories and vocational identities of professional classical Australian singers are unchartered and lack specific empirical evidence. Rarely do studies explain the professional singers’ experiences and the processes they undertook to reach goals, to comprehend their deep identification with the craft, and acknowledge the specific market conditions which drive their career.

Creative careers in the performing arts follow a somewhat unique trajectory that is driven by specific skill demands and market conditions. My research investigated the careers of Australian classical singers through a qualitative interview-based study and analysis. Extensive interviews were conducted with thirteen retired professional singers’ and the subsequent thematic analysis found a career trajectory of development and decline.

Major career theories and empirical studies from elite dance and sportsperson were interrogated to provide a basis for a qualitative examination of performance careers. Implications arising from an analysis of the singer’s experiences were related to career models from the film industry, to discourses from cultural economics and sociology, to music training concepts and to the latest research on entrepreneurial approaches to working in the creative arts. The result was the identification of a distinct career typology for professional classical singers comprising five stages. 1) pre career; 2) breaking in; 3) peak stage; 4) denouement; and 5) moving on.

The study found there is a critical link between pre and post career stages that has implications for training, which currently tends to emphasise technical facility rather than lifelong learning and skills that support careers. Other findings include that creativity and identity are tightly intertwined for the professional singers in the study, and when seeking new directions following the denouement stage, the majority of the singers attempted to remain attached to an artistic field even when they accepted that their time as a professional singer had passed.

The study highlights that creative careers are difficult to sustain and that the fragility of the creative career, once realised, can have very real implications for the well-being of the creative professional. The research also revealed that career trajectories in professional singing follow a distinctive arc because of the way the work is creatively embodied. The findings suggest that career planning, pedagogical training and entrepreneurship have often been inadequate in this industry and it is only in the consideration of the lifecycle of a creative performance career that the critical link between pre- and post-career stages can be made.

Keywords: careers, professional classical singers, vocational identification, transition, entrepreneurship
Introduction
Recently the term Creative Industries has been used to describe an extensive and encompassing range of activities which includes that of music making, the performance of music and the cultural transmission of skills and knowledge of music via education. The term, Creative Industries, can cause disquiet and be imprecise, but it can help us to explore the labour of those who pursue music making as a career or as a component of their livelihoods. (McKinlay and Smith 2009)

As a window into the subjective lives of musicians, singers and performers a small number of studies have begun to argue the need to convey the individuals’ interaction between their training in music and their subsequent search for a meaningful lifelong engagement in the field of music making or in the creative industries. (Renshaw 2010; Bennett 2012). For many musicians their negotiation of a fragile career path is upon those known in the emerging theory of Creative Industries, as historical or preserved creative practices, such as in orchestras, opera, and ballet or theatre arts (Jones, Lorenzen and Sapsed, 2015; Potts 2011; McKinlay and Smith 2009).

Researchers such as S. Mor (1996); D. Bennett (2008); J. Jeffri and D. Throsby (2005); J. Oakland (2012) and M. Seton (2018) highlight, via their analyses that the career realities for musicians, actors, singers and dancers in the market place, are often at odds with the hoped for longevity and pursuit of artistic ideals played out in heroic or mythological discourse. The narratives I set out to explore were of professional singers within the Australian context and using in-depth interviews and a survey, the analysed data unpicked the impetus for their creativity and their experiences in the marketplace and then followed them through to their new directions in their fields of creative practices.

Their narratives led the research to develop a typology of career which I argue explains the development and decline of the Australian singer’s professional careers, and found the elite singers post their professional performance career, remain connected to their craft and creative practices. At the conclusion of the article, I will draw out some findings which offer considerations for training of musicians and lifelong engagement in music making.

Introduction and Methodology
My study interviewed in depth 13 Australian classical singers. Each identified as having experienced a professional career, and were at the time of interview past their peak career stage. Based on the narratives of the singers’ experiences during their working lives, the study found a typology of performing arts careers. The typology is underpinned by an understanding that the trajectories experienced by the singers in this study, are somewhat representative of the career trajectories of performing artists more broadly, sharing many traits with creative careers in general, such as acting, circus arts and musical performance. The stages of this trajectory, I propose encompasses: (1) pre-career; (2) breaking in; (3) the peak period; (4) denouement; and (5) moving on.

Before turning to this framework, I’ll firstly outline the impetus for creativity, the embodiment of creativity in performing arts careers, and how these are tied into the identity of performers. Offering such a background is important for providing the context through the rise and fall of a career as negotiated by the elite classical singers.
The catalyst to pursue a career as an elite classical singer may have many stimulants and impulses. However, my study found a consistent component is the individual's inner drive to master the complex and challenging skills of the singing style required to compete in a work environment that is characterised by embodied virtuosity; that is achieved through extended training, and an incessant search for quality projects (Jones 1996, 2002). There is in the domain intense competition for limited work opportunities, uncertain employment security, and vocational environments which include dynamic management changes. Despite this somewhat unattractive employment context, perhaps in part because of ignorance of its challenges, people continue to be motivated to pursue careers in the performing arts (Comunian, R., Faggian, A., & Li, Q. C. 2010).

The impetus for creativity can be evident early in life as McPherson, Davidson and Faulkner. 2012; McPherson and Welch 2012, found. The singers in my study identified early adolescence within a nurturing environment began the development of their lifelong engagement and advancement in the stages of competency as classical singers. Important stepping stones and developmental projects, in which to live out their creativity in the field, can vary from choirs to amateur stage shows. My study, found that community music groups, were often the nurseries (Bartleet et al. 2008 and Menger 2017) in which emerging singers begin to signal their skills, learn theatrical processes, and drive their passion for singing and performance and were of vital importance to develop a reputation (Jones 2002).

The study draws strongly on the works of career theory (Arthur and Rousseau 1996), arts economics (Throsby and Zednick 2010: Towse 1993; 2012; Potts 2010) and sociology in the arts (Hesmonhalgh 2007; Hesmonhalgh and Baker 2011; Menger 1999, 2017). It musters information from music education (McPherson et al 2012; McPherson and Welch 2012) and communities of music (Coffman and Higgins 2012; Bartlett 2008). In particular, it aggregates new initiatives in entrepreneurship and employability of those in creative and performing arts. (Beckmann 2010; Beeching 2010; Bennett 2012; Bridgstock 2005, 2011, 2012)

The significance of an embodied practice on career development can also be found in the career studies of sports and dance fields. These fields have acknowledged that the career span of their elite practitioners will most likely reach a physical and mental maturity for the intense level of competition expected (Baillie 1993; Wylleman, P., Alfermann, D., & Lavelle, D. 2004; Jeffri and Throsby 2006). These elite performers’ training magnifies their commitment and it is shared by those with whom they collaborate, creating a deep-rooted commitment to the practice. Research in these fields, however, shows that without awareness of forthcoming career events, the sports and dance practitioners, like the singers of my study, would resist changes to their career, bargain against the loss of their positions in elite sports and artistic teams, and seek further opportunities to continue to work in a role that they feel can never be replicated.

The singers in my study found they were faced with a variety of issues regarding their hoped-for longevity as a career singer. Multifaceted issues besiege the singers as they tried to maintain a healthy approach to their voices, appearance, and emotional and physical fitness. Such factors could include an oversupply of competitors, shifting managerial and market perceptions, lifestyle questions and a stalled career trajectory that resulted in the singers becoming bored or frustrated with their career (Hesmonhalgh and
The research found that singers were resolute in their outlook on skill development and vocational intention, often to the exclusion of making well-judged career decisions. The intense identification with the domain, manifests itself as a deep sense of identity as a performer and creative practitioner, which leads to strong social bonds with others who ‘understand’ these motivations and experiences. Whilst they each made heroic efforts to either survive or revive their careers, it was distressingly without support or guidance. In the absence of understanding the dynamics of a performing arts career, what can be seen as a positive career identity can become a negative drag.

**Findings**

Turning to the major finding. I will now explain the five distinct career stages of the typology.

**Pre-Career.** This stage demonstrates the intense training period and early experiences as the singers attempt to find work and it describes the singers’ management of multiple threads of work. (Throsby & Zednick 2010). Singers need practical avenues to develop skills in theatre making, reputation building and deep reserves of self-regulated processes, and the following participant describes how theatre making can be life-changing (Folkstead 2006).

> When the curtain went up and there was applause after applause, I just marvelled at the adrenaline that surged in me. All the weeks of making scenery, selling tickets, late night rehearsals, and learning lines just came together in one moment that stayed with me. (S.7)

However, while singers recall their training in singing, most in the study had little or no recollection of training that addressed the types of market they would enter, nor their suitability for the demands of the market, as the following singer describes:

> We were given the premise, at the Conservatorium that we were all going to be soloists in an opera company. There was no discussion about your suitability for working in a company of opera singers. We didn’t deal with the realities of being a working singer. (S.13)

**Breaking In** describes the next stage in the singers’ career and in this period singers will establish and continue to pursue a career. This period is one of deep learning about seeking work in the industry, finding out who are important and influential individuals and cohorts, and which domains of entertainment and performance they may permeate. The incessant search for work can mean that singers may take years to find a well-matched entry-level position. The long queues on auditioning days, the perpetual credentialing, and the repetitive striving for hirers to take notice of singers are well known. The following singer described their experience of persisting in an uncertain labour market:

> I auditioned at the national opera company for three years. Every time I auditioned, I was told there were no positions and that there were many sopranos available. Come back next year, I’d be told. I did and finally was delighted when I was offered a chorus contract. (S.2)
Earnings are low at this stage and do not necessarily show a prospect of improving substantially and costly training is ongoing and travel is an expectation. Signalling of skills and reputation building at this stage are vital and the following singer who described a post graduate course in opera performance as disappointing, fortuitously found an opportunity arose to work with a skilful and connected expert. An audition was arranged with the national opera company which needed artists with both dance and voice skills. The singer reflected on outside activities undertaken during the course that led to a successful audition:

While I was doing the postgraduate course in opera, I continued to perform for amateur musical groups and I was in a small group that presented Gilbert and Sullivan concerts. I really honed my dance skills through both these activities. The G & S shows earned me some money, and along with temp work. I could keep financially afloat. (S.7)

Jones (1996, 2002) argues it is this stage when artists must demonstrate reliability, a competitive attitude and an acceptance of menial tasks and low remuneration. Towse (1993) describes this period for singers as “a foot in the door”. This career stage for artists, I argue, needs far greater attention from the research community and the domain.

Peak Career highlights the crowning stage of a career and a cautioning note is struck. The term peak indicates a relationship with the surrounding typography. This stage represents the culmination of the singers’ persistent endeavours to achieve professional careers. Their earnings are entirely from their professional engagements, and they are in a cohort of a few who are regularly engaged to perform, and their skills are highly regarded. The following singer recalled the rewards of her assiduous attention to her craft, which led to opportunities in Australia and Europe:

I developed and built a store of roles that were regular within the operatic canon. Performing those roles with other fine performers, including conductors and directors, meant I had continued work, where I could quickly substitute for a house in Europe and return to Australia to recreate those roles. Working with some of Europe’s masterful conductors and performers was exhilarating and deeply embedded my identity as an elite performer. (S.8)

Their extreme commitment has, however, a reverse side. Reliance on singing as a long-term career may seem attractive, but the realities and potential prospects need addressing, but are mostly ignored. The concept of managing a career trajectory in the field has received little forethought during the previous stages and the prospect of change is deflected by most.

Denouement describes the stage of the singers’ career trajectory often marked by a desperation to renew and sustain their performance career. Relinquishing such a hard-fought career, gained in the face of extreme competition, given meticulous and uncompromising investment, and cherished with a creative passion, brings with it a turbulence and complexity hitherto unspoken and unremarked. For some, sudden and unexpected career loss is bought about by management decision that seems to have little understanding of the effect of such action on individuals.

The following morning, after a standing ovation in a musically and psychologically complex operatic role, I walked in for a regular [house]
audition and sang very well. The management informed me I would not be required at the end of the current season. It just came out of the blue. (S.1)

While others found their career stalled against the background of discrete labour hierarchies in what is often assumed to be a progressive form of labour.

I was hopeful my career would expand and grow and be challenged. I pestered management about giving me more but was told, “There are many other singers similar to your voice”. I began to get discouraged and so I decided I would have to take control of my career and I left to be a freelancer. It was a complete failure. (S. 13)

This stage is particularly complex, traumatic for most, and based on the singers interviewed, their career denouement falls on average between the ages of 36 and 44. Most of the singers were unprepared for the turmoil this stage presents and lacked guidance and support in order to make careful decisions to seek new directions.

Moving On focusses on the rejuvenated direction of the singers’ careers and discusses the myriad processes they undertake to transition to their new directions as creative contributors. Emotional journeys are explored as the singers come to terms with the irreversible changes in their career focus. As one singer describes:

There is a booming silence when your career ends. You have bought into the ego of being a singer and a sense of self-importance. But there is no psychological backstop when the gold frame crumbles. (S.3)

For some singers their new directions lack initial coordination, but eventually personal successes are achieved. For others their goal-orientated approach proves a secure basis on which to begin new directions, as this singer reflects:

I thought it was better to be master of my own destiny. So, I took the decision to change my career track. I have achieved a good business and I have no regrets and I get more vocational satisfaction from what I do now, than as a singer. I’m very clear about my role, what I do, how I do it and for whom. Now I speak with authority. (S.12)

The experiences of some singers as lay operators in arts enterprises are worthy of further investigation as models of change and transition in the business of music making in creative industries. Renshaw (2010) notes that many musicians will need reskilling in order to embrace diverse roles and the following singer explains her experiences which exemplify Renshaw’s position that working as an artist outside the major arts sector will require new skills, attitudes, and counselling.

Creating a company was a new world. I had to become highly computer literate, learn how to run a website, databases, government arts policy, funding bodies and budgetary constraints. I had to teach myself about training young people. I needed to work out how you digest all your knowledge into a way young people can use. I had to work out what were my skills and how I could translate that for learners. It was a massive learning curve. (S.3)
By using meta competencies the singers began to transition through their struggles and find new capabilities, communities and identities. Their stories have the potential to contribute to an understanding of those in specialised careers and the implications for training in these fields.

**Further findings**
Several issues became evident as the singers’ narratives were analysed, and near the close of the project the singers were contacted to discuss where their new directions had taken them and any thoughts they’d like to share.

The lack of financial literacy and business administration skills was clearly an inhibitor for the singers as they moved to new directions, and this finding is also present in the research of Seton (2017), regarding actors. In addition, skills to plan career moves, to make adjustments to a specialised career and to audit skills as an arts practitioner were lacking. Career denouement, loss and transition can elicit an enormous emotional impact on singers and musicians and without skills this can be an ongoing issue for singers and musicians. Acknowledging this issue is a first step in the process.

Become an educator as many singers choose, required personal qualities that differ from being a performer and as well the singers found they needed to explore new and different communities to enact their goals both in terms of their business and pedagogy outlook. These took time and energy that at first confused the singers who were used to siloed labour markets in the performing arts.

In this article I set out to raise some thoughts about the career trajectories of singers and performers in the creative industries. I believe that the footpath’s individuals tread as they celebrate and embrace their music’s at all stages of life, are not only personally fulfilling but are also a rich component of our cultural and creative life as a country. Therefore, these narratives need a deeper and more active understanding by all those who advocate for and work in the field of music making and creative practices.

**References**


Exploring how iPad and KAiKU Music Glove Technology affect academic performance in elementary school children
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Abstract
This article explores how an existing technology, the iPad, and a new technology, KAiKU Music Glove, affect academic performance in elementary school children. It does this by recording the results from a pilot study, testing iPad and KAiKU Music Glove technology in the music classroom. The study gathered attitudinal responses and a test of knowledge. The study was conducted in an elementary classroom with two classes. Motivation levels to use the two technologies scored high in both classes, showing non-significance when compared with one another. Ease of use response levels scored high in both classes showing non-significance when compared with one another. The iPad registered a 2% margin of improvement in the test of knowledge compared to KAiKU Music Glove. This suggests that the iPad influenced academic performance in elementary school children with greater magnitude than KAiKU Music Glove. KAiKU Music Glove’s promising performance indicate it was achieving the balance in learning and innovation many educational technologies strive for.

Keywords: Music education, music technology, music pedagogy, user experience

Introduction
Guido d’Arezzo and The Guidonian Hand
Guido d’Arezzo was a music theoretician who lived in Italy in the Middle Ages and used the hand to illustrate fundamental concepts of music theory and musical systems difficult to understand. This is the fundamental and theoretical concept to the KAiKU Music Glove invention. The KAiKU Music Glove has been designed to use the hand in teaching, playing and creating music, with the aim to incorporate music theory on the hand. This is intended to be an engaging method in teaching and learning music, traced back to a medieval music theoretical system (Miller, 1973; Taction Enterprises Inc., 2018).

Since the emergence of educational technology, educational psychologists and technology specialists have taken conflicting views on the role that educational technology has in an educational system. For example, while education researchers advocated the approach of curriculum-based integration, technology specialists have stressed technology-based integration (Clements, 2008). Similarly, some educational psychologists described educational technology as potentially distracting and promoting time wastage (Clements, 2008).

Despite criticism of technology in education being linked to time wastage, the general consensus among motivation scientists is that technology may help students create meaningful connections between what they do and learn in school (Albrecht & Karabenick, 2018).
Constructivist Psychology
Nanjappa and Grant (2003) state the theory of constructivism originated from the works of Piaget (1976), Bruner (1979) and Vygotsky (1980) and is also the combination of both philosophy and psychology. Constructivism assumes that a person’s behaviours and environments are dependent on each other (Nanjappa & Grant, 2003). Authors Witfelt (2000) and Richards (1998), state that the role of the teacher is most important in a constructivist environment. Nanjappa and Grant (2003) support this notion, arguing that a teacher creates the learning context where either collaborative or independent learning methods are supported. Jonassen, Peck and Wilson (1999) acknowledge that using technology to teach in classrooms supports a constructivist learning style, as students converge new knowledge with old knowledge.

KAiKU Music Glove
KAiKU Music Glove is an invention functioning as a wearable MIDI controller. It is a hand-based wearable device, equipped with touch sensors. KAiKU Music Glove has been intentionally created to meet the needs of music education. The touch sensors on KAiKU Music Glove are arranged in two rows. The touch sensors are organised in the order across the fingertips from the index finger to the little finger, consecutively ranging from C, D, E and F. The thumb includes the touch sensors A and B. The semitone E-F is found between the ring finger and the little finger. The semitone B-C is found between the thumb and index finger. This is a preferential mapping setup and can be changed by the user. In this study, participants will use this original mapping setup.

Figure 1. The progression of the music scale on the hand when using KAiKU Music Glove. The arrows show the location of the notes in the adjacent fingers. This is a concept sketch, as the sensors and technological units are not presented. (Taction Enterprises Inc., 2018).

Action Research Framework
In this study a Technical Action Research (TAR) framework will be used. The purpose of TAR is improving the outcomes of a practice or an intervention (Coghlan & Brydon-Miller, 2014). TAR fits the purpose of this study, as its aims are to explore how technologies affect academic performance in elementary school children. In this study, qualitative and quantitative data will be collected, converged and analysed to test each
devices’ use in the music classroom. There will be two researchers present during the data collection phase.

**Methods**
The current study explores how existing and prototype technology affect academic performance in elementary school children, by testing iPad and KAiKU Music Glove hardware in the music classroom. The study involves gathering attitudinal responses before and after the technology is used. Further, all students will complete an academic test of knowledge before and after the technology is used. The data will be compared to understand how the technologies affected academic performance in elementary school children after the experiment ends. The attitudinal responses are gathered from Likert-scale self-report questionnaires. The self-report questionnaire records responses in motivation and ease of use. The study takes place over six weeks.

**Setting**
The study was conducted in a classroom setting at the Jyväskylän Normaalikoulu School located in Jyväskylä, Finland. The school provides comprehensive education for students ranging from grades 1-9. The iPad is a common learning technology used in the Jyväskylän Normaalikoulu music classroom.

**Participants**
The participants were two classes consisting of twenty-one students in both classes. All of the participants are students enrolled at the Jyväskylän Normaalikoulu school between the ages eight and nine. This will evaluate participant curriculum knowledge after they have used the technology. One class of students is assigned the iPad technology and the other class KAiKU Music Glove as the instrument to engage in the academic curriculum. All participants complete a self-report inventory before and after each lesson. The self-report inventory is the same for each class.

**Technology**
iPad is selected for play and interaction in one class for all participants and was used as a connecting apparatus in the KAiKU Music Glove class for all participants and teacher. KAiKU Music Glove is selected for play and interaction in the other class for all participants of that class and teacher. GarageBand software is used by all participants to create sound with. GarageBand sound pre-sets are loaded before classes began by the teacher and researchers. Headphones given and used by all participants to hear and playback sound triggered in GarageBand. Participants are instructed to use the technology for six weeks of classes.

**Baseline Test of Knowledge and Post-test of Knowledge**
All participants are required to complete a baseline test of knowledge before using the technology. Prior ability within the curriculum was assessed by completing a baseline test of knowledge before using the technology. The same test will be complete after the participants have used the technology. This would establish the student’s academic performance before and after using the technology to play and learn with in their curriculum.
**Likert-scale Self-report Survey**  
A self-report survey was included to assess how participants experience the experiment before and after the class. The self-report survey consisted of three questions before using the technology and six questions after using the technology. Their response was recorded on a 5-point Likert-scale. In this study, responses in motivation are analysed before the technology is used and responses in ease of use after the technology are analysed.

**Familiarisation Sessions**  
Familiarisation sessions took place over two sessions. These two sessions began before the baseline test of knowledge was administered as well as the procedure of testing the technology in the classrooms. The aim of these sessions was to informally introduce the KAiKU Music Glove technology to one group of students as well as introduce ourselves as researchers to both groups. The sessions were timed with four sets of students in total using the technology for approximately 10 minutes as a group (total= 40 minutes). The iPad group used their technology for the entirety of the class. Both researchers took observatory notes during this session. In addition, there was lesson content taught in the familiarisation session. The content contained students playing four bar simple rhythms, whole notes, half notes, quarter notes and whole rests using one note.

**Weekly Lessons**  
Both classes are given an overview regarding the content of the lesson and asked by the lesson teacher to play and practice independently. Both the iPad and KAiKU Music Glove class are asked to play together during their lessons, by unplugging their headset from the iPad and either playing the iPad or KAiKU Music Glove with other students. Both classes of students receive feedback from the teacher and are then instructed to play independently. The class ends with all students returning their technologies and completing a self-report inventory.

**Learning Outcomes**  
In week 1, the students incorporated three notes, ‘C-D-E’, into four bar simple melodies. During week 2 the students learned about different note names on the stave. Week 3 saw the students rehearsing the melody and harmony of Twinkle, Twinkle, Little Star. This was accompanied with the teacher playing Twinkle, Twinkle, Little Star on the electric keyboard. Week 4 saw students rehearsing the melody and harmony of a traditional Finnish Christmas Carol (Joulu on Taas). The students sang to accompany the melody and harmony of the Christmas Carol. This was the first-time students accompanied the use of their technologies with singing. Within week 5, the students learned about time signatures, ¾ time playing and incorporated two new notes to their repertoire, including ‘low H’. They continued to rehearse the Finnish Christmas carol piece (Joulu on Taas). The students also sang and played the technology at the same time. In the final week, week 6, the students continued to rehearse the Christmas carol (Joulu on Taas) and were accompanied by the teacher on the electric keyboard.

**Results**
Both the results from the Likert-scale self-report questionnaire data and results from the test of knowledge are presented here. First, differences in the class Likert-scale self-report response before and after using the technology are presented, across six weeks using the technology. Second, differences in class score in the test of knowledge before and after using the technology are presented. Statistical analysis was performed on the self-reports using an independent samples \( t \)-test to compare the iPad and KAiKU Music Glove responses.

**Likert-scale Responses Before Using the Technology**

An independent-samples \( t \)-test was conducted to compare student motivation before lessons began across the six classes in the iPad and KAiKU Music Glove class. Table 1 shows there was not a significant difference in the scores of self-reported motivation before lessons began across week 6.

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>( t )</th>
<th>df</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>iPad</td>
<td>17</td>
<td>3.80</td>
<td>1.25</td>
<td>-0.162</td>
<td>35</td>
<td>0.872</td>
</tr>
<tr>
<td>T-Music Glove</td>
<td>20</td>
<td>3.70</td>
<td>1.74</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

\*\( p < .05. \)

*Note.* \( n \) = Amount of students present. SD = Standard Deviation. df = Degrees of Freedom. \( t \) = \( t \)-value. \( p \) = Statistical Significance. Likert-scale ratings range from 0 (Not at all) to 5 (Very much).

**Table 1.** \( t \)-test Results comparing student motivation in iPad and KAiKU Music Glove classes before lessons started, week 6.

**Likert-scale Responses After Using the Technology**

An independent-samples \( t \)-test was conducted to compare if the students found the technology easy to use in the iPad and KAiKU Music Glove class after lessons were complete. The data was collected at the end of each the six lessons. Table 2 shows there was not a significant difference in ease of use scores after the lessons were complete during week 6.

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>( t )</th>
<th>df</th>
<th>( p )</th>
</tr>
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<td>0.356</td>
</tr>
<tr>
<td>T-Music Glove</td>
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<td>0.97</td>
<td></td>
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</tbody>
</table>

\*\( p < .05. \)

*Note.* \( n \) = Amount of students present. SD = Standard Deviation. df = Degrees of Freedom. \( t \) = \( t \)-value. \( p \) = Statistical Significance. Likert-scale ratings range from 0 (Not at all) to 5 (Very much).

**Table 2.** \( t \)-test Results comparing how easy the technology was to use in iPad and KAiKU Music Glove classes after lessons ended, week 6.
Test of Knowledge
The test of knowledge was complete by both classes before and after they used their technologies. This test would provide a baseline of what the student’s knowledge in the music curriculum was before using the technologies. After using the technologies, the same test was given to the students to measure their academic performance in the curriculum. The test of knowledge is scored out of a total of 31.

Pre- and Post-test Results: iPad Class

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>9.58</td>
<td>7.5</td>
<td>5.80</td>
</tr>
<tr>
<td>Post-test</td>
<td>16.17</td>
<td>16</td>
<td>7.80</td>
</tr>
</tbody>
</table>

*Note.* SD = Standard Deviation. Pre-study presents results before using iPad in the curriculum. Post-study presents results after using the iPad in the curriculum. Total test score is 31.

Table 3. Pre- and Post- test results of the iPad class.

Pre- and post-test Results: KAiKU Music Glove Class

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>12.52</td>
<td>10</td>
<td>9.30</td>
</tr>
<tr>
<td>Post-test</td>
<td>15.60</td>
<td>10.5</td>
<td>9.90</td>
</tr>
</tbody>
</table>

*Note.* SD = Standard Deviation. Pre-study presents results before using KAiKU Music Glove in the curriculum. Post-study presents results after using KAiKU Music Glove in the curriculum. Total test score is 31.

Table 4. Pre- and Post- test results of the KAiKU Music Glove class.

Discussion
Discussion Introduction
This section will provide an explanation of the main results by examining Likert-scale responses provided by the students and the test of knowledge scores from the two classes.

Motivation Likert-scale Responses
Responses in motivation to use the two technologies remained high in both classes, showing similar scores up to week 6 and non-significance when compared against each other up to week 6 ($p = 0.872$). Comparatively there is not a significant difference in motivation between using both technologies. Overall, the users high scoring response suggest both technologies are motivating to use.
Ease of Use Likert-scale Responses
Ease of use response levels remained high in both classes showing similar scores across weeks 1 and 6 after classes finished. In addition, non-significance is recorded after using the technologies across weeks 1 and 6 ($p = 0.356$). The responses indicate both technologies were easy to use. This suggests the students found the technologies accessible and accordingly, the technology was not an obstacle for them to use in the music classroom. The overall high score in ease of use among both classes may suggest that both technologies were free from effort to use in the classroom.

Test of Knowledge Results
Before using the iPad, the students who would use that technology in their class produced an average score of 9.58 with a total of 20 students completing the test. After using the iPad, the same students produced an average score of 16.17 with a total of 19 students completing the test. Before using the KAiKU Music Glove technology, the students who would use that technology produced an average score of 12.52 with a total of 21 students completing the test. After using the KAiKU Music Glove technology, the students produced an average score of 15.60 with a total of 20 students completing the test.

The results show that the majority of students improved in test score with the exception of one student, who decreased by one point after the six lessons. After 6 weeks of using the iPad, the respective class improved their baseline score by 21%. After 6 weeks of using the KAiKU Music Glove the respective class improved their baseline score by 10%. Accordingly, the results indicate the class using the iPad finished strongest, the completing the six-week experiment with a higher post-test result and greater margin of improvement. When both classes post-test results are compared with one another, there is a 2% difference favouring the iPad class.

Conclusion
High response levels were found in motivation to use the technologies before the lessons began. This may indicate increased engagement levels in students of both classes when using the technologies. This may be beneficial in helping students concentrate during class. High response levels were also found in ease of use after lessons finished, suggesting that students interacted with the technology using little effort.

In the test of knowledge scores, the results indicate the class using the iPad finished strongest, completing the six-week experiment with a higher post-test result and greater margin of improvement. There is a 2% improvement difference favouring the class using the iPad. This suggests the iPad to be a superior technology when effecting academic performance.

The current study explored how existing and prototype technologies affect academic performance in elementary school children by testing iPad and KAiKU Music Glove hardware in the music classroom. It suggests that motivation and ease of use are important conditions in how technology affects academic performance. As KAiKU Music Glove is a prototype technology, it shows promising performance as an educational technology that may benefit future teaching in the music classroom.
References
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https://doi.org/10.4135/9781446294406  
https://doi.org/10.1007/978-3-642-46323-5_2  
Appendix 1 – KAiKU Music Glove Invention with Touch Sensors
The teaching of art deconstruction and language innovation in the inclusive music education perspective
Áureo Deo DeFreitas Júnior & Jessika Castro Rodrigues

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Doctoral Student at Federal University of Pará, Belém (Brazil)

Abstract
The movement of music inclusion as a compulsory language in teaching of art in Brazil and special education from the perspective of inclusive education has forced musicians, pedagogues, psychopedagogues and psychologists to face a range of realities in the last two decades. To contextualize the deconstruction of music teaching and language innovation, the present researchers aimed to report investigations in the field of music education, developed in the Developmental Disorders and Learning Difficulties Research Group (DDLD-RG). In order to do so, the researchers adapted and/or created effective teaching strategies to the inclusion of these students in the context of music education. The researchers selected from the DDLD-RG the research studies carried out during the New Talent Project by CAPES, that happened in 2014. Highlighted teaching strategies involved teacher training in basic education, theoretical and practical training of undergraduate students, percussion workshop in-group for children with Autism Spectrum Disorder and for children with Down Syndrome, and cello workshop in-group for adolescents with ADHD and Dyslexia. Punctual reports defined the deconstruction of music teaching and language innovation. Therefore, for music education to meet everyone’s need comprehensively, cyclical exercise of teaching and research needs to be maintained, thus promoting a personalized service to the community.

Keywords: music inclusion, ASD; ADHD, Down Syndrome, dyslexia, developmental disorders.

Introduction
Music education as a form of intervention for students with Developmental Disorders and Learning Difficulties is a broad theme because it encompasses issues within the context of research on social and musical inclusion (DeFreitas et al., 2014). The authors suggest that actions in the area of music, to maintain the balance between music education and pedagogical and psychological proposals, may corroborate to minimize the complex task of the social inclusion of persons with developmental disorders and learning difficulties.

When one talks about education and inclusion, disparities may be verified at the local and state and national levels, and the social actors involved in this process (family, community and society) must fight for compliance with current laws. Although the existence of the Law Guidelines of Bases Education (LDB), the Law No. 9.394/1996, amended article 26 to promulgate the compulsory teaching of the arts at all levels of basic education.

The Law No. 11.769/2008 amended the article 26, which promulgates the compulsory teaching of music in basic education. With that said, there are disparities,
both in terms of compliance with this law and the provision, without discrimination for
vacancies that meet this demand.

To contextualize the deconstruction of music teaching and language innovation, the
present researchers have aimed to report investigations in the field of music education,
developed in the Research Group - Developmental Disorders and Learning Difficulties.
In order to do so, the researchers adapted and/or created effective teaching strategies for
the inclusion of these students in the context of music education.

**Contextualizing four developmental disorders**

Autism Spectrum Disorder (ASD) is a condition marked by varying limitations in
communication and social interaction, and sensory difficulties. In some cases, persons
with ASD show the presence of stereotyped behaviors (DSM-V, 2013). According to De
Paula et al. (2011), in Brazil, the prevalence of ASD is 27.2 persons diagnosed in a
population of 10.000. Regarding gender prevalence, Elsabbagh et al. (2012), in a
worldwide literature review survey, highlighted that ASD is more frequent in boys than
in girls with a prevalence of 1.33-16.

According to Oliveira et al. (2013), Down Syndrome is caused by the presence of
an extra 21 chromosome that causes a variable degree of motor retardation and physical,
and mental development. Moreira & Gusmão (2002) say that, one may observe
associations with signs such as muscle hypotonia, single transverse palmar fold, single
fold in the fifth finger, groove between the halux and the second toe, excess skin in the
neck, oblique palpebral fissure, and face flattened out. Louro (2006) warns that the
syndrome is a medical definition that refers to the occurrence of several simultaneous
errors during the formation of the embryo and fetus leading; consequently, to the
emergence of various internal and/or external limitations.

Regarding Attention Deficit Hyperactivity Disorder, it is considered a
developmental disorder. According to DSM-V (2013), ADHD manifests itself before the
age of seven and has three main characteristics: inattention, because the child has
difficulty paying attention to details; hyperactivity, characterized by the resistance of the
child to remain seated and quiet; and impulsivity, when the child has difficulty waiting in
turn, interrupts persons and speaks hastily.

With regard to dyslexia, according to Silva e Silva (2015, p. 34) it is one of the
most frequent learning disorders in school-age children. Silva e Silva says that it affects
between 5% and 17% of the child population, affecting children without cognitive or
sensory impairment, supposedly exposed to appropriate educational instructions, and
without significant physical or emotional problems. It is, also considered a central
nervous system dysfunction characterized by difficulty in acquiring or using reading
and/or writing. (Gerber, 1996, p. 52; Capellini, 2005, p. 12; Ciasca, Capellini &
difficulties associated to dyslexia are phonological difficulties, information processing
difficulties, memory and coordination, organizational difficulties, problems. sequencing
and orientation, visual and auditory processing difficulties. However, each of these
associated difficulties, depending on the degree variation, could shed more light on
literacy problems.
Methodology
The present researchers selected investigations for analyses conducted during the CAPES New Talent Project in 2014, because they addressed the topics related to developmental disorders and learning difficulties in music education, researchers from the Developmental Disorders and Learning Difficulties Research Group (DDLD-RG) conducted the workshops.

Researchers classified the workshops as: (a) percussion in-group workshops for students with Autism Spectrum Disorder and students with Down Syndrome, which took place at the Graduate Program in Arts of the Federal University of Pará and (b) cello in-group workshops for students with ADHD and students with Dyslexia, which took place at the School of Music of the Federal University of Pará. The university students and teachers and staff from the Basic School interested in music education came from diverse social, ethnic and cultural backgrounds. Researchers designed activities aimed at lectures, courses, and workshops for teachers and students from the Basic School Education in a public school, undergraduate and graduate students from two public universities, and any professionals interested in music education.

The lectures, courses, and workshops took place at the Music Laboratory of a regular school of music; the ‘Teachers’ Room of a Basic School Education; and the Auditorium of the Graduate Programs from a Public University. Regarding the Ethical Care, researchers submitted the project to the ethics committee on research with human beings. Also, researchers requested from the participants’ guardians the signing of the Informed Consent Form.

Results
The research coordinators from the New Talent, sponsored by CAPES, conducted 04 studies. Researchers aimed to promote the social inclusion of children and adolescents with Autism Spectrum Disorder (ASD), Down Syndrome (DS), Attention Deficit Hyperactivity Disorder (ADHD) and Dyslexia, via in-group percussion and in-group cello workshops.

Study No 1: The researchers coordinators created 04 classes, consisting of 10 students. There were 4 students with ASD and 6 students with/without learning difficulties. In total, there were 16 students with ASD and 24 students with/without learning disabilities, aged 6 to 9 years old. As monitors the high school and undergraduate students advised the children with ASD during the percussion in-group workshops, supervised by a licensed musician and a psychologist. In addition, high school and undergrad students collectively performed field records, planned the next classes, and organized the data analysis. The researchers indicated that the music education via in percussion in-group workshops promoted, in children with ASD, the fine stoning and wide motor coordination (during free activities with the instruments) and the identification, recognition and reproduction of tone and posture while performing on the percussion instruments (coquinho, clubs, rattles, xylophone and drum).

Study No 2: The research coordinators aimed at the inclusion and access to musical education of children with Down Syndrome and children without disorder or syndrome, aged 6 to 9 years old. Ten students attended the percussion in-group workshop. There were 4 students with Down Syndrome and 6 students without disorder or syndrome. Acting as monitors in the percussion in-group workshop, there were students from the
technical courses and undergrad music field, advising children with Down Syndrome, and organizing the music activities, while being supervised by a licensed professional in music and a psychology. In addition, the students from the technical music cello course and students from the undergrad music course performed collectively field records, planned the next classes, and organized the data analysis. After analyzing the results, researchers pointed out that children and adolescents with Down Syndrome and/or learning disabilities improved their learning process, as they performed well during the percussion in-group workshop.

**Study No 3:** The researchers coordinators aimed to promote the social inclusion of children and adolescents with ADHD and children and adolescents without difficulties or ADHD, during the cello in-group workshop. The researchers enrolled twenty-four students in the project, ranging in age from 09 to 14 years old. There were 8 children and adolescents who had risk characteristics for Attention Deficit Hyperactivity Disorder (ADHD) and 16 without risk characteristics. As for the instrumental practices of the cello in-group workshop, it was based on the teaching methodology of the Suzuki Project (Japanese Music Project) and String Project (American Music Project). Researchers used the 1/2, 3/4, and 4/4 cello size, in order to promote the process of musicalization. Then, researchers formed two cello in-group classes. Each class consisted of 4 students with risk characteristics for ADHD and 8 students without the characteristics. A music educator and cellist taught the cello in-group workshop, attended by 01 student from the Technical Music Cello Course and 02 students from the Undergrad Music Course (Monitors). In addition, there were 02 students from the Grad School Course in Arts and 02 students from the Grad School Course in Psychology, both of whom were from the UFPA. After analyzing the results, researchers highlighted a higher prevalence of ADHD in male music students, and suggested that children and adolescents with ADHD could improve their learning process at the regular school, and, consequently, improve their instrumental learning process at the music school if they had a fixed teaching staff that could provide continuous classroom teaching.

**Study No 4:** The researchers coordinators aimed to promote the social inclusion of children and adolescents with dyslexia and children and adolescents without difficulties or dyslexia, during the cello in-group workshop. Researchers enrolled 24 students in the project, aged from 9 to 14 years old. There were 9 students with risk characteristics for dyslexia and 15 without risk characteristics. Then, researchers formed 2 cello classes, each consisting of 12 students. The first class consisted of 5 students with risk characteristics for dyslexia and 7 students without the characteristics. The second class consisted of 4 students with risk characteristics for dyslexia and 8 students without the characteristics. A music educator and cellist taught the cello workshops, assisted by 01 student from the Technical Music Cello Course and 02 students from the Undergrad Music Course (Monitors). There were 02 students from the Grad School Course in Psychology and Speech Therapy, both of whom were from UFPA. Procedures for assessing the practical development of cello students included four assessments through the Music Learning Assessment Scale (MLAS). There were also three Musical Theoretical Evaluations I and II (MTE I and MTE II). The researchers suggested that the poor adherence of teachers and technician staff to the pedagogical proposals through lectures, courses, and workshops could have made it difficult to disclose the vacancies offered, thus hindering the access of potential students to the registration of the cello in-
After analyzing the results, researchers suggested that children and adolescents with dyslexia could improve their learning process, and consequently, improve their instrumental learning, and their regular learning at the Basic School, if they had a fixed teaching staff that could offer continuous music classes and regular classes.

**Teacher and Student Training**

The researchers Coordinators from the Developmental Disorders and Learning Difficulties Research Group (DDLD-RG) devised a teacher/student training model/procedure for the teachers from the Elementary Basic School and students/researchers from the UFPA. There were four workshops: (a) children with Autism Spectrum Disorders (ASD) percussion in-group workshop, (b) children with Down Syndrome (DS) percussion in-group workshop, (c) children and adolescents with Attention Deficit Disorder (ADHD) cello in-group workshop, and (d) children and adolescents with Dyslexia cello in-group workshop.

Seven teachers from a regular elementary school in Belém attended the teacher retraining workshop Those teachers participated in lectures and courses at the educational institution itself, which provided access to information about ASD, Down Syndrome, ADHD and Dyslexia. The process of scientific initiation and the partnership between undergrad and graduate students, in turn, allowed, in addition to access to theory, practical actions in the research process, contributing to the integral formation of these students.

Music teachers and psychologists gave seven lectures to the teachers from the Basic School Education and students from the UFPA. The lectures took place in the first semester of 2014, in the Basic School Education. After the lectures, there were three mapping attempts of students with risk characteristics for ASD, ADHD, Dyslexia and DS. Of the seven lectures, one was specific to the ASD theme; however, due to the low frequency of teachers in these initiatives, research coordinators scheduled two lectures to present every single diagnose. Due to lack of teachers, the researchers cancelled the lectures.

According to the information from the school head principal from the Basic School Education, the institution did not have an exact number of technicians and teachers registered in the institution. The school head principal attributed that to the fact that many teachers retired or relocated themselves to other schools, due to the end of their full-time schedule contract. In addition, the school head principal mentioned the high rate of assaults that occurred frequently in the institution, which led some teachers to choose not to teach in the school.

Faced with the low rate of involvement of teachers of the Basic School Education, during the seven lectures, the research coordinators of the four studies articulated a Mini Specialization Course, entitled “Special Needs: music and school social inclusion”. The short-term course took place in the Grad Program in Arts of the Federal University of Pará. Two Music Education professors, with Doctoral Degree, three Psychology professors with Master’s Degree, and 01 Specialist in Letters conducted the short-term course. With regard to student, participants in the short-term course, there were nine undergraduate students, three teachers/researchers; seven teachers and technician staff from the Basic School Education; and eight teachers from other neighbouring schools.
The researchers trained the teachers/students to conduct the percussion in-group workshops. Teachers/students participated in the lectures and theoretical-practical workshops about Autism, Down Syndrome, Dyslexia, and ADHD. DeFreitas (2009) says that music learning through the cello in-group workshops began in the School of Music at UFPA in 2006. For this reason, it was not necessary to conduct teacher/student training in order to qualify them to lead a homogeneous cello workshop, created for children and adolescents with ADHD or Dyslexia risk characteristics. Researchers observed that the teachers/students acquired theoretical knowledge through lectures, workshops, as well as acting as monitors. Thus, there was an intense exchange and knowledge construction between teachers, undergrad and graduate students, which favored an integral formation of teachers.

**Considerations and Implications to Music Education**

To contextualize the deconstruction of music teaching and language innovation idealized by the Developmental Disorders and Learning Difficulties Research Group (DDLD-RG), the present researchers reported studies in the field of music education. As a result, researchers created effective teaching strategies devised for the inclusion of persons with Autism Spectrum Disorder (ASD), Down Syndrome (DS), Attention Deficit Hyperactivity Disorder (ADHD), and Dyslexia.

Punctual reports conducted by researchers of the present investigation defined the deconstruction of music teaching and the language innovation. Taking into consideration the formats of the traditional music workshops, such as Suzuki Project and String Project, the DDLD-GP researchers devised a differentiated teaching format in which children and adolescents with developmental disorders and learning difficulties learn music. Meanwhile, students from the Undergrad Courses in Music, Letters, Pedagogy, Psychology, Psychopedagogy, and Occupational Therapy, and Graduate students collected data aiming to complete their projects such as, scientific initiation paper, undergraduate research paper, and master's degree dissertations.

As a proposal to the teaching deconstruction aiming at a language innovation, the research coordinators from the DDLD-RG adopted extracurricular activities: (a) Lectures for teachers of basic education and (b) music instrumental practice workshops. Music educators, Psychologists, and Speech Therapists gave lectures about the Developmental Disorders and Learning Difficulties, addressing the practical group training.

During the lectures, researchers noticed teachers' lack of knowledge regarding dyslexia and/or learning difficulties. This suggested that children and adolescents with dyslexia and/or learning difficulties could be inserted in the school context of the institution, corroborating the fact that students did not learn effectively, thus influencing the cello learning process.

Deconstruction translates into today's challenges. Today's challenges may be the attitude of the teacher who researches their practices via research actions; the teaching strategies that conform to occurrences in practice; and the subdivided teaching workload, considering time for the involvement of a multidisciplinary team as training. In addition, must be the permanent involvement of a multidisciplinary team in order to provide instruction and control of actions and the involvement of parents and caregivers in the construction of teaching strategies.
Innovation is established by the experience of undergraduate students in order to raise research questions, as well as, applying their research experiments in workshops. Therefore, for music education to include everyone, researchers and music educators need to offer it comprehensively and to include a cyclical exercise of teaching and researching, in order to promote and effect a personalized service in a collective environment.

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Avoiding playing-related injury in a university piano performance class through a common technical understanding

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Abstract
Students enter university performance courses from a variety of backgrounds with diverse pre-tertiary tuition. Some have had the benefit of highly skilled teachers, while others have had little opportunity to gain knowledge about the basic elements of technique and body use. In the highly competitive tertiary environment, there is insufficient time to correct the faulty movement patterns which can cause pain and injury, and even less agreement among teachers about what constitutes a balanced technique. The aim at this university was to establish a common ground of technical understanding among piano teachers with varied training backgrounds in order to reduce the risk of injury in tertiary piano performance students. The various movements involved in piano playing at every level were analysed and broken down into a series of simple exercises which focused on a coordinated use of hands, fingers and arms. These were taught in a class situation to all piano performance students and assessed as part of their coursework. Each exercise was described and shown on video and the individual piano teachers were instructed in their delivery. Although there has been no formal data collection, performance-related injury has reduced markedly in the five years since the introduction of these exercises. Not only do the exercises provide awareness of healthy movement patterns, but they also provide a common ground for class discussion for students and teachers from different traditions. An illustrated digital electronic book Fit 4 Piano (de Lisle, 2019) has now been produced which includes the exercises on video, with examples of how they are relevant to repertoire of all levels. Further quantitative evaluation could be used to verify this resource as a means of maintaining healthier performance practice in tertiary piano students.

Keywords: Injury prevention, piano pedagogy, university performance, coordinated technique, piano exercises

Background
Since the advent of the recording industry the demands on the musician for total accuracy, while taking the risks required in bringing a performance to life, have escalated. There is the perceived need for more and more practice to achieve the perfection in a live performance that compares with the standards of a compact-disc recording (Altenmüller & Jabusch, 2010). With the increased competition and the demands of the economic climate in the last fifty years, musicians are required to practise longer hours and to produce results within shorter time frames than ever before. Children often begin their studies before the age of five and are expected to accomplish demanding repertoire at a very young age in order to “cash in” on the public’s love of musical prodigies. There is no longer time for the step-by-step methodical technical training that was considered the norm a hundred years ago. The perceived demand instead is to
accomplish the most difficult pieces as soon as possible in order to dazzle the audience. As the musical journey continues, pressure to meet these expectations intensifies, placing greater and greater demands on the developing musician. His very existence becomes entwined with his view of himself as a musician.

Nowhere is this more obvious than in the tertiary sector, where young pianists in music performance programmes aspire to intense competitive demands. Some who may have musical potential have had no instruction on how to play with a balanced technique and biomechanical awareness. Most think that piano playing involves the fingers, but have no understanding of the role that the arms, shoulders, hands and torso can play in making a free and beautiful sound.

Students usually enter the university with some fluency of finger technique and can often play fast without any thought of how to combine the fingers with a coordinated use of the whole body. Technical development often begins with mindless playing of fast scales, used to “warm up” the fingers. Since there are no muscles in the fingers, how much better it would be if a “warm-up” involved the whole body with slow exercises. Moreover, a “warm-up” is pointless if the body then begins to play in a way that is “out of balance”.

There are confusing and conflicting instructions from music professors, and little agreement about what constitutes a balanced technique. Many students are still being trained to lift their fingers high and play with a percussive action in order to strengthen the muscles. In many conservatories some of the technical practices in piano teaching which were considered the norm a hundred years ago are still being taught, in spite of growing research that this way of playing can be injurious. In addition, at tertiary level the focus on exams and competitions is paramount, and there is insufficient time for retraining the technique.

Most piano pedagogues will stress the need to relax, but without specific instruction as to how it is possible to play with minimum tension, this instruction can be misunderstood. Far too many teachers have a lack of biomechanical knowledge and are simply teaching the way they were taught.

Piano playing at concert level is highly repetitive. A study of a pianist by surgeon Dr. James Paget revealed 72 finger movements per second (Critchley, 1977, p. 366). A Liszt étude can demand 1800 repetitions per minute (Munte, Altenmuller, & Jancke, 2002), and any professional musician is required to play up to 20-30 notes per second (Tubiana, 2000, p. 334).

With these demands, it is of paramount importance that the whole body works in the most biomechanically efficient way possible. If the initial technique was biomechanically faulty or if the technique has gradually moved away from this ideal, then such repetitive demands over time may lead to injury (Wilson, Wagner, & Homberg, 1993).

Moreover, the complex movements of fingers, arms, and indeed the whole body need to be performed with the utmost precision to meet the expectations of the listener. Ready internet access to high level competitive performances in international piano competitions leaves the young musician in no doubt as to the standard that is required. In addition, the reduced number of lessons allocated in university settings means that there is very little time to retrain unsafe movement patterns in the race to learn the repertoire,
pass the exams and win the competitions. This constant pressure has the potential to impact on both mental and physical performance health of the student.

**Establishing a common understanding**

Over many years far too many university piano performance students have experienced playing-related injury. On arrival at the university, most have been playing for around ten years, and many have ingrained habits of tension, poor posture, and stiffness in the shoulders, arms and wrists. The increased practice time required at tertiary level puts these students at risk. Playing-related pain is common, and if not addressed by performance teachers can lead to further pain and injury. However, there is little understanding of the causes of specific pain or discomfort, and teachers often tell the student to practise harder, without modifying the movement patterns that are responsible. Few understand the basic concepts of alignment and joint support and the “no-pain, no-gain” attitude still exists.

The aim of this research was to find a way to reach agreement on biomechanically based technical principles with a group of five piano teachers in order to create awareness and reduce the risk of injury in a class of 45 tertiary piano performance students at a New Zealand university.

In order to clarify technical understanding among teachers with varied training backgrounds, aspects of piano technique were broken down into the simplest possible movement patterns.

At the most basic level it was important to understand how to make a sound with the hand, fingers and arm *together*, and to be able to release from the keyboard without any residual tension. The process began with one and two notes, making sure that the movement incorporated a coordinated use of the whole arm. Each movement was analysed and dissected into its simplest form and then the numbers of notes were increased by use of physical and musical gestures, adding one note at a time to each group. A series of very simple progressive exercises were designed, their purpose and execution explained to the teachers and then taught to all piano performance students. Principles of posture and awareness of the core of the body were discussed. To establish freedom, the exercises began with gross movements involving small groups of notes or gestures, in order to reduce tension in the technique and establish a coordinated use of the body. These large movements were then reduced and refined when put into repertoire. All exercises were short, so that focus on the quality of movement could be maintained. Unwanted tension in the wrist, elbow, hand and arm was monitored. The use of gestures meant that release was programmed between groups of notes, preventing a build-up of any tension. Familiar finger exercises were not included, since the focus was on involving the whole body as part of the playing mechanism, and most students had already had extensive finger-based training. Large movements of the upper arm were used to establish lateral movement across the piano, and repeated note patterns focussed on engaging the fingertip while still involving the arm. All exercises stressed avoidance of unnecessary fixation at the wrist and allowed the arm to follow the direction of movement, using a coordinated movement involving controlled transfer of arm weight. Quality of sound was always a focus, whether playing staccato or legato, single notes or chords. Common causes of pain were discussed to create awareness of healthy playing habits, along with
ideas that have proved beneficial for correction at the piano, involving exercises to develop freedom in the wrist and arm while playing.

**Increasing Tempo**
As tempi change, so do the demands on the pianist. Once these basic principles were established, speed could be gained by processing a number of notes at a time or ‘chunking’. The gradual acceleration to tempo by using a metronome, often recommended by teachers, is not always efficient because of the different neurological processing required at the faster tempo. There often comes a point where the student can simply not cross the barrier from slow practice to full tempo. It takes longer to process a message from the brain to the hand than to process the single notes required in a fast passage. Therefore, it was effective to practise passages of semiquavers in groups, using the movements learnt in the exercises and stopping on different notes in turn during a passage, gradually extending the gestures until four, eight or twelve notes were programmed as a single thought.

The slow exercises used in this research train the fingers, hand and arm to release after playing. In fast playing the fingers need to be nearer the keys, and the fingertips can engage with the keys with lightning speed and release immediately, so that speed is not hindered by unnecessary accumulation of tension. By beginning with extremely slow large muscle movements, the quality of the movement is maintained. As speed increases, the movement can be reduced so that the choreography is scarcely visible, but the gestures programmed by the exercises help to ensure freedom throughout the passage.

**Sharing the concepts**
The class situation at this university involved all 45 piano performance students, and the exercises provided a toolbox of common understanding, which could then be applied to repertoire at all levels. The exercises were assessed as part of the coursework.

The team-teaching framework and the open and inclusive teaching atmosphere made it possible for these ideas to be implemented and available to all students. All teachers were receptive to using the exercises and incorporating these technical principles in their teaching. The class gave further opportunity to address technical problems in repertoire through the framework of the basic exercises. In addition, the students who were already teaching in the community could see how an understanding of coordinated movement could be applied to their own teaching of children. Although formal research has not been undertaken to further verify the usefulness of these exercises as a means of injury prevention, there has been a marked reduction in the injury experienced in pianists at this university since their introduction five years ago.

**Further research**
Since most instrumental teachers have little biomechanical knowledge, further research is now needed to evaluate the most effective way of educating teachers on the dangers of unbalanced body use. Piano teachers need to learn how to be vigilant in detecting postural problems and to know how to correct them. Few understand how to develop joint stability, how to develop alignment and avoid ulnar deviation, and how to release from moments of tension. Even experienced teachers can pass on unsafe practice methods to their students. Teachers are often resistant to change, and are protective about their own
students, and this approach has been shown to be one way of clarifying principles of safe body use in a way which is easy to understand and non-threatening. These concepts have now been published as part of an interactive electronic book *Fit 4 Piano* (de Lisle, 2019), which is now in use at a further New Zealand university with encouraging results. The *Fit 4 Piano* principles have also been adopted by a number of teachers in Australia, New Zealand and further afield, and it is hoped that they will assist the development of an injury resistant piano technique from the earliest to the most advanced levels of training.

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General music education through the lens of dominance and subordination

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Abstract
In this paper general music education in South Africa is described using the framework of Julietta Singh’s theory of mastery. Mastery refers to the mastering of indigenous people by colonisers, who created a master and servant and / or slave relationship of dominance and subordinance. The subordinate position can be overcome either through mastery of the dominant culture or by establishing and recognising a different cultural hegemony such as multiculturalism. In South Africa, the hierarchical relationship of western cultural hegemony has extended over time. Cultural hegemony prevails and the relationship of dominance and subordination is reframed as one of class and economics.

Keywords: South Africa, music education, dominance, subordination

Mastery and suppression
Throughout South Africa’s history, music has been performed and shared in cultural production and social spaces, which led to uniquely South African popular music styles, namely mbaqanga, kwela, mbube, marabi, maskanda, isicathamiya, fusion, local jazz, afro-jazz and bubble gum pop (Coplan, 2008, pp.13-24; 293-304; 74-395).

Conversely, cultural hegemony has existed in formal education from 1737 onwards. Music education in South Africa is described using the framework of Singh’s theory of mastery, where mastery refers to the mastering of indigenous people by colonisers, who created a master and servant and relationship of dominance and subordinance. Singh identifies three characteristics of mastery. Firstly, mastery enforces the creation of political spaces that disadvantaged groups of people. Secondly, mastery causes one party to be subordinate while the other party is dominant and in a position of power. Thirdly, mastery ensures that the hierarchical relationship is extended over time (Singh, 2018, pp. 12-14).

Parallels can be made with South Africa, where political spaces were established and regulated by legislation that entrenched the mastery of the coloniser as “conqueror” over the indigenous people. In education, indigenous music practices were erased, and the music of the dominant, Western culture was introduced as the standard for music education. Secondly, different races were educated for either being the “master” or the subordinate. Thirdly, the hierarchical relationship has extended over time and into the present, where despite a new political dispensation, inequalities and suppression continue.

Singh’s thesis of mastery echoes Gould’s description of dualisms, which is a specific type of hierarchy and which holds true for South Africa. The effects of dualisms are discrimination, domination and oppression, when one group is deemed to be inferior (Gould, 2007, pp. 229-240).
The creation of political spaces: mission education

South Africa is different to other former colonies, such as other African countries and Australia. In South Africa different groups of indigenous peoples experienced colonisation differently. The San and Khoikhoi can be considered as first nations as they too were not immune to smallpox and were decimated by the disease. A second group of indigenous peoples are Blacks, whose experiences with the mission system, mirror those of the rest of the African continent. In South Africa, we have Coloured people who are of mixed race and who have adopted the Western culture and languages. Blacks still speak their home languages, which are now official languages, and adhere to cultural practises while also adopting Western culture and languages.

Prior to the arrival of the missionaries, the indigenous people in South Africa, practised oral cultures, where education and learning music were part of daily life and included ceremonies and rituals and traditions that were passed to successive generations through songs, dances, poems and stories (Christie, 2016). Learning was through apprenticeship, discipleship, listening, participating and assimilating (Ong, 1982, p. 9). Some of the settlers and missionaries learnt the languages and recorded the stories and histories which enhanced orality by organising the components of oratory into scientific art (Ong, 1982, p. 9). Two such colonists were Wilhelm Bleek, a philologist and Lucy Lloyd, who recorded information about the language, culture, folktales, history and narratives of the Khoikhoi and San people at the Cape (Deacon, 1996, pp. 93-113). However, these histories were not included in the formal school curricula.

By way of example two divergent mission practises, will be described. The Moravian missionaries were the first group of missionaries to arrive in South Africa, and ministered to the Khoikhoi and San people, suppressed and erased culture and language as they spread cultural imperialism and inculcated Western languages, cultures and religion. Western culture dominated and was adopted by the communities in mission stations across South Africa (Davenport, 1988, pp. 177-180; Gould, 2008, pp. 29-44). The Khoikhoi and the San were in fact banished from the mission stations if they exhibited any evidence of their former way of life (Marais, 2014). Mastery of the people established through Christianising, with music and specifically the music traditions of 18th century Europe played a dominant role. Vaugeosis (2007, pp. 163-200) states that music has been used a means to erase cultural identities, while enforcing new identities through religion and schooling.

By the time the Moravians arrived at the Cape in 1737, the Khoikhoi and San people had begun to lose their identity and had been assimilated into colonial society as farm labourers and followed colonial laws (Viljoen, 1995, pp. 53-54). They were therefore receptive to the Moravian teachings and conversion to Christianity (du Preez, 2009, pp. 11-19). Moreover, the society at the Cape was conservative, due to the Dutch and the French Huguenot influence. The ideologies of the Dutch would over time lead to their rejection of British liberalism and eventual segregation and apartheid policies (Cell, 1982, p. 6). The Moravian missionaries were conservative. While liberal ideas in Europe were influencing society and the churches, the Moravian teachings provided an antidote against modernism (Krüger, 1966, p.48). To paraphrase Fanon, the Khoikhoi experienced

In South Africa, the word Coloured refers to a person who is multi-ethnic and whose ancestors include the European colonists and the indigenous people living in South Africa
that their “customs and the sources on which they were based, conflicted with a civilisation unknown to them and which was imposed on them” (Fanon, 1986, p. 110).

Through the erasure of culture and subordination, the Khoikhoi and San learnt a new language, Dutch and later Afrikaans for education and religious worship. After baptism the Khoikhoi and San received Christian names and could participate in worship and education in the mission schools (Bredekamp, 1988, p. 25; Dick, 2012, pp. 659-662).

The Moravian missionaries based their teaching on Comenius’ philosophy of education, which included the singing of simple hymns and psalms, in the European tradition. The main purpose of music in the Moravian tradition was to prepare children for worship in the church (Laurie, 1972, pp. 88, 143-144; Monroe, 1972, pp. 88). This philosophy enabled the exclusion, marginalisation and suppression of indigenous culture and music. The missionaries ensured the continuation of their culture into perpetuity by educating their converts to take over the role of priests, teachers and musicians who would become the socially elite. Teachers educated in the Moravian tradition, were taught to play music instruments such as the piano, violin and organ (Krüger & Schaberg, 1984, pp. 132-133).

British missionaries arrived in the Eastern Cape in the nineteenth century to minister to the Xhosa (Mills, 1995, pp. 153-171; de Kock, 1996; pp. 38-39). These missionaries had different worldviews and philosophies to the Moravians. James states that the “notions of African inferiority” which had been prevalent up to the nineteenth century were questioned by the philosophies of the Romantic era and by Evangelical Christianity. The Romantic ideals of universal brotherhood, liberty and the right to pursue happiness, gave rise to the conviction that if African people were converted to Christianity, it "would complete (his) their felicity". The Christian belief, which was the belief of the missionaries, is that there is only one human race and man was created by God and could therefore have salvation (James, 2016, pp. 12-13). Like the Moravians, the British missionaries enabled the development of an influential, educated, social elite who mastered the colonial ways and who would later be masters over the lesser educated people in their communities and perpetuate the European traditions (Coplan, 2008, pp. 38-39).

The British missionaries followed a benevolent approach which meant that the Xhosa were able to retain cultural traditions, such as lobola, coming of age rituals and their language while also mastering the colonial culture and the English language. Xhosa clergymen, educated at the seminaries embraced both Xhosa customs and Christianity and practised these in their communities (Mills, 1995, pp. 153-171). This benevolence also extended to the promotion of the mother tongue in religion, most notably with the 1859 translation of the Bible, which was published in one volume in 1864. The music curriculum of the British mission schools, which included music literacy and choral singing, also led to the emergence of Black composers of choral music. Amakwaya is African sacred or secular choral music that combines European classical song and hymnody, American popular song and African traditional choral music (Coplan, 2008, p. 438). Waters’ (1990) anthology of amakwaya music, composed by Zulu and Xhosa composers educated in mission schools, reflects the fusion of Western and traditional

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2 Lobola is a custom practiced by Black South Africans, whereby the bridegroom’s family pay a bride price, traditionally cattle, but also property or cash.
African music idioms, solfege and staff notation. The lyrics of the songs are in Zulu and Xhosa and consist of a wide range of subjects, incorporating traditional African characteristics, including call and response, question and answer, pattern and repetition, pattern and imitation as well as pattern and sequence. African harmonisation, whereby the main melody is harmonised by counter-melodies that move parallel to it, is also present (Waters, 1990).

The music curriculum with choralism as the norm, was also established. This limited focus enabled the retention of cultural identity, but one can draw parallels with Jorgensen, who in a different study speaks about the suppressive nature of such practises because it limits wider participation in music making (Jorgensen, 2007, pp. 169-189).

**Dominance and subordination: segregation and apartheid**

During the 19th century the philosophy of liberalism spread across Europe, especially in England and France, and mainly “among the professional and commercial middle class, intellectuals and writers.” At the same time, a more divisive worldview, nationalism also gained traction and these nationalist ideals, influenced theories on racial superiority and ultimately shaped imperialism (James, 2016, pp. 8-9).

Between the years, 1880-1940, a series of events changed the shape of South African history. These included The Great Trek, which saw the Afrikaners seek independence from the English; the birth of Afrikaner nationalism; the discovery of gold and diamonds which started the South African War and the beginning of separate development (Christie, 2016, pp. 42-52).

Socially repressive legislation led to Blacks being dispossessed of their citizenship and relocated to homelands. Labour laws were passed that restricted the job opportunities and freedom of movement of Blacks. From 1910 onwards, the government became responsible for education (Christie, 2016, pp. 42-52).

During the 1950’s Dutch Reformed Church ministers used the Biblical story, the Tower of Babel, as found in Genesis chapter 11, verses 1 to 9 to justify segregation and later apartheid. Their interpretation of this Biblical story was that God punished the evils of universalism. According to the Afrikaners, God required a strict division of people according to language and culture (Frederickson, 2002, pp. 135-136). The Bantu Education Act of 1953 led to the closure of mission education and took control of education for Blacks away from the English missionaries. Further legislation such as The Coloured Persons Act of 1963 and the Indian Education Act of 1965, ensured differentiated lower levels of education for certain races, with less funding, less resources, and inferior curricula. These school curricula were designed to educate for their intended roles in society (Malherbe, 1977; Hartshorne 1992, pp. 136-137). Subjects in the school curriculum, such as Gardening, Homecraft and Arts and Crafts, were designed to prepare Blacks for jobs as gardeners and domestic workers, while Arts and Crafts focused on utilitarian traditional crafts such as basketry, weaving, papier mâché, beadwork, carving, graphic art, sculpture and wire art (RSA, 1967a; RSA,1967b).

There was resistance to the apartheid laws, which had ensured that racial discrimination and injustice in education and society were entrenched. The most significant resistance occurred in 1976, when *inter alia* the language of learning and teaching, for Black children was changed from English to Afrikaans (Christie, 2016, pp. 56-57).
The music curriculum for Black children focused exclusively on choral music; the singing of traditional African songs and songs in other official languages, vocal exercises and the solfege system (RSA, 1967a; RSA, 1967b). On the other hand, the music education curricula for Coloured children, whose ancestors had experienced erasure of culture, was more comprehensive and similar in scope to that of White children and was based on the principles of Orff, Kodaly and Dalcroze (DoE 1972). McLachlan’s (1983) text for music teachers in primary schools describe activities including singing, notation, aural, voice development, instrumental ensembles, music listening, solfege and notation. These two curricula displayed the hegemony of Western culture and was devised to develop multiple music literacies.

In 1992 the government implemented multicultural education, which meant that all schools became accessible to all children (Christie 1999, pp. 160-168). This led to the movement of learners to the better resourced schools that had been designated for Whites only during apartheid. These schools became fee-paying schools and attracted learners of colour, mainly from the socially elite who could then also access high quality music education, taught mainly by White teachers, and that included instrumental lessons, participation in bands, ensembles and orchestras. During this transition period, a revised curriculum for music education was introduced for all schools which was very similar in content and scope to the earlier school music curriculum for Whites (DoE, 1994). This change did not benefit the repressed group, because they did not have the resources to implement a comprehensive music curriculum.

Hierarchical relationship extended over time: suppression in music education in a democracy

After the adoption of a new constitution in 1996, the education policies of segregation were replaced with a single education policy and one school curriculum for all schools, based on democratic values. In its first iterations general class music was replaced with a broadly-banded learning area, Arts and Culture, consisting of music, dance, drama and the visual arts (DoE, 1997; DoE, 2002). These curricula were organised around themes and values of the constitution and were not discipline based. The purpose of the curricula was to address sociological issues, such as equality, social justice, transformation and redress through the arts (de Villiers, 2016). Textbooks for these curricula included activities such as beadwork, wire art and papier mâché, which were like those of the Arts and Crafts curricula. There was amelioration because the cultural hegemony of Western culture was replaced with multiculturalism.

The current version of the curriculum, known as Creative Arts, which though broadly-banded in the Foundation and Intermediate Phases, is organised according to subject specific arts for the Senior Phase, Grades 7 -9 (DoE, 2010; DoE, 2011). Multicultural content and the values of the constitution are minimalised in this curriculum, and this curriculum reintroduces the cultural hegemony of Western art forms. These curricula are also like the curricula in Western democracies which were designed to be taught by qualified teachers (Gould, 2012, p. 75). Dolloff (2007) echoes the realities in South Africa when she states that to implement those curricula, teachers need to be highly qualified with an established identity as music teachers, in the Western definition of music teacher, to fulfil their role of mediating teaching and learning of music. Teachers in South Africa find it challenging to teach a complex, multicultural
music curriculum that includes listening, reading and writing music, creating and performing (de Villiers, 2016, pp. 67-79).

Moreover, the quintile classification of schools is an acknowledgement by government that there is no equitable education in South Africa. Schools in quintile one to three are the poorest schools in each province. Quintiles four and five are fee-paying schools and are most often schools previously designated for Whites-only during apartheid. The government funds schools according to quintiles; with quintile 1 receiving the highest allocation and quintile 5 the lowest allocation. Researchers including Spaull, (2012) reveal that Black children attending township schools are adversely affected by the dysfunctional state of schooling, lack of resources, teachers who do not know the subject matter they teach and no textbooks. These learners also daily experience insufficient hours of teaching and learning across the curriculum. One can infer that poor schooling leads to learners not being able to access quality education including quality music education. This resonates with Jorgensen who states that poor schooling, poverty with its accompanying social deprivation, such as no parental support no access to instruction or music instruments result in children having very limited musical experiences (Jorgensen 2007).

Concluding thoughts
Music education in South Africa as framed within the theory of mastery demonstrates how Western cultural hegemony has continued through suppression of culture through the relationship of dominance and subordination. The hierarchical relationship extends over time, because the dominant party has ensured that the subordinate who wishes to overcome her state of subordination, will want to claim power, which is to master the culture of the dominant group. The subordinate position can be overcome either through mastery of the dominant culture or by establishing and recognising a different cultural hegemony such as multiculturalism. The new leaders have failed by perpetuating political spaces that disadvantage groups of people. This enables the hierarchical relationship of Western cultural hegemony to extend over time. The hierarchical relationship is potentially flawed and skewed in favour of the subordinate who is the true master, as she has mastered her own culture and has the potential to master the dominant culture. However, cultural hegemony continues, and the relationship of dominance and subordination is reframed as one of class and economics. We need to unlearn mastery and take active steps to ensure amelioration.

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Glocalization in post-apartheid South African school music education policy
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Abstract
Glocalization offers a lens that permits an investigation of the post-apartheid South African school music education policy. The aim for such scrutiny is to examine the extended role of globalization in the curriculum. By focusing on the politics of hybridity, this article reveals the need to subvert established genres of music. I argue that World Music, seen as a proponent of glocalization, could be used to replace the current classification of Western Art Music (WAM), Indigenous African Music (IAM) and Jazz. These genres have been identified as representative of all South African citizens and offered as a suitable vehicle for social transformation.

Glocalization, a term that has arisen by amalgamating the words globalization and localization, is a concept used to discuss the trend to interconnect global and local events. In the post-apartheid South African milieu of music education this word can be used to describe current policy tendencies to absorb external influences whilst at the same time strengthening a national collective identity. The simultaneous presence of three diverse musics in school music education policy can therefore be interpreted as a manifestation of glocalization.

An examination of curriculum reform after apartheid reveals that the bid for diversity necessarily revives an interest in indigenous music. However, the notion of defending heritage and cultural identities becomes problematic in the post-modern environment of glocalization where the simultaneous juggling of global and local knowledges takes place. The Curriculum and Assessment Policy Statement (CAPS, 2011), the most recent policy revision, has recognized the evolution of global citizenship by including diverse musics in the curriculum and in doing so, encourages children to adapt their ethnic identities in response to the different musical experiences they access.

The implication for music education in South Africa is that social transformation in music should continue to address the complexity and dynamics highlighted by globalization. Glocalization is the logical next step. To fulfill this, it is essential to dismantle the existing categories and replace them with a new canon that integrates different musics under one banner. It is my belief that World Music should be taken seriously and regarded as a viable alternative to the existing framework. Such a move would enable a more comprehensive view of the complexities of music education, as reflected in the changing nature of society and culture.

Keywords: glocalization, diversity, global citizen, World Music

Introductory words
At the outset, I offer a distinction between the nuances of globalization and glocalization. My understanding, in the context of a discussion on South African school music education, is that globalization takes place when the local curriculum is linked to the
outside world. An example of this is when school pupils in this country are required to identify and experience Western and African instruments. Glocalization is where curriculum content promotes the understanding of music to be both local and global in such a way that enables local activity to absorb global influences. This is the approach taken in the most recently revised Curriculum and Assessment Policy Statement (CAPS, 2011), eight years ago, herein afterwards referred to as CAPS.

A policy like CAPS that encourages children to perform music with Western and African instruments in a single composition to create a mélange of sounds can be identified as a move towards glocalization. Ritzer (2003, p. 193) defines glocalization as "...the interpenetration of the global and the local, resulting in unique outcomes in different geographic areas". This view rejects the perception that influences originating from the West lead to global cultural appropriation. This definition supports my claim that South African children can use the unique mix of influences from their environments to enjoy a worldview that is particular to them.

A survey of some closely related terms is necessary to get a better sense of the word glocalization. Related literature about multicultural phenomena as part of musical culture reveal that this is a word associated with a plethora of other terms. Often their meanings overlap. In chronological order, these phrases include "biculturalism" (Riemenschneider, 2000/2001), "transcultural exchanges" (Baltzis, 2005), "cross-cultural diversity" (Kim, 2017), "fusion genres" (Sanga, 2010), "multicultural music education" (Johansen, 2013) and "transglobal cosmopolitan music practices" (Balosso-Bardin, 2018) to name just a few. It should be noted that these authors often use these terms interchangeably in their writings about cosmopolitanism where the ideas of shared beliefs and harmonious integration underpin a philosophy of hybridization. The backdrop of modernity offers an understanding of glocalization if comprehended as a synopsis of these key ideas that appear repeatedly in writings about glocalization particularly during the last eighteen years.

Whilst it is not the intention of this article to discuss in detail the features of each of these terms, it is useful to note that they arise as a result of discussions about cultural contacts "...between different ethnicities, between Europe and non-Europe, between what is one's own and what is alien" (Kim, 2017, p. 22). Understood in this way, Indigenous music is seen to represent alien music owned by others and Western music represented by what is familiar, conventional and often regarded as the dominant paradigm favored by many music institutions.

The demarcations of music in CAPS as Western Art Music (WAM), Indigenous African Music (IAM) and Jazz are therefore problematic not least because they reveal an implied hierarchy. The tenets of European colonialism and ensuing concepts of exoticism in post-colonial insights (Said, 1978) articulate the perspective that the construction of music education was founded on European mainland traditions that prevailed in the curricula of apartheid education policy. The dissemination of Western music practices in the strict regime of the apartheid state is consequently interpreted in a climate where the dominant minority enforced principles of racial discrimination and claimed superiority over the subjugated majority. Within this notion of suppression rests my claim that the labels used in CAPS to distinguish the three different genres of music be considered outdated in the post-modern epoch. By continuing the tradition of understanding music in
terms of WAM, IAM and Jazz, policy makers have demonstrated that they have yet to transition to a new ontological process of conceiving music in a glocalized way.

**Glocalization in the South African education policy landscape**
The imprint of glocalization becomes evident when retracing the steps of the journey from segregation to democracy in education policy documents since 1994. The close relationship between post-apartheid political imperatives and post-apartheid education is characterized by a set of values that not only signal the advent of democracy but also the desire for the country to reclaim its place, through the imperatives of democracy, in the global community. A statement from the Bill of Rights illustrates the values specified in the Constitution of 1996 and which continue to underpin post-apartheid curriculum development.

The Bill of Rights states:
This Bill of Rights is a cornerstone of democracy in South Africa. It enshrines the rights of all people in our country and affirms the democratic values of human dignity, equality and freedom (Bill of Rights, 1996).

Democracy provided the platform for curriculum development and transformation in contemporary South Africa. Social cohesion and active citizenship are emphasized by the Department of Education to repair the damage caused by the legacy of segregation in the form of separation between Blacks and Whites that took place socially, politically and territorially over three hundred years. Consequently, South African education policy since the early 1990s has set out to reflect music education as a vehicle of social transformation and as a platform for excellence. The former implies elements located in the national realm and the latter suggests an awareness of transnational imperatives.

To this end, Indigenous African Knowledge and Jazz have been introduced into the Curriculum and Assessment Policy Statement (CAPS, 2011) to comply with the principle that the curriculum can promote "knowledge in local contexts, while being sensitive to global imperatives" (CAPS, 2011, p. 4). This is the last move in the four post-apartheid education policies\(^1\) to complete the transition from a Eurocentric curriculum to a broad-based curriculum that includes a range of musical practices. As early as 2002 the second policy revision, known as the Revised National Curriculum Statement (RNCS, 2002), recognized in its policy overview that cultures are not stagnant and are prone to change (RNCS). This observation implies that the teaching of music should not be solely entrenched in past discourses that defined music as Western and non-Western. It is therefore my belief that the nuances of glocalization influenced the incorporation of newer traditions of music such as global, world and fusion music into the curriculum. For the purposes of clarity and brevity, the term World Music includes global and fusion music as they contain very similar characteristics in the way in which they criss-cross geographical borders.

Parallel to the displacement of cultures is the notion that social and cultural transformations are overturning ideas about linear patterns of learning. Aspirations of obtaining traditionally valued skills are no longer predictable. There is a pressing need for

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\(^1\) C2005 (1994), RNCS (2002), NCS (2003) and CAPS (2011) see the Department of Education in the reference section of this article.
curriculum design to reflect these changes and package content to deliver unexpected pathways into the workplace. According to the sociologist, Richard Sennett (2006, as cited by McWilliam, 2017, p. 8), life narratives are improvised without a sense of self or continuous identity. McWilliam explains: "The ability to move at speed across disparate, geographical, virtual, disciplinary and socio-cultural landscapes is now a key capacity of the global workforce" (McWilliam, 2017, p. 9).

The distancing from an assumed and inherited heritage becomes apparent in observations I make during the celebrations undertaken by many people for South Africa’s Heritage Day. I teach in a multi-national school in Johannesburg that includes expatriates from all over the world as well as representatives from the various South African ethnic groups described as Black, White, Coloured, Indian and others (Department of Statistics South Africa, 2018, p. 5). Each year, on the 25th of September, students and staff are invited to wear clothes that represent their national identities. The creed behind this is to celebrate the diverse heritages of South Africa’s citizens. Herein lies the challenge. Many of my pupils experience an instinctive refusal to accept an identity ascribed to them by others (Riemenschneider, 2000/2001, p. 154). They have expressed their confusion to me by describing how unsettling it is for them to choose an outfit that visually represents who they are. As global citizens, they have inherited mixed heritages, either through familial links to other cultures or as a result of being transplanted in other countries prior to living in South Africa. Their "...identities have been pluralized, fragmented and de-territorialized..." (Leman et al., 2014, p. 11) during the last two decades.

Early expeditions, such as those undertaken by prominent ethnomusicologists father and son Hugh and Andrew Tracey2 since 1929, relied on people physically crossing borders to experience alien music. Almost one hundred years later this is no longer the case. Armchair travel via online music facilitates widened understanding of the world. It therefore follows that a new type of global citizen must be recognized in curriculum discourses. This is someone traversing geographical boundaries with ease and is eager to absorb external influences. In the South African milieu, these forays into the unknown can be described as virtual journeys undertaken in school classrooms via technology. Thus, a dramatic cultural shift has taken place in the evolution of the South African citizen.

The ensuing identity of the global citizen can be described as one who is associated with multiple heritages. She will be pre-occupied with a wide range of ideas experienced virtually through technology. I anticipate that such a technologically astute individual can and will successfully negotiate several cultures via the medium of World Music. This is the case I present for dismantling the current three classifications and replacing them with a single entity that transcends borders. There is evidence to suggest that local education policy is already aligned with a new pathway that promotes global citizenship. Critical outcomes mentioned in CAPS and the three policies that preceded it can be summed up as critical thinking, teamwork, evaluation of information, communication skills, responsibility to others and the environment, as well as a demonstration of an understanding of the world. Developmental outcomes are described as a reflection of different learning strategies, participation as responsible citizens, a cultural awareness

2 For more information, refer to Davey (2019) in the reference section of this article.
across a range of social situations, exploration of education and career opportunities, and
the development of entrepreneurial opportunities.

The link between the Curriculum and Assessment Policy Statement and
Glocalization
In the Curriculum and Assessment Policy Statement (CAPS), the expression of
transformation is understood as a way of promoting local knowledge whilst
simultaneously taking into account global imperatives:

The National Curriculum Statement Grades R-12 gives expression to the
knowledge, skills and values worth learning in South African schools. The
curriculum aims to ensure that children acquire and apply knowledge and skills
in ways that are meaningful to their own lives. In this regard, the curriculum
promotes knowledge in local contexts, while being sensitive to global
imperatives. (CAPS, 2011, p. 4)

The policy promotes music via three specific streams of music and is behind the
rationale to widen music knowledge. It also aims to make it more relevant to learners and
gives a sense that the development of music education is on-going in a manner that is
responsive to contemporary needs. This includes the understanding of music through
technology (CAPS, 2011, p. 5) and the expectation that learners can negotiate their way
around the South African music industry (2011, p. 51). Overall, these efforts can clearly
be identified as essential elements of glocalization. To elaborate, the aforementioned
allows for the alternative perspective of a localized realm (the South African music
industry) to be juxtaposed on to the pluralistic world of technology.

The world is growing more pluralistic. Glocalization theory is exceptionally
sensitive to differences with and between areas of the world. In other words, it

The inclusion of three streams of music identified as Western Art Music (WAM),
Indigenous African Music (IAM) and Jazz in the current policy, CAPS is particularly
significant in the development of local music education. Although I have pointed out
earlier that the labelling of three musics is unhelpfully divisive, it nonetheless provokes
the reaction "ranging from nationalistic entrenchment to cosmopolitan embrace" (Ritzer
& Ryan, 2002, p. 59) thereby transforming globalization into glocalization. The balance
between promoting local knowledge and protecting music knowledge as a discipline is of
continuing interest to policy makers and it is the conduit for this paper’s hypothesis that
CAPS is linked to glocalization. The analysis of the ideology behind CAPS discusses
some of the issues involved in the choices represented by the three genres. Additionally,
the implications that arise out of these choices are considered a consequence of the
emphasis of social transformation that appear in music education.

A statement about a key difference in Western and African art forms in the first
post-apartheid music curriculum policy called Curriculum 2005 (commonly referred to as
C2005) published in 1994 signaled the start of glocalization in the curriculum: "Most
African art forms and cultural practices are integrated…data Western art forms are more
inclined to remain discrete" (C2005, 1994, p. 9). The word "integrated" suggests that in
terms of teaching and learning, African music can break down barriers between subjects
by lending itself to cross-curricular approaches. It could be argued that the established rules of Western music can be used in conjunction with the more informal framework of African music in order to encourage participation at any level. The suggestion in C2005 was that integration from prevailing art forms could take place to "create new forms of expression" (1994, p. 9). Applying this rationale to music, it is surmised that learners are being encouraged to expand their imagination and skills without being contained within the Western paradigm of music making. This is the way forward to bridge the gap between global and local cultures that concurs with the definition of glocalization, portrayed as an alliance between the global and the local (Robertson, 1994). The next section offers an understanding of why multiple styles of music have been included in the curriculum.

**Hyphenated identities**
The effects of migration are evident when World Music is understood by ethnomusicologists as music without borders. They describe it variously as "non-Western music" (Stokes, 1994, p. 153), "musics of many ethnic minorities" (Meintjes, 2003, p. 7) and "multimusicality" (Nettl, 1983, p. 59). I interpret these definitions as an extension of glocalization where musicians have acquired unique musical understandings through cosmopolitan practices inherited from their individual backgrounds and experiences. The dislocation inherent in their work is a typical aspect of their cosmopolitism and coincides with the displacement of national identity experienced by global citizens.

An ethnomusicologist of post-modern outlooks mirrors the position of glocalization as explained in the beginning of this article. Stokes (2003) proposes that the global dimensions of migrant culture have produced new kinds of cultural alliances between the marginalized and dispossessed. This alliance has created a global citizen that Stokes rationalizes as the emergence of "hyphenated identities" (2003, p. 304). I take as such an example, Dinuk Wijeratne, a Sri Lankan-Canadian musician, who to me embodies the breakdown of "hegemonic local identities" (2003, p. 303) and represents a hyphenated global citizen of the type described by Stokes.

Wijeratne is of Sri Lankan origin, born to a Singhalese father and Tamil mother. His early education was in Dubai, the United Arab Emirates, accomplished his graduate studies in the United Kingdom, pursued postgraduate music studies in New York, the United States and then migrated to Halifax, Canada where he conducts, performs and composes what is regarded by his critics as World Music. His popular composition, the Tabla Concerto (Wijeratne, 2011) is written for Symphony Orchestra and Tabla (Indian hand drums), and contains a fusion of Western and Eastern musical elements which makes this piece of music identifiable as World Music.

**Closing words**
South African school music education policy has liberated the curriculum from racialized nationalism and orthodox views on music education by engaging teachers and learners in a wider choice of musics. Efforts in this direction have revived an interest in indigenous music as well as absorbed many alternative cultural stances including that of World Music. The enterprise of looking at the Curriculum and Assessment Policy Statement (CAPS, 2011) through the lens of glocalization is an endeavor to contribute to the debate on the democratization of music education in South African schools. It is convenient that
music education worldwide remains in a state of flux. This condition compels researchers and policy makers to continuously locate their investigations outside the status quo. In the South African setting, their new insights will broaden the discussion from social transformation to global transformation making local music education a considerable force to be reckoned with on the world stage.

References


Musical education in a community project for leisure: Iris participation
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Abstract
The Experiences in Diversified Leisure Activities (VADL) is a community project for children and youth from economically impoverished urban outskirts of São Carlos, São Paulo, Brazil. We will first present the community project and relevant concepts for its practice such as: love as an essential emotion to life; education as a lifelong process; conviviality (“convivência”); leisure as a content and mean of education and a perspective on music education. Deriving from a doctoral dissertation, for this paper we chose to focus on participant Iris, who embraced the teaching and learning from one another during the music activities in this project. This is a qualitative research with phenomenological inspiration using field diaries for data collection and analysis. There were twenty-three field diaries: twenty-one encounters with project participants, and two conversation circles with participants, family members and educators. The names presented here are fictitious, invented by each participant to preserve the identity of the participants and the investigation project was approved by the Ethics Committee on Research with Human Beings of the Federal University of São Carlos. Iris helped us to understand that the participation in a community group can include the relation with their members, with the musical instrument, the musical practice itself and the way you relate in this context, being learning and teaching only a part of it.

Keywords: educational processes, music education, leisure, teaching and learning, community project

Introduction
Since 2013 and 2019, respectively, we have been working on the community project Vivências em Atividades Diversificadas de Lazer (VADL, translated as Experiences in Diversified Leisure Activities) for people from 7 to 17 years old in the economically impoverished urban outskirts of São Carlos, at São Paulo state, Brazil. This social and educational leisure project is free and participation is not mandatory. So as music educators we plan casual to medium-term activities according to material and immaterial interests and possibilities. Many has been done, such as playing percussion (surdo drum, agogô, pandeiro, reco-reco, tamborim, body percussion), experimenting brazilian rhythms (samba, baião and brazilian funk), musical games, music practices from Brazilian popular cultures, instrument making (pife and ganzás) and collective songwriting from scratch to performance. In 2018, we formed a percussion group in which we did activities on music appreciation, movement, music reading and playing along with recording.
The community project

VADL was created in 1999 by professor Luiz Gonçalves Junior from Department of Physical Education and Human Motricity of the Federal University of São Carlos (UFSCar) and, according to Gonçalves Junior (2017), VADL has its foundations on Human Motricity (Manuel Sérgio), Existential Phenomenology (Maurice Merleau-Ponty), Ecology of Knowledge (Boaventura de Sousa Santos) and Dialogical Pedagogy (Paulo Freire). Since 2013 it has partnered with the More Than Football (MQF) project from Sports, Educational and Social Metalworkers Association, with financial support from the Fondation Terre des Hommes (Germany). That is why from now on we will reference it as the partnership VADL-MQF.

During 2018, the project held encounters with participants twice a week, for 3 hours, in the after-school or before-school hours at the Metalworkers Union Club of São Carlos. Mediated by conversation circles in which we chose together seeking to build consensus, participants and educators engaged in activities on music, capoeira, swimming, games and plays from African and indigenous people, storytelling, reading, cycling and Fútbol Callejero (a tool for popular education created on Argentina). The team of educators consisted of undergraduate students on physical education, music education, biology, pedagogy, biblioteconomy, environmental management, and graduate students in education. The educators also met twice a week for planning, evaluation and studying on a research group named Physical Education Phenomenology Study Center (Núcleo de Estudos de Fenomenologia em Educação Física). Also, educators took turns joining the transportation of participants who live in urban outskirts of the city of São Carlos, constituting an important moment of conviviality.

We understand that education is a social process, resulted from conviviality. According to Freire (2014) “No one educates anyone else nor do we educate ourselves, we educate one another in communion in the context of living in this world” (p. 96). Therefore, being with participants outside student-teacher situations creates a different time-space for education. Joining the participants transportation from home to the project site, going through different neighborhoods, seeing where they live, what happens on the street, meeting people nearby, talking about daily life is relevant: living together, on context, as a mean to educate ourselves.

We find that the work at VADL-MQF contributes to our formation as music educators specifically about the music and leisure relation as potential transformative practice that will be discussed in this paper. We aim to understand the educational processes related to teaching and learning from one another, emerged within Iris participation at VADL-MQF. We will start defining key concepts.

Human, education and music education

First, we acknowledge the human essence of love. Unlike the assumptions that the existence and continuity of living beings occurs through a process of competition and aggression, Maturana and Verden-Zoller (2004) state that the essential emotion for life is love, as what brought us here as species. We also understand how the word is worn, but it still is central to life. About this apparently sillyness or sentimentalism we address the following: we live in a society whose dominant cultures (Western Eurocentric), having radically elected rationality, diminished, belittled, and marginalized the role of affects
and emotions in human life. Maturana and Verden-Zoller (2004) understand that even the decisions we consider rational are emotionally grounded.

Due to the limitation on the emotions generated in us by our culture, we in the Western world have generally been unable to perceive how our emotions, physiology and anatomy necessarily intertwine as a normal and spontaneous aspect of our ontogeny (individual life history), from conception to death. Moreover, because of this cultural limitation, we have been particularly unable to realize that love - as an emotion that specifies the domain of behaviors that constitute the other as a legitimate other in coexistence with us - is the emotion that underlies and constitutes the social domain as behavioral environment in which animals, in close coexistence, live in mutual acceptance (Maturana & Verden-Zoller, 2004, p. 222).

Even considering lovingness as the essence part of the human, we need to acknowledge the denials of this essence as the silencing of certain groups, cultural impositions and violence that portray a panorama of dehumanization, distancing or particularizing humanization.

Such distances are also translated into musical practice in the form of hierarchization of knowledge and cultures, beliefs in innate gifts, supposed musical quality (with hidden ethnocentric motivation), universalization of sequential music learning, music as an entity-object, and so on.

We want to embrace a broad vision in music education: any social practice in which music is learned, systematically or casually, whether intended or not to be taught. It is based on the practical essenciality of music (Small, 1998). Music learning can take place in classes where someone intentionally proposes to teach music content, also in musical gatherings such as rodas de choro (systematic or occasional) by processes of observation, imitation, exploration, by people who are playing, singing and those who are participating as spectators; at festivals; in movies; in garage bands and so on. Educational processes are not limited by teaching intentionalities.

From this it would not make much sense in asking “who is music education for?” as it is already a process of all. Aware of this music education and its importance, here we will focus on the intentional teaching music happening on VADL-MQF.

Leisure
We consider leisure as a human need and dimension of culture (Marcellino, 2010; Gomes & Elizalde, 2012). Some aspects related to leisure are: a) Social time-space instead of working time. We acknowledge the conquered or available time in relation to obligations in general, since for economically impoverished and marginalized communities, the concept of work and free time are diverse. b) Attitude from those who participate, therefore, not evaluative from outside but experiential. This may include performing, organizing, mediating or watching the leisure activity; c) Ludic come and go (vaivém lúdico, in Portuguese): According to Buytendijk (1977) involvement with leisure activities are fluid. There are movements of engaging and detaching, tension and release, submersion and emersion in the practice of leisure.

We will now move on to the possible purposes of leisure. As stated by Gomes and Elizalde (2012) the elements (ludicity, cultural manifestations and social time-space)
“configure the material and symbolic, subjective and objective conditions that can - or can not - make leisure a powerful ally in the process of transformation of our societies, making them more human and inclusive” (Gomes & Elizalde, 2012, p. 82). This potentiality for social transformation is also debated by Marcellino (2010) when writing about leisure as a possibility of changing social inequalities.

It only makes sense to talk about educational aspects of leisure, considering it as one of the possible fields of counter-hegemony. The instrumentalization, even educational, of people's available time, where one seeks, or should be sought, fundamentally joy, is meaningful only insofar as it can contribute to these people having more joy in living, being less pressured by suffocating socio-economic structure, in which a minority has excess resources, space and time, by exploiting the vast majority, whose time, when not unoccupied, by the inability of the imposed economic model to generate labor, is free - in quotes. It only makes sense, as it helps to eliminate these quotes (Marcellino, 2010, p. 54).

For Marcellino (2010) leisure has a double educational aspect: a) leisure as a privileged mean of education (education through leisure) as the situations set on leisure activities can lead to educational experiences. In the case of VADL-MQF, for example, we can say that when building consensus about where and how to play we have different learnings in aspects of human relationship and also opportunities to work contents that emerged from practice; b) leisure as its own object of education (education for leisure), since the cultural industry offers are intrinsic to its profit priority. Thus, it is also possible to learn other forms of leisure, more collaborative, valuing cultures and marginalized knowledge, allied with not predatory (environmentally and humanistically) consumption.

**Practice and research path**

We worked on the VADL-MQF as adjunct coordinators involving the work as educators (specially but not restricted to music activities) and administrative services. We are also researchers from Graduate Program in Education (PPGE) at UFSCar, developing qualitative researches with phenomenological inspiration on Social Practices and Educational Processes research line and Society for Qualitative Research in Human Motricity.

The data presented in this research were collected for [information omitted]. It consisted of twenty-three field diaries with descriptive and reflective excerpts, as proposed by Bogdan & Biklen (1994). a) Descriptive: speeches, descriptions of the subjects, place, people and actions observed during the encounters, registering the maximum details; and b) reflective: what we thought about what we saw, opinions, speculations, suggestions and ideas. We consider that such information depends on the researcher's careful view and that it should be mediated, composed and displayed by a theoretical reflection (Costa, 2002).

Data were collected a) between March 13, 2018 and June 7, 2018 for musical practices; b) June 10, 2018 for circle conversation with participants, family members and educators and musical practice; c) September 22, 2019 for circle conversation to discuss the results (dissertation data analysis) with research participant and their families. The research was developed on afternoon term and was attended by 34 participants and 8
educators. The names presented here [information ommited] are fictitious, mostly invented by the people themselves. The investigation project was approved by Human Research Ethics Committee of UFSCar.

The aim for this article is to understand the educational processes related to teaching and learning from one another, emerged within musical practice at VADL-MQF. The theme “teach and learn from one another” emerged from the data analysis consisting of a) ideographic analysis as a moment of identification of the units that contained meanings (in researcher’s perspective), assigning them an Arabic sequential number; and b) nomothetic analysis as a movement to group those meanings units in themes. For this paper we restricted the situations protagonist by participant Iris believing that it can display a pedagogical example to discuss the educational processes related to teaching and learning from one another.

**Participant Iris**

Participant Iris was 12 years old when we started a percussion group project. We played mainly an Afro-Brazilian rhythm called Samba-Reggae, from northeastern Brazil, more specifically from Salvador-Bahia. Peer-to-peer teaching situations were encouraged, as there were people coming assiduously and other joining in each encounter. Among the many times that Iris has taught colleagues, we selected this one because it involved a conflict and mediation of the educator, offering potential for other learnings about ways of teaching.

Participants Iris, Milena and Tatagiba continued playing. Iris said, “You have to pay attention to me, see? Because if you don't do it, Milena, when I do that, you have to hit it.” (…) Iris said "Oh, you have to do it pretty, huh?!" Educator Murilo: "Iris, very nice that you are helping, but be careful … it may seem …". Milena added: "Bossy!" Murilo: “Yes, bossy, ok? So let’s play!” (VI - 28).

In this leisure project we consider essential the voluntary aspect of participation. We sought to talk about the importance of staying in the same activity through commitment to colleagues and for their own development in certain content, music or bicycle (activities offered at the same time demanding a decision between one or another).

First time we announced the musical activity only Iris participated. Willing to explore a new practice, as she announced: “Ah, I am going to try music, because we go to bicycle every week, right?” (DC I-10) or by pity or solidarity since only two educators raised their hands to participate, she became the most assiduous on this mid-term musical project. We have some clues on why such as affection with others and relation with musical instrument.

Conversations about changing for bicycle were recurrent, being discussed within the group, not an educators-only matter since it impacts the whole group:

Educator Murilo: “There are people who never came”. Megablue: "Ahh, but you will see, it will not be even half, everyone will go to bike!". Murilo: “Megablue, trust! Believe!”. Baixinha: “Like me, I want to go to bike”. Megablue: "See you then!" Iris: “But I'm with … hum … I'm not going … but I want to go to … I want to go to bike, but I am afraid! It's scary … hum, it breaks my heart to leave the music and someone can steal my instrument!” (XII
As Iris, Megablue and Baixinha were assiduous on the musical practice, we all started to peer-teach and have conversations about what was considered good teaching, and what were good ways of teaching. Peer teaching became a part of our project. An example of that is when we held a conversation circle with family members to hear them about the musical activities developed in the project. For this day, we collectively decided that we would perform and so prepared for it. On that day, minutes before we perform participant Iris said: “Juliana [her friend and neighbor] will play, okay? I taught her everything!” (XXII - 80).

At the last conversation circle held a year after the last one, they remembered together about this situation and educator Thais also told that the were a day when Iris taught them play after this percussion group ended

Educator Thais: “About that, Murilo, I think it was in May, right Iris? We made music and Iris taught me samba-reggae. (…) ‘This is how it is done, do like this, like that’. She explained to us and we played samba reggae one afternoon here” (…) Iris: “Then there was a person who learned”. Juliana: “One day before the presentation”. Iris: “I taught her and she got it” (XXIII -18).

Here we want to highlight that not only the situations were important, but remembering and acknowledging them were also important.

**Considerations**

We highlight how musical learning experiences go through creating possibilities for its production and construction where teaching and learning from one another is a result also from conviviality (*convivência*).

In many moments of the music meetings we had, the relation of teaching and learning provided a collective sense. By being with others a culture of presence was created allowing instruction between each other. From Paulo Freire’s dialogical pedagogy the conception of knowledge is related to (co) construction - building with others - present in living experience.

As educators we were concerned with the continuity of activities for educational leisure. That is also why we seek to value the autonomy of the participants in the musical making, not only on their experience of playing an instrument, but also in sharing the knowledge about the playing with colleagues. We can emphasize that in this process of teaching and learning music in a leisure project we realize the new possibilities for sharing experiences and experimentation.

Iris help us to understand that the participation in a community group may have reasons, from the connection with the community (who is or is not part of it), the musical instrument, the practice and the way you relate in this context, being learning and teaching only a part of it.
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Technology and music education: A mapping of ISME international meetings publications from 2010 to 2018

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Abstract:
This article presents the results of a research that aimed to perform a bibliographic mapping of works that relate technology to music education published in the annals of world conferences and seminars promoted by the International Society for Music Education (ISME) from 2010 to 2018. The methodology used was an integrative bibliographic review of publications made available on the ISME website, referring to the last five meetings. Given that the documents are digital, the first phase of the research consisted on searching all the documents, using the following keywords: online/distance education, blended learning, virtual, e-learning, digital, m-learning, networking, media. We found 49 works, whose initial reading and cataloging resulted in the following categories: (1) music creation, diffusion and consumption in cyberspace; (2) online and hybrid music education; (3) knowledge, skills and training for the 21st century; (4) technological resources for teaching and learning music. Among the main results, we highlight the relationship of some digital music teaching and learning platforms to the classroom, the exploration of social media in the teaching of music, the experiences with online courses, the exploration of computer graphic resources, and the pedagogical use of virtual reality among others. It is possible to see that the studies improve the discussions on technology and music education as they relate various forms of the relationship among people, technologies and music. However, there are still gaps in studies on the subject, such as assistive technologies for music and innovative methodologies, showing that it is a dynamic field in constant transformation.

Keywords: music education, technology, International Society for Music Education (ISME).

Introduction
This work is the result of a research developed by the research group Tecnologias e Educação Musical (TEDUM), which aimed to perform a bibliographic mapping from the works that connect technologies and Music Education published in the annals of world conferences and seminars promoted by the International Society for Music Education (ISME). For this research, we considered the works published between the years 2010 and 2018.

The use of the broad term technologies to refer to the theme of this research is based on the understanding that it encompasses all concepts and other terms that were the starting point of this research, namely online teaching and learning, distance music teaching and learning, and blended learning. It also relates to more general terms that
encompass music practices in the field of cyberculture and sound digitalization, such as social media, digital, and online, among others.

Concerning the methodological aspects, we highlight the works of Schwan, Bellochio and Ahmad (2018) among the publications in the area of Music Education that resemble this research. They carried out a bibliographic mapping from the publications of the Magazine and the Annals of the Annual Meetings of ABEM (Brazilian Association of Music Education) between 2008 and 2017, seeking to “analyze music and its relationship with academic-professional education in the context of Pedagogy courses”\(^1\) (Schwan et al., 2018, p. 115).

Marques (2018) carried out another work approaching this methodological point of view, aiming to “map, among publications in the area of Music Education, researches related to online teaching and learning developed through digital social media, especially on YouTube” (Marques, 2018, p.1). Thus, he provided a timeframe of relevant publications in the area in the last five years, including magazines, annals, theses and dissertations.

There is also the work of Silva and Ribeiro (2017), who analyzed the theme Technology and Music Education and conducted a state of knowledge research, having the journals in music with Qualis A\(^2\) as their source. They could observe those publications take into account the process of teaching and learning and the role of technology in teaching and learning music.

**Methodology**

This research has the qualitative bibliographical approach as its methodological basis. We carried out an integrative bibliographic review of the publications of international congresses from 2010 to 2018 made available on the ISME website, considering its updates up to February 2019. The integrative bibliographic review method used “aims to synthesize the results obtained from researches on a topic or matter, in a systematic, orderly and comprehensive manner. It is called integrative because it provides broader information about a subject/problem, thus constituting a body of knowledge” (Ercole et al., 2014, p. 9). According to the authors Botelho et al. (2011, p. 127), this approach “allows the inclusion of studies that adopt various methodologies”.

We considered a total of 1596 papers available, including full articles and abstracts, as shown in table 1. The mapping had the support and methodological orientation defined as “state of the art” (FERREIRA, 2002; ROMANOWKI & Ens, 2006), considering the theme and searching for the following indicators: online/distance education, blended learning, virtual, e-learning, digital, m-learning, networking, and media. We analyzed all events, commissions and proceedings available on the organization’s website and identified that 49 works (3.07% of the total) related to the theme of this research. The PDF files of these texts have been saved for reading and analysis.

As a collective research conducted by the TEDIUM group, it was initially necessary to elaborate a table containing five columns: year of publication, author(s),

\(^1\) Whenever we cite a text in a foreign language, our translation of it will be used in this paper.

\(^2\) In Brazil, the Coordination for the Improvement of Higher Education Personnel (CAPES) is responsible for grading the academic production. Grades start as Qualis C (journal with little or no academic agenda), passing through B5, B4, B3, B2, B1 to Qualis A2 and A1 (the last two being journals with international importance that meet internal academic standards).
title, keywords and location of the work in the ISME archives. These publications were then divided among the participants of the group so that the full reading of each publication and the writing of the respective abstracts were performed.

After the reading phase, another spreadsheet was prepared, containing the integrative summaries and eight columns with the following information: title, author(s), year, objective, methodology, research location, results and observations. Then, the data gathered in this spreadsheet were analyzed and cataloged with the aid of the Atlas.ti, a computer program that assists researchers dealing with vast databases. The program provides tools that enable the organization and intertwining of quantitative and qualitative information, enabling a systematization of the production developed in the area and published by ISME.

<table>
<thead>
<tr>
<th>Year</th>
<th>Published on</th>
<th>Full papers</th>
<th>Abstract</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>29th World Conference Proceedings (WCP)</td>
<td>51</td>
<td>-</td>
</tr>
<tr>
<td>2010</td>
<td>Commission for the Education of the Professional Musician (CEPROM)</td>
<td>17</td>
<td>-</td>
</tr>
<tr>
<td>2010</td>
<td>Music Policy: Culture, Education and Media (ISME-POLICY)</td>
<td>22</td>
<td>-</td>
</tr>
<tr>
<td>2012</td>
<td>International Society of Music Education (ISME)</td>
<td>-</td>
<td>769 (605 papers, 54 round tables, 110 workshops)</td>
</tr>
<tr>
<td>2012</td>
<td>Community Music Activity (CMA)</td>
<td>21</td>
<td>8</td>
</tr>
<tr>
<td>2012</td>
<td>SPECIAL ED.</td>
<td>24</td>
<td>-</td>
</tr>
<tr>
<td>2014</td>
<td>Early Childhood Music Education (ECME)</td>
<td>6</td>
<td>16 + 3 (workshops)</td>
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<tr>
<td>2014</td>
<td>ISME - Research Commission (ISME-RC)</td>
<td>23</td>
<td>-</td>
</tr>
<tr>
<td>2014</td>
<td>CEPROM</td>
<td>19</td>
<td>-</td>
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<tr>
<td>2014</td>
<td>ISME - POLICY</td>
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</table>
Data categorization and analysis

We identified works with common topics and grouped them into four categories: (1) music creation, diffusion and consumption in cyberspace; (2) online and hybrid Music Education; (3) knowledge, skills and training for the twenty-first century; (4) technologies and music teaching and learning.

It was necessary to elaborate subgroups for each category due to the specificity of some works. It is important to highlight that some works analyzed, presented thematic elements that would allow them to be inserted in more than one of the categories suggested here. However, in order to avoid unnecessary repetition of citations and references, such works were included in only one category.

Music creation, diffusion and consumption in cyberspace

Chen (2010) draws attention to political issues related to cyberspace, highlighting the role of public policies concerning internet access and, consequently, the use of internet, especially in Music Education. In the same year, Wang (2010) discusses the influence of media changes on the development of pop music from two modes of communication: interpersonal communication and mass communication. Navarro and Berrueco (2010) present a selection of the results from a quantitative analysis performed on children's television soundtracks in order to know what children listen to on television shows in Latin American. They conclude that children's tracks are basically instrumental, having electronic sounds in the background, a binary rhythm and starting on the down beat. Besides that, they show no change or variation in frequency or rhythm.

Whitaker et al. (2016) points us towards the relationship between the perception of consumers who only watch videos online and those who watch the videos, read their comments and check their likes. He concludes that there are indeed different perceptions between the two groups and suggests that music educators disable the comments option.
in tutorial videos. Almqvists and Leijonhufvud (2018) discuss the relationship between music, streaming consumer culture and human beings, focusing their study on Spotify and its users, what may be connected to educational aspects.

**Online and hybrid Music Education**
Bozkurt et al., (2018) present a tool for mass online courses (MOOCs), whose goal is to reduce teachers' time in relation to exercise feedback, while Mullins (2018) uses theoretical and empirical data from examples of blended learning platforms. He also inquires about the new careers that will come into existence after 2030 and the role of education in this context. Elissavet (2016) aims to detect the opinion of music teachers regarding the context of digital teaching and its purposes in music classes, all of which is made possible through information technology tools. Faraone (2012) investigates a new platform of e-learning devices and explains a project of “multimedia learning experience” in his workshop, seen by students from 11 to 13 years old.

2 **Online and hybrid music pedagogy**
Nielsen (2012) seeks to explain and demonstrate a variety of online and distance learning formats, aiming to develop synchronous and asynchronous learning opportunities for elementary school classes by identifying the benefits of virtual and mixed education modalities. Similarly, Narita (2010) discusses knowledge, conventions and practices based on the conceptions of teachers during the planning of a distance music training course. She aims to encourage collaboration between students, local tutors and associates in both face-to-face and distance meetings. As a result, the author points out that students have developed their ability to reflect on their musical and pedagogical practices, to express themselves and understand academic texts, to organize their ideas and to improve their competencies and skills to act as researchers. Still, Baker (2012) presents his research, in which he analyzes issues related to online learning in the continuing education of Music Education teachers in Australia.

Waldron and Bayley (2012) explore the way traditional Irish music is taught and learned by participants at the Online Academy of Irish Music (OAIM) and point out its relationship with a digital pedagogical practice, in particular the video format. They emphasize the adaptations derived from the traditional pedagogy to the digital one, for example: the student can replay the video, notice the details of the fingers and the instrument along with the sound; they can observe the audience watching the video, which can be very diverse, being composed by both beginner and advanced musicians.

In her research, Kretchmer (2012) measured the effectiveness of online instruction added to face-to-face contact in a piano lab and found out the online complementary instructions have greater value to students compared to face-to-face meetings. Souza and Schramm (2012) report the experience of offering music teaching and learning for people of all ages in small villages located in isolated regions of the Amazon, in northern Brazil, through distance learning and using digital materials.

Whitaker, Orman and Yarbrough (2016) observed the viewers' perceptions of a Music Education video posted on YouTube and point out that the enjoyment of the video differed between those who only watched it and those who had access to the comments, which influenced the likes and dislikes of the survey participants. Their research also points out the nonmusical aspects, such as the use of an open or directed camera and the
recording quality, which influenced the viewers’ responses. Like Whitaker et al., (2016), afore mentioned, the authors suggest the possibility of disabling comments when thinking about the production of tutorials as another resource for the music teachers' practice.

Rickels (2016) analyzes the student feedback reception through videos compared to those who only receive a written feedback. The study was conducted in two phases: in the first phase, they observed a better improvement of the students who received a feedback through video. In the second one, with the expansion of the study to several universities in different contexts, it was not possible to confirm the previous results.

Montague (2010; 2012) explores the distance learning journey in a secondary school through a longitudinal survey over a five-year period, while Jones (2010) conducts a literature review, seeking to contextualize the current state of studies on online music education as a continuation of American higher education.

Knowledge, skills and training for the twenty-first century

Knowledge, training and skills developed in the use of technologies in the classroom

Clauhs (2018) discusses the problems faced by music teachers when using digital technologies in the classroom and proposes some alternatives in order to improve the situation. He comments on elements such as the improvement of teachers in the practice of teaching music in classroom, as seen in Nascimento's survey (et al., 2018), which arises from online music activities experienced in a virtual environment. Such activities are created to support public school basic education classes, where the participating teachers work, developing public school teachers’ proficiency in the didactic-pedagogical use of digital technologies through online music activities.

Annie Mitchell (2014) discusses how a doctoral level academic education can influence the professional/musical practice of the observed cases, especially regarding to creativity and skills. Authors such as Clements and Galt (2014) address the difficulties that higher education presents when modifying its practices and norms in an attempt to suit today's students.

Bechara (2014) discusses Music Education in the digital age based on the assumption that young people are “native”, having always been inserted in cyberculture. In this sense, her literature review shows educators are concerned to develop an understanding of the relationships between young people, new media and school.

Rickels (2016) intended to record a video lesson made by a teacher in training with audio feedback and graphic notes. The work developed by Lima and Beyer (2010) presents a reflection on the inclusion of new technologies — term used by the authors — in music classes held at UFRGS College of Application (CAp), observing music as a connected knowledge area that establishes relations with the world.

Hannan (2010) develops the same theme by commenting on the state of music production nowadays, when it becomes more democratic through the use of software such as Garage Band and Reason, enabling production without the need for a band, a studio or musical producer. He presents authors for and against this new form of music production and discusses concepts such as Do-it-yourself and prosumer.

Technologies and music teaching and learning

Technology-mediated teaching and learning process
Although this topic sounds like the whole purpose of our research — where technology in music teaching is the keynote of the mapping —, we separately highlight some works that disentangle general aspects of technology that are present in the works of this cut. In his research, Akuno (2016) manifests the interest of understanding which functions technology can positively bring to the teaching of music, using theories such as behaviorism and constructivism as his theoretical basis.

Homburg (2010) compares two types of instruction and their effect on listeners' aesthetic and emotional responses through a software called Continuous Response Digital Interface (CRDI). This test sought to understand what the most useful way to stimulate people who seek to play an instrument is by analyzing their emotional/aesthetic sides and assisting in the best learning method. Besides this one, there are other works with different themes, but within a similar context, revolving around the relationship of teachers’ technological knowledge and the classroom, and different software that help and complement the teaching of music in their practices.

**Assistive technologies: the use of technologies for people with special needs**

We found two works that deal with the use of technologies to aid musical development in people with disabilities. Darow (2012) examines how the hearing ability influences on the playing of Guitar Hero Tour, while McKord and Lee (2012) elaborate on the use of IPads in the musicalization of children with autism, highlighting how this tool, when associated with music applications, influenced the behavior of the autistic children observed.

**The use of digital software, resources and tools**

Lazzarini et al., (2014) presents ideas regarding a research group on “Ubiquitous Music”, composition and collective sharing of songs via ICT (Information and Combination Technologies). They address the latest advances of this research and their influences on educational practices, the uses of these technologies and collective compositional activities in the classroom, in order to understanding how our conception is changed from the contact with technology and how we connect with the world. Kazaka (2018) presents the difficulties music teachers have in captivating their students in the instrument teaching classroom. To solve part of these problems, the author shares her experience using the application “Solféj.io”, which contains songs with separate instrumental and vocal tracks, making it easy to learn how to play any instrument and to play live music with colleagues. The app also saves time when it comes to preparing materials: teachers can choose songs their students feel most involved with and can adjust class assignments to different levels of experience, the size of the classroom, and the available musical instruments.

**Conclusions**

Within the theme of technology in Music Education, we observed some general aspects that run through the researches found in our mapping. We can mention the relation between some digital music teaching and learning platforms and the classroom, the exploration of social media in music teaching, experiences with online courses, the exploration of computer graphic resources and the pedagogical use of virtual environments, among others. It is possible to notice these studies advance the discussions about technologies and music education as they articulate various forms of relation
between people, technologies and music, going beyond the vision of technologies as a mere classroom resource.

We also found several works focusing on the use of digital software, digital resources and tools. However, we did not find works on the creation/development of technological solutions for music education. This demonstrates that we still need to advance the production of software and resources that help us improve. The field of music education could come even closer to areas such as computer science and programming, so it is possible to work in teams and develop solutions to the problems and limits of those existing tools.

In this research, the works that deal with innovative methodologies still proved to be fragile. We need to advance studies on the use of active methodologies (inverted classroom, problem-based learning, project-based learning) that help us understand the role of technology in music teaching and learning. We might even resignify the classroom, as the learning may take place in another time/space. Also, there are few works on assistive technologies and/or the role of digital technologies in teaching music to people with disabilities. This demonstrates a need to develop studies on this theme.

A deeper analysis of the work about “knowledge, training and skills developed in the use of classroom technologies” may give us a broader notion of the role of digital technologies, not only thinking of their use as a resource in music lessons, but in the way people listen to, consume, produce, and play music from all technological advances.

References


Develop performance of musical education graduates on piano to work in Egypt and Arab countries

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Cairo University (Egypt)

Abstract
This research aims to prepare a piano skills program that prepares music education graduates with competencies to suit the work in Egypt and the Arab countries. To achieve this goal, the researcher designed a questionnaire; the results of the study showed that graduates of music education who joined this course acquired a high degree of technical and expressive skills on the piano, by playing individual and accompaniment tracks. They also acquired new skills in the formation of bands and new skills to achieve communication and communication through music. The research generated a number of recommendations, the most important being:
1 - the need to hold courses for music teachers and inform them of modern methods and take advantage of the technological development that has occurred in this area and training them on modern techniques.
2 - Increasing interest in music in the school curriculum through the provision of specialized teachers and the provision of musical instruments and training rooms.
3 - Holding courses to play the instruments in the summer vacation, especially the piano machine to produce better results.
4 - Holding courses in music education in general

Keywords: piano, graduate, program, music

Introduction
Today's society is experiencing many changes, and these changes have affected all educational institutions in Egypt, including the faculties of specific education. These faculties are appointed to graduate a qualified teacher in some areas, including skills as a music educator. The teacher is the main pillar in the processes of development and modernization, so the institutions of teacher preparation must look for ways to raise the efficiency so that newly qualified teachers can successfully carry out their responsibilities and the performance of their mission in education (Bashir, 2000). Hence, the issues of teacher preparation and apprenticeship are the main concerns of policy makers inside and outside the teaching profession.

The researcher identified the development of piano performance skills among education graduates, as the piano is one of the most important requirements for the exam to apply for work as a teacher inside and outside the Arab Republic of Egypt. The researcher noted that the content of the piano program for the graduate does not include all the requirements that the graduate can use in working life. The researcher proposes a piano program for the graduate that includes musical pieces containing all the techniques and tactical skills as well as the pieces required to qualify the graduate for the exam for the Arab countries.
**Research problem**
The research problem is summarized in the lack of knowledge of the curriculum requirements that help education graduates to work locally and regionally. Therefore, the researcher suggests the development of a program to qualify graduates to improve the level of piano performance and in order to qualify them to play well levels in Egypt and Arab countries.

**Research questions:**
1. What is the proposed program to qualify the education graduate to play the piano to suit the labor market in Egypt and the Arab countries?
2. What are the special requirements for working outside and inside Egypt?

**Search procedures:**
**Research Methodology**
Ten graduate students from the Faculty of Specific Education, Cairo University, took part in the study. The graduate students were all applying for work in Egypt and some Arab countries. The research took place over a period of two months.

**Research tools:**
1 - Questionnaire of expert opinion.
2 - Note card to evaluate the performance of the graduate to play tracks on the piano (pre-/post-test)
3 - The proposed program to develop the performance of the graduate in playing the piano. through the teaching of pieces and Arab music and republican peace for some Arab countries.
4. Questionnaire of the graduate survey (research sample) in the skills gained from the proposed program of the piano after the completion of teaching the proposed program.

**Definitions:**
**The piano**
Is a toned stringed instrument with a keyboard. It is one of the largest musical instruments and has its own unique character as well as self-sufficiency in integrated playing (Monie, 2010).

**Program**
It is a general plan that is placed on the process of teaching and teaching at a stage of education and summarizes the procedures and subjects organized by the college during a certain period may be one month or six months. It is therefore more comprehensive and broader than the curriculum (Alden & Rahman, 2015).

**Development**
Development is a complex and comprehensive concept that aims to achieve an improvement in the components of the activity to the level of achieving the best level, which is to follow the methods and approaches to achieve the goals of advancing higher education and scientific research in quantity and quality and to reach high global
indicators in the percentage of students of the total number of young people and the number of graduates and reach them to international ranks. (Morsy, 1993).

**Good Performance**
It is the performance that Ada listened to the conscious ear can realize the author's style and character of the author taste for all elements of beauty, through the player, whatever is now being played and whatever the type of the author and how simple or complexity (Reynolds & Brich, 1977).

**Research literature**
The researcher reviews her research literature in two frames. The first part includes the theoretical framework.

1. **Arab Studies**
A study entitled "A proposed program to teach piano to qualify graduates of non-specialized colleges: To work in kindergarten in the light of the concept of quality” (Bahia & Saud, 2009) aimed to prepare a program to learn to play the keyboard for graduates of non-specialized faculties of languages and qualified to work in kindergarten faculties. The study is not concerned with musical excellence. (Bahia & Saud, 2009)

**Researcher's comment:** The researcher uses the current research to inform the development of a proposed program for college graduates.

2. **Class Piano for Elementary Classroom Teachers**
For two and one-half years, the Baltimore Public Schools have sponsored free class piano instruction for elementary teachers. Mr. Hjelmervik, director of music education in Baltimore, tells of results of the program, as gleaned from an interesting opinion poll (Nemdili, 2007).

While there is a great deal of scholarly inquiry focusing on student teaching experiences in the field of classroom education, there are few resources devoted to student teaching in the context of the applied music lesson. In “First year teacher of first year teachers: A reflection on teacher training in the field of piano pedagogy”, a teacher educator in the field of piano pedagogy uses self-study to combine reflection on personal experience with academic research. This results in recommendations for best practices in developing successful applied music student teaching experiences, as well as in models to aid in evaluation of this teaching. The conclusions of this self-study not only aid applied music teacher educators in developing an artistic, effective pedagogy of applied music instruction, but also expand the limited academic writing about student teaching in the piano pedagogy curriculum (Elgersma, 2012).

**Researcher's comment:** This research is consistent with the current research in the interest of the graduate teacher, especially in playing the piano.

**Theoretical framework:**
Quality standards of the performance of the graduate of the Faculty of Specific Education Department of Music Education for Piano:
- Defines the bases and rules of sound playing on the piano
- The use of modern methods and training methods and terminology for piano compositions
- The use of modern technology in teaching to improve the performance of students on the piano
- Using different teaching methods to suit individual differences between learners
- Using comprehensive assessment methods to identify students' needs and improve their performance
- Allows collaborative learning for learners and exchange experiences and information between learners and piano teacher.

Music Curriculum in Egypt and the Arab States
The curriculum in Egypt and the Arab countries employs qualified cadres of highly qualified teachers, explaining that the teaching of music education increases the national belonging of the student, in addition to cultural development so that students can learn about the lifestyles in societies and the change and development. Music education has a great impact on the integration of the mental development of the child, so it was focused on the foundation stage, and the main objective of teaching music education in the primary stage is to prepare the student and highlight his talents in this area.

The aim of entering these curricula for the second grade is to develop the students' skills and artistic abilities so as not to be neglected, the idea being that the pupil who is allowed to study music in an orderly manner will have creative abilities in this area. The aim of the development of music education curricula is to uncover and develop musical talents, and train the graduate to practice playing to establish the state's interest in culture as a high concept. The exams for the teacher to keep pace with the labor market conditions for each country in the performance of exams all meet to perform the piano in a good manner as well as the requirements of the exam to work in Egyptian government schools and Arab countries such as Kuwait, Oman, Jordan and the UAE to graduate proficient piano playing with other instruments also (Ibrahim, 2005).

Applied Framework
Through the current research, the researcher will explain the proposed program of training on the piano to develop the performance of the graduate of music education through the playing of individual and accompanying pieces of different instruments and the national and the Arab countries. Table 1 sets out the objectives of the 16 sessions, each of which was 45 minutes.

| Session 1 | • Gain theoretical information on how to perform compositions on the piano.  
|           |   • Listen to different pieces and knowledge about the author and knowledge of different eras.  
|           |   • Presentation of the curricula of the Arab countries, especially the items playing the piano.  
|           |   • Difficulties and problems that may face the graduate and how to overcome them.  
|           |   • Presentation and review of the performance of the ornaments.  
| Session 2 | • Perform scales and technic exercises.  
|           |   • Egyptian National march  
|           |   • Playing part of Beethoven's Fur Elise  

<table>
<thead>
<tr>
<th>Session</th>
<th>Activities</th>
</tr>
</thead>
</table>
| 3       | - Kuwait National march  
          - Playing the second part of Beethoven's fur Elise  
          - Playing two pianos titled le premier concert |
| 4       | - Playing the national march of the Sultanate of Oman  
          - Playing part of the Turkish march composed by Beethoven  
          - Playing part of Abu Bakr Khairat etude Tyrique. |
| 5       | - Playing the national march of the UAE  
          - Playing the second part of the Turkish march  
          - Playing the second part of the song Abu Bakr Khairat  
          - Playing a duet composed by piano eco dai Monti |
| 6       | - Playing the national march of Tunisia  
          - Playing a piece of Omar Khairat and accompanied by the canone instrument  
          - Playing two pianos |
| 7       | - Playing the national march of the State of Syria  
          - Playing a vita Serena duet piano  
          - Chanson del adieu playing for Chopin |
| 8       | - Playing the national march of the State of Yemen  
          - Playing the harebell pieces accompanied by a flute  
          - Playing a little serenade for Hayden. |
| 9       | - Playing the national march of the State of Algeria  
          - Playing the swan lake by Tchaikovsky  
          - Arabesques for BurgMüller |
| 10      | - Playing the national march of the State of Morocco  
          - Playing the face of the moon to Omar Khairat  
          - Playing a piano with a flute |
| 11      | - Playing the song tactouka de Sayed darwish Abu Bakr Khairat  
          - Playing dolly’s dreaming and awakening for t osteon. |
| 12      | - Playing ‘Les Vues du Danube’ by Ivanovici  
          - Playing a piece of love story accompanied by a cello. |
| 13      | - Playing a barcarolle for Rachmaninov |
| 14      | - Playing a piece of the instrument of the piano accompanied by a cello, guitar, violin. |
| 15-16   | - Reviewing the previous training on stairs, national songs, solo, duet and accompanying based on the evaluation scorecard that was designed based on the importance of the element and the concentration ratio.  
          - Evaluation of sessions:  
            - Graduates performed the pieces in a correct and good way |

Table 1. Objectives of the 16 sessions

Research result:
1. What is the proposed program to qualify the graduate to play the piano to suit the labor market in Egypt and the Arab countries?
- The researcher conducted an opinion poll of experts in the proposed program items and the number of 7 professors and the researcher made the required adjustments where the result came to confirm:
  - Appropriateness of the program in terms of the objectives of each session of the proposed program, which consists of the performance of stairs and the performance of national songs selected and the performance of different tracks and music and accompanying duet.
1. Appropriate presentation of the topics of the proposed program and listen to the sections included in the program.

2. What are the special requirements for working outside and inside Egypt?

Through the review of national songs and various curricula and famous sectors required to perform in school concerts and exam requirements and presentation in different schools and the possibility that the program contributes to the qualification of graduates to pass exams for work in Egypt in the Arab countries, the following Table shows the specific items of the proposed program to develop the performance on piano of graduates of music education, to qualify them to work in Egypt and the Arab countries. The Table shows the relative weight of all elements and pieces of experience and items of the scorecard.

<table>
<thead>
<tr>
<th>Degree</th>
<th>Overall goal %</th>
<th>Skill target%</th>
<th>Mental goal%</th>
<th>Cogni%</th>
<th>Relative weight%</th>
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<tr>
<td>15</td>
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<td>15</td>
<td>1</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>%15</td>
<td>Technic</td>
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<tr>
<td>15</td>
<td>1</td>
<td>7</td>
<td>3</td>
<td>4</td>
<td>%15</td>
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<td>20</td>
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<td>4</td>
<td>4</td>
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<td>Foreign pieces</td>
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<td>20</td>
<td>2</td>
<td>11</td>
<td>3</td>
<td>4</td>
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<td>Arabic pieces</td>
</tr>
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<td>15</td>
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<td>7</td>
<td>3</td>
<td>4</td>
<td>%15</td>
<td>Piano duet</td>
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<td>100</td>
<td>9</td>
<td>50</td>
<td>20</td>
<td>21</td>
<td>%100</td>
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<tr>
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<td>6.3</td>
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<td>2</td>
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<td>26.000</td>
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<td>14.000</td>
<td>26.000</td>
<td>12.6</td>
<td>23.4</td>
</tr>
</tbody>
</table>

Table 2. Pre-post selection of the observation card for the ten graduates
Research recommendations
At the end of the researcher recommends the following:
- focus on the practical aspects of training courses, especially as the results of this study has shown the need for graduate teachers for more courses in playing.
- the need to use some experts and specialists in the process of training to contribute to the provision of courses in music education for graduates.

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Ethics in conducting Indigenous research

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Abstract

In qualitative studies, it is important that the researcher describe his or her positioning so that the reader understands the lens through which the researcher is interpreting the findings (Patton, 2002). Mirza (1992) states that the first step in conducting respectful inquiry is to acknowledge any subjective bias, to ensure that researcher positioning is openly defined. Currently, the newly revised Tri-Council Policy Agreement (2010) document clearly defines the steps necessary to ensure an equitable and respectful approach to Indigenous research. The crucial importance of the relationship of inquiry demands adherence to the current ethical guidelines for conducting research with Indigenous populations. In the following inquiry these guidelines were followed to ensure fair treatment of Indigenous communities and non-Indigenous researchers and formed the basis of initial conversations with the Maasai of Tanzania.

Keywords: Indigenous; community; ethics; inquiry

Context

Located approximately 25 kilometers from the highest mountain in Africa is the town of Kilimanjaro, which is home to a small Indigenous Maasai tribe. A school is located within the village to enable the children to continue with community work while attending school. The instruction at the school follows the traditional curriculum of the Tanzanian public schools, which is a Western curriculum, based on Western beliefs, methods, and expectations, with an emphasis on mathematics, English language, reading, and writing (NECTA, 2011). In the context of this inquiry native Maasai music, delivered by the tribal Elder, was introduced into the school curriculum, to respond to the needs of the Maasai students, specific to the cultural, historical, and social contexts in which they live.

I felt a connection with the Maasai based on my musical heritage. As an Irish national, my knowledge of traditional Irish music was transmitted and learned in a similar fashion to that of the Maasai. Earliest memories as a toddler are lyrical melodic lines sung by my mother at bedtime and standing beside my father at family gatherings as each member sang and played the spoons, fiddle, or tin whistle. The most memorable traditional songs were those sung a cappella in the traditional mode of Irish music. Sung in an intimate manner, a quiet would descend upon those listening, as we sat by the fire and listened to the story of sadness being sung.

Unforgettable memories took place at the dinner table when, to my mother’s annoyance, dad would pick up the cutlery and start to play the spoons up and down his arms. Within seconds, my three younger siblings improvised by singing and playing, while my mother and I eventually joined in with a descant. These are the memories of a musically woven life, where lessons were taught, traditions passed on, heroes
remembered and celebrated, and character and dignity were demonstrated through the musical tales sung.

I remember joining the ladies when I was a little older and spinning the Aran wool as we knit fisherman’s sweaters. Each pattern was representative of an Irish clan (family) and was an indicator when bodies were washed up onto the West coast of Ireland as to which clan the lost fisherman belonged. Traditional songs were sung throughout the knitting sessions, which were mostly old fishermen folksongs sung in Gaelic; the traditional language of the Irish. Irish dancing lessons began as a young girl and compulsory lessons in cultural revival such as Irish language, competitive Irish dancing, and inquiring Irish authors took place in both junior and secondary school. This was the generation that created a cultural revival movement, which is now known as the Celtic Tiger (Dorgan, 2006).

Throughout my doctoral journey I examined some of the ethical and philosophical considerations of being a white Irish/Canadian female researcher. During the design phase of this inquiry I consulted the Tri-Council Policy document (2010). I also consulted the work of Brazilian educationalist, Paulo Freire who calls for a humanized pedagogy, and Indigenous researchers such as Linda Tuhiwai-Smith, who emphasised the crucial responsibility of all parties collaborating in Indigenous inquiry to follow the protocols of honesty, trust and respect for the knowledge, customs, traditions, and beliefs of the communities involved (Smith, 2005). By adhering to such ethical standards, I earned the respect and trust of the Maasai Elders, an honour not to be taken lightly.

**White Irish Female Conducting Indigenous Inquiry in Tanzania**

This inquiry questioned my own history as a colonized Irish national with experiences of losing rights and respect for culture, hearing stories told by the fireside of family Elders executed for their beliefs, and relatives exiled from homelands to far away continents. It also raised an awareness of how the Irish people struggled to maintain and support the Irish culture and beliefs and traditions, which is evident in currently popular traditional dance and Celtic music often sung in traditional language. This revitalization of language, music, and storytelling positioned the Irish nation to be an example of a people successfully preserving the traditional knowledge of a culture on their own terms. Further reflection brought to light my current position as moving from a history of colonization and oppression to receiving the status of a white ‘privileged’ female in North America. Although this inquiry examining traditional music and the early learning of Maasai children, was requested by the Maasai Elders from a small village at the base of Mount Kilimanjaro in Tanzania, one must ask how did my positioning impact this inquiry? Should one begin with white, female, Canadian, Irish, immigrant, or religious beliefs? If one were to seek the ideal enquirer does such a candidate exist? Should I approach this research endeavour from the perspective of non-Maasai, or simply the more common Westerner, and what implication does that conjure up in one’s mind?

**Respectful Inquiry**

Frideres (2007) argued, “so long as white people are not racially seen and named, they function as the human norm.” He goes on to suggest that, in being free from the constraint of being labelled a representative of a racial group, Whites are in the powerful position of claiming to represent “humankind” (p. 44). Research by Evans, Hole, Berg,
Hutchinson, & Sookraj (2009) supports the following statement by Frankenberg (1993). Whiteness can be seen as a location of structural advantage that White people occupy in society; a standpoint from which White people understand the world and their position in it; and a set of cultural practices that in White settler societies are usually dominant, but also unmarked and unnamed. (p. 6)

Although assuming equality on my part by attempting to demonstrate respect for the Maasai community, the perceived privilege of my Whiteness was highly visible to the Maasai. Whiteness was initially a dynamic that influenced our relationship and our ability to communicate with trust (Nakayama & Martin, 2003). Freire (1992) emphasizes the need for “reciprocal trust as the indispensable precondition for change. A real humanist can be identified more by his trust in the people, which engages him in their struggle, than by a thousand actions in their favour without that trust” (p. 45). In the role of enquirer working to gain the trust of the people, and engage in their struggle, great care was necessary to guard against the potential to assume, through a privileged lens to know what was best for the community and not take their friendliness, silence, or attempt to please, as a form of agreement (Delpit, 1988). As the only white person in the community, all acknowledged my racial identity and it was a significant reminder of the social and cultural differences we faced. A conscious effort on my part to remove the white lens and view the Maasai as collaborators instead of diverting attention and analysis and considering them as others was crucial to moving forward (Doane, 1997). However, as our relationship developed overtime, I became aware of the honour bestowed upon me in being invited into a Maasai world, at a level, where very few have ventured. Refocusing the object of inquiry directly on the inclusive curriculum for the school, will, from a research perspective, transform the Maasai people from the objects of inquiry to its authors.

Receptiveness to my position and role within the Maasai community was enhanced by awareness on the part of the Maasai, to the changing world in which we live. A Maasai parent named Eli understood the power of globalization to impact the lives of the Maasai, and the urgency to prepare the Maasai children for their future. Together we came to the conclusion that learning needed to support the Maasai way of life.

Examples of research that is relative to the community problems and beneficial to the Indigenous peoples, are the Indigenous organizations working with UNESCO (2008) that are combining both Maasai knowledge and skills by experimenting with new GPS technology for mapping cultural terrain (Kaunga, 2008). The reframing of education is a key component of this much larger challenge towards self-determination and should be a forum where respectful Indigenous research plays a crucial role (Waters, 2000).

As an educator, it was a priority to meet the children and the teachers in their school environment. So, I returned many more times. During one of these visits Eli joined us for lunch and spoke of the Elders concern for the future of their children. He spoke of ‘the new world’ having no place for the Maasai children. He spoke of the customs and treasured heritage and way of life that they did not want to lose. He spoke of the land and the need to preserve it. Eli was an insightful man who seemed to understand how globalization would change the future course of his children. He was reluctant to change, but the overwhelming necessity to plot the right course for the children of the community was creating tensions for him and more importantly the Elders. He confirmed the
importance of education and yet indicated many were opposed to the children leaving the daily chores of a shepherd for that of student. He indicated his frustrations and yet pride for the school. He asked that I return and help build the school, to send teachers and supplies, and to help find a way for the children to prepare for the future while maintaining what they held dearest to their heart – their beliefs and traditions. Through continued dialogue we agreed to work together to discover a model of learning that supported the Maasai way of life – respecting the earth.

Friere (1992) placed pedagogy within this gaze developing a method of curriculum development that was informed by Indigenous peoples and directly relative to their experiences of daily life and globalization. The goal of appreciating the richness of the Maasai culture, and perspectives to teaching is to expand our understanding of the diversity of human thought, rather than expand our own specific hegemonic ways of thinking (Phillips, & Bhavnagri, 2002). Wittgenstein (1968) reminds us that it is difficult to interpret thoughts and ideas from an unknown context without understanding that context, and his insistence on context as a source of meaning is aimed at preventing misinterpretations and misunderstandings of the unknown. Whiteness and its advantages, whether subtle or not, is an issue when conducting research with Indigenous peoples. In the case of the isolation and cohesiveness of the Maasai community I worked towards building awareness of the privilege and dominance of whiteness as an enquirer, and accepting greater accountability for this position of privilege.

Through reflective analysis of the relationship between myself, as researcher, and the Maasai community, I became aware of how White people live and come to see the world as an object of analysis. To reiterate, in the white dominant nations, Whiteness is seen to represent the ‘norm’ to which all other cultures are measured. This creates a base of privilege for White people over all others, which in turn is reflected in research. The importance of this problem of addressing Whiteness in enquiry became a priority that led to the open acknowledgement of other ways of knowing (Kobayashi & Peake, 1994).

Tikly and Barrett (2006) suggest that the role of research is to “investigate the meanings, value and relevance of education for Indigenous peoples” and that ideally the role of researcher should involve researchers from the local community as well as the non-Indigenous academic community. Culturally sensitive approaches to the research are detailed by Smith (2005) and are the guidelines this inquiry followed in order to create a situation of upmost respect for the Maasai community, their privacy, intellectual property, reciprocal learning and knowledge shared (Arewa, 2006).

**Indigenous Inquiry**

Difficulty arises when researchers such as me, take it upon themselves to represent “Others” in particular, around potential dangers of misrepresentation, misuse of power and abuse. A useful distinction here is pointed out by Wilkinson and Kitzinger (1996), which speaks to the “notions of re-presenting and representing. They state the notion of re-presenting is about giving a voice to marginalized individuals and groups who are often under-represented, whilst representing has a patronising quality of standing in the place of and speaking on behalf of the Other.” (p. 41)

Smith (1999) argues that whether friend or foe, the ‘Indigenous problem’ has become a part of an academic discourse in which inquiry plays a crucial role, and once again the problematising of the Indigenous is a White obsession (Smith, 1999). From the
perspective of the Indigenous peoples, what is the benefit to the inquiry? Why would the Indigenous peoples agree to participate? Who is conducting the inquiry and can they be trusted. Where will the results of this inquiry lead the Indigenous people? Are there implications for the future, and if so, what are they? (Wilson, 2001). After a lifetime of colonisation why would an Indigenous community be interested in this inquiry, what challenges arise for the researcher, and what steps must be taken by the researcher to attempt to build a collaborative effort on both parts in the co-intentional sharing of knowledge? My relationship with the Maasai is ongoing and I continue to work towards gaining their trust and building strong relationships based on mutual respect.

A priority when conducting an investigation with Indigenous peoples is to create a situation of upmost respect for the Indigenous community, as it relates to their privacy, intellectual property, reciprocal learning, and shared knowledge. The essential focus for everyone should remain on building a reciprocal and respectful relationship between the Elders and researcher in order to provide solutions, through inquiry, for educating their children. Smith (1992) suggests using a model of inquiry which “addresses the sorts of questions the Indigenous people want to know and which have beneficial outcomes” (p. 177) for the future education of Indigenous children. By taking this approach towards respectful inquiry with the Maasai, I hope to have paved the path for Indigenous peoples to “frame the questions differently, define problems differently, and overtime to transform the activity of inquiry to an empowering place whereby the researched become the researcher” (Smith, 1992, p. 139).

In the past, research conducted by White researchers placed all the power in the hands of the researcher whose Western gaze often resulted in stereotyping and blame (Smith, 2005). In response to this Western structure of research, Indigenous communities have required specific measures as a protective measure against future unethical research (Brant, 2002). Cajete (1999) suggests that it is encouraging to witness a movement among marginalized scholars to assert decolonizing research paradigms based on minority worldviews and knowledge systems. Although a few marginalized scholars have written about postcolonialism, there is limited research by Indigenous researchers using this lens (Duran & Duran, 2000). Perhaps this is in fact due to the continuation of colonialism, and that the real fact of the matter is that research needs to not only describe the effects of colonialism but also to contribute to decolonization (Grande, 2000).

As the only white female in the community, all acknowledged my gender and racial identity and it was a significant reminder of the social and cultural differences I faced. I made a conscious effort to remove the white lens and view the Indigenous peoples as collaborators who were crucial to moving forward (Doane, 1997).

This inquiry highlighted some of the issues in conducting respectful Indigenous research in education by non-Indigenous researchers. Of paramount importance was a reciprocal relationship of respectful sharing of knowledge with the Maasai peoples. Of equal importance was the positioning of the researcher and, in the case of this inquiry, a white female conducting research in a Maasai community in Tanzania. However, I continued to collaborate with the Maasai and recognized that the routes to a Maasai inclusive curriculum were based on trust, honesty, and respect.

**Paths for future researchers**

Most of the research on culturally responsive education is descriptive, observational, and
qualitative. These studies are small, local and, for the most part, do not include Maasai peoples. Future educational research of Indigenous knowledge systems may wish to address the underlying long-standing challenges between educational, political, and cultural values. These issues will need to be approached in an integrated, cross-cultural, and cross-disciplinary manner, supported by a strong Indigenous influence (Cajete, 2000).

Future research may also wish to respond to the needs of the people by considering employing experimental research designs, to evaluate the effectiveness of the chosen interventions. Data regarding the effects of specific interventions is required to sustain change. Such studies may provide insight into the causal links among the variables. We need to know the key interventions that bring innovations forward in Indigenous education. Once again, I leave this area of inquiry to those who follow in the footsteps of this paper and delve further into the world of the Maasai.

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Bullying in schools and the role of music in creating positive change
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Abstract
Around the world there is growing awareness of, and concern about, a rapid increase of bullying in schools and the devastating impact it often has on the life of children and young people. Pupils who are at increased risk of being bullied include those with disabilities, indigenous population, culturally and linguistically diverse, refugees and those who identify themselves as lesbian, gay, and transgender. There is ample evidence that various forms of musical engagement can create significant emotional and social benefits to individuals and groups, and thus potentially influence creation of a positive school environment, characterized by social acceptance and inclusion. The aim of this paper is firstly to present selected relevant studies related to bullying in schools, and secondly, to unearth the scarce research that specifically relates to music engagement and bullying amongst children and teenagers. Furthermore, the paper presents examples of musical activities that can be utilized in the context of bullying prevention in various settings, ranging from the classroom to the whole school and to the community at large. The paper indicates the need for more research and more specific music practices that can play an important role in prevention of bullying in schools and our society.

Keywords: Musical development, socio-emotional development, anti-bullying strategies, classroom cohesion

Bullying as a global issue
Bullying is defined as aggressive behaviour which involves repeated actions intended to cause distress or harm, and where there is imbalance of power between perpetrator and victim (Olweus, 1993; Rigby & Smith, 2011). It occurs in three forms: face-to-face, covert, and cyber bullying, and is found to be more prevalent amongst teenagers than younger children. On average, bullying rates for boys are significantly higher than for girls, however, girls who have been reported to perpetrate cyber bullying more often than boys (Richardson & Hiu, 2018). Pupils who are at increased risk of being bullied are those with disabilities, indigenous population, culturally and linguistically diverse, refugees, and those who identify themselves as lesbian, gay, and transgender.

Bullying costs economies around the globe billions of dollars per year, but what cannot be put into a dollar value is the devastating impact of bullying on peoples’ lives. Poor academic attainment, mental health problems such as anxiety, depression, eating disorders, violent behavior, self-harm and suicide, are the most serious consequences of bullying, which have been found to persist also into adulthood (Copeland et al. 2013; Rudolph et al., 2014; Schwartz et al., 2015; Wolke et al., 2013). The associations between experiences of being bullied at school, and the mental problems in later life have been found in both developed and developing countries (Boyes et al., 2014). The emotional
and physical pain and distress of the victims impact also their families and their communities.

The Global Bullying Data (GBD) collected by UNICEF in 2018 combined the results of six international surveys in 145 countries, with the focus on 11 to 15 year-olds. The results are alarming. The document demonstrates that the phenomenon of bullying is global. By region, “South Asia and West and Central Africa experience most bullying, while countries from Central and Eastern Europe and the Commonwealth of Independent States (CEE/CIS) experience the lowest rates of bullying” (Richardson & Hiu, 2018, p.2).

New data collected by UNESCO (2018) between years 2013-2018 also revealed that bullying amongst young people occurs everywhere, with almost one-third of teenagers experiencing bullying worldwide. The human rights movement advocates prevention of bullying as part of the school’s duty of care towards students, and a moral imperative to keep students safe.

The need to solve the bullying problem has encouraged schools worldwide to implement a variety of anti-bullying programs. In Europe, the most commonly applied programs include: The Olweus Bullying Prevention Program (Norway), KiVa (Finland), Seville Anti-bullying in Schools (Spain) and Sheffield Anti-Bullying Project (UK). It has been found that such programs are most effective when they use a strength based approach and whole-of-school and whole-of-community approach, since the problem is embedded in the norms and values of wider society (Cahill, 2017; CESE, 2017; Lee, Kim & Kim, 2015; Polanin et al., 2012; Ttofi & Farrington, 2011, Tsatsou, P. & Vollink, T., 2012). Striking a balance between nurturing and resilience building strategies, and disciplinary measures appears to be an important aspect of all such programs (Cahill et al., 2014; Masten, 2009). Advocated in many of these programs is the leadership of the students to drive the anti-bullying projects and the engagement of families and community members. Students, family and community reinforce the values of school connectedness through inclusion, personal responsibility, respectful, positive relationships, team spirit, resilience and empathy in students as well as teachers (Thompson & Smith, 2011; Ttofi & Farrington, 2011; Pepler, D. & Craig, W. 2014; Richardson & Hiu, 2018).

Research indicates that there is a negative correlation between empathy and various forms of violence, and that empathy plays an important role in reducing students’ violent behaviour. Also, teacher’s empathetic caring was found to be contributing to safe learning environments, positive relationships and students’ pro-social behaviour in schools, and thus it is perceived as an important element of many programs to prevent bullying (Clark & Giacomantonio, 2013; Doday et al. 2013; Wood et al., 2018).

Ey & Spears (2018) and Week (2010) reported that bullying also occurs in early childhood settings, and they recommended introduction of anti-bullying strategies from a very young age.

**Music engagement and bullying**

Healthy emotional and social development has been placed in the centre of many programs aiming to reduce bullying amongst children and young people. There is ample evidence that various forms of musical engagement can bring significant emotional and social benefits to children and young people. Odena (2007) reported that young children’s engagement in music developed their social acceptance, inclusion and respect for
diversity in early childhood settings. Hallam (2010) and Hogenes et al. (2015) presented a number of studies showing improvement in personal and social development of children. These improvements encompassed self-awareness and self-esteem, increased confidence, sense of belonging, trust and respect, and communication skills with peers and adults.

Music making was found to bring people together and to create group cohesion (Bakagiannis & Tarrant, 2006; Campbell et al. 2007; Hove and Risen, 2009), particularly when singing and dancing was done in synchrony (Clayton, M. 2009). Musical engagement was also reported to enhance children’s self-esteem and to improve their emotional mood, sense of belonging, social acceptance and group participation (Kalandyk, 1996; Zapata & Hargreaves, 2017) as well as increase willingness to cooperate and to develop empathy (Kirschner & Tomasello, 2010; Rabinowitch et al. 2013).

Barret & Baker (2012) examined the outcomes of a music program in a juvenile detention centre, where twenty-two detainees aged 14-18 were offered tuition in guitar, bass and drum-kit. At the end of the 10-month-long experiment, it was found that the extra-musical learning outcomes included: increased positive social behaviours, capacity to engage in and persist with learning tasks, cooperation, communication skills and trust between residents and residents and staff.

A study by Crawford (2017) found that school-based music specialist program involving singing and percussion had a positive impact on the wellbeing and learning outcomes of teenage refugee students, and in particular on their sense of belonging, inclusion, and enhanced engagement with learning.

Zapata & Hargreaves (2017) investigated the effects of a specially-designed music program on children’s self-esteem in a deprived part of conflict-torn Bogota, Colombia. Fifty-two children, aged 6-8 years, participated in a 18-week program of singing workshops. The results indicated that music activities had positive effect on children’s self-esteem, resilience, and general wellbeing.

However, it appears that only a handful of studies specifically focused on a direct link between engagement with music and bullying in schools.

Ziv & Dolev (2013) carried out a pilot study investigating whether calming background music, played in the playground during a 20-minute class recess in the middle of the day, could reduce the occurrence of bullying amongst 56 sixth-grade students who attended an elementary school in the northern part of Israel. The music selected for the study was relaxation music from the disc “The Spirit of Yoga”, characterized as World Music. The results indicated significant reduction of bullying incidents during the time music was played.

Eerola & Eerola (2013) conducted a study to examine whether extended music education classes created social benefits in the school environment. The quality of school life (QSL), as experienced by pupils, was tested in 10 Finnish schools. Examined were classes with an extended music program versus control classes that followed a regular music program. The sample consisted of 735 pupils aged 9 to 12 years old being asked, amongst other questions, about incidents of bullying in the class. The results indicated that extended music education had a positive effect on the overall perception of students’ quality of school-life although no specific relation between bullying and musical engagement was in focus.
A study by Ravlings (2015), involving 470 middle school children, indicated that on average ensemble students perpetrated aggressive behaviours within the school less frequently than did non-music ensemble students.

Rigby and Johnson (2016), Thompson & Smith, (2012) and Perren et al. (2012) found that music, along with drama, role-play, literature and audio-visual material, met with very positive teacher and student evaluations of classroom-based anti-bullying strategies.

Conclusions - where to from here?
Bullying in schools and its serious impact on children’s and young people’s development and mental health have been widely studied and reported. However, research on the role of music to prevent and reduce bullying in schools appears to be very scarce. Considering the positive influence that music can have on pupils’ emotional and social development, much more research is needed on the application of music in prevention and reduction of bullying amongst children and young people.

From the music practice perspective, many forms of musical engagement can reinforce positive social values and attitudes:

- **In classroom teaching** - musical content, teaching practices and teacher’s modelling can encourage mutual respect and develop students’ sense of belonging, group acceptance, cohesion, and cooperation. Student driven projects can identify the musical items that can be incorporated into the anti-bullying program at school.

- **A whole-of-school approach** - the music program can reinforce practices and strategies for connectedness within the school for the purpose of incorporating them into anti-bullying programs, e.g. school orchestra, choir, individual performances at assembly, school anthem composed by students and staff.

- **Community Music** - a variety of music activities: choirs, bands, instrumental groups and orchestras, and local radio.

- **Online** - musical contributions to websites promoting positive social interactions and to specific anti-bullying programs. Creating new platforms as well as providing recordings of musical items enhancing positive relationships on YouTube.

- **In pre-service research-based education of music teachers** - development of music teachers’ skills to apply pedagogical practices, strategies and creative activities that effectively deal with the issue of school bullying. Teachers would examine and understand the issues of anti-social aggressive behaviours and what is required to reinforce the social values of their community.

Songs with messages of social acceptance and team spirit could be one of the most effective musical forms to build on classroom and school cohesion, and to contribute to a positive change in the community at large. Some of the examples include: listening to selected songs (e.g. from Michael and Marissa Charity), singing, composing, recording and then performing them at school assemblies, on YouTube channel, at local radio and in pop-ups in public places. New musical items composed and performed by students could also be included in the National Day of Action Against Bullying and the National Bullying Prevention Month.
Referring to Seligman’s Positive Psychology (Seligman & Csikszentmihalyi, 2000; Seligman, 2011), Fox-Ranson (2015) collated a list of the songs for young people - the songs carrying messages of positive emotions, attitudes, relationships, social engagement, accomplishment and meaning (pp. 30-34).

Various forms of music making could be integrated with other creative arts – drama, dance, visual arts and media - and incorporated into the existing anti-bullying programs. Collaboration between schools and musicians, composers, performers, and sound engineers can present an opportunity to influence the music industry to assist with spreading anti-bullying attitudes. Michael & Marisa Charity (2015) is an example of such collaboration.

“The Sync Project” is an example of “a global collaboration harnessing the power of music for health”. It is “a new organization, they already have several blogs sharing studies on music and well-being” (Fox-Ranson, 2015, p. 21).

Cultivating cultural understanding, inclusivity and tolerance plays an important role in today’s world in which the children, young people, parents, teachers and community at large are challenged by rapid, unsettling social and cultural shifts and changes. Music Education has a valuable part to play to maintain positivity and harmony in the classrooms, schools and the community.

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New baby music education program based on latest research to empower the developing brain

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Abstract
Historically, we have sung and chanted the same nursery rhymes since the 1700’s to our babies. These rhymes stay in our memory our entire lifetime. Research has found that even patients with dementia can sing nursery rhymes learned in childhood despite severe cognitive impairment in other domains. Nursery rhymes are one of the first things we are taught and the last thing we remember. They are foundational music for our life.

The focus of this paper is to have a deeper analysis of these nursery rhymes for use in baby music classes and determine whether they are empowering the brains of our babies based on the latest research. Multi-disciplinary fields are presented, including what we know about the power of music together with modern research in psychology, neurobiology, neurotheology, neuroscience and music and medicine. Modern research in neuroscience and psychology show how words can change our brain and influence our behavior and emotions. One important brain area involved in this process is the amygdala - the area involved in processing of emotional stimuli, memorizing these reactions and activating responses such as anger. Deficits in amygdala function has been associated with depression, anxiety and posttraumatic stress disorder among many others. This important brain area is affected when we are exposed to negative lyrics. Modern research in neurotheology and neurobiology teach us that exposure to repetitive negative words damage the brain. Integration of the brain parts-which is important for optimal health and wellness-is impaired.

When we bridge these multi-disciplinary fields, it can be concluded that we should exclusively use positive words for lyrics and uplifting stories in our songs for early music education. This research would necessitate eliminating some well-known nursery rhymes and creating new uplifting rhymes that will empower the minds of our next generation in a new baby music education program. One such program has been developed in Canada based on this research, called Wee Musicians Club.

Keywords: music for babies, music for toddlers, nursery rhymes, empowering music for children, early childhood music education, research on early childhood music

Introduction
Early childhood music educators have been using the same nursery rhymes for hundreds of years to teach children foundational music. Nursery rhymes have proved to be a great educational tool, helping children develop memory, and improve their performance in school (Supanen et al., 2019). As music educators, we are always striving to be the best we can, in order to empower our students to reach their potential. When we look at what is happening in the developing brain with multi-disciplines of modern research, it becomes clear that we need to reconsider some of the nursery rhymes and carefully select
only positive lyrics and stories for our teaching material for early childhood music education.

Historical Understanding of the Power of Music

To understand the power of music, we look to our earliest known record of music from the book, *The History of Western Music* (Grout, 1980). Aristotle, Plato and Pythagoras achieved profound insights and formulated principles of this understanding of the power of music, its effects and ethically correct uses in human society. This wisdom has not been superseded to this day. Pythagoras, in his *Doctrine of Ethos* (p. 7) concerns the ways in which music can convey, foster, and even generate morals and ethical states. In Plato’s *Music of the Spheres*, he states:

> There is a power in music akin to the power of words for influencing human thought and action, and that therefore, an artist, whether in music or words, is under obligation to exercise this power with due respect for its effect on others. (p.7)

Aristotle in his *Doctrine of Imitation* states:

> Music directly imitates (represents) the passions or states of the soul: gentleness, anger, courage, temperance and their opposites and other qualities. Hence, when one listens to music that imitates certain passions, he becomes imbued with the same passion and if over a long time, he habitually listens to the kind of music that rouses ignoble passions, his whole character will be shaped to an ignoble form. (p. 7)

The power of words and music was known in 500 BC by these philosophers to shape our personalities, values, morals, character and behavior. Modern research is proving their teachings to be true.

Modern Research on the Power of Words

The following studies bridge multi-disciplinary fields into one framework to underlie the need for a review of our foundational music for early childhood education. These fields include psychology, neurobiology, neurotheology, neuroscience and music and medicine. To best understand why positive lyrics in music are so critical, it is important to understand the impact of negative lyrics on one’s brain. Within the last 10 years there has been alarming research conducted on the use of negative words in music. Dr. Fields, a neurobiologist, published a book titled *The New Brain* which claims that repetitive use of negative words and emotions causes far more than just emotional harm. He cited changes in the corpus callosum in individuals exposed to this negativity. The corpus callosum is a bundle of nerve tissue containing over 200 million axons which are nerve fibers that carry electrical impulses from neurons’ cell bodies, which facilitates communication between the two sides of the brain. The corpus callosum is the largest collection of white matter within the brain, and it has high myelin content. Myelin is a fatty, protective coating around nerves that facilitates quicker transmission of information. If this is damaged from continuous exposure to negative words, the integration of brain parts will be impaired. Ideally, we want clear connection between our rational left brain and emotional right brain sides to deal with life.
Further research in the field of neurotheology presented in the book *Words Can Change Your Brain* (Newberg & Waldman, 2012) shows the links between words and brain changes. Their research involved MRI scans while the subject was exposed to negative words. They found that “a single word has the power to influence the expression of genes that regulate physical and emotional stress”. Just by showing participants the word “NO” for less than one second, they saw a sudden release of stress-producing hormones and neurotransmitters. These chemicals impede the normal functioning of the brain and can lead to impaired logic and reasoning abilities, impaired language processing and communication skills. This finding was exacerbated in highly anxious and depressed people. It was also found that the longer people ruminated on the negative words, the more damage they experienced in terms of ability to regulate memory, feelings and emotions (Talarrovicova et al, 2007). Adding emotional intensity to the negative words created further problems. If you vocalize your negativity, or even slightly frown when you say “no”, more stress chemicals will be released, not only in your brain, but in listener’s brain as well. The listener will experience increased anxiety and irritability, thus undermining cooperation/teamwork and trust” (Tessitore et al., 2002).

The American Pediatric Association compiled 106 research papers on the effect negative words and stories have on our youth. It was shown that repetitive use of negative words in music shaped the values, morals, and personality, affecting the behaviors and attitudes of our children. In neuroscience, it is well understood that music is the only medium that lights up the entire brain simultaneously. Any repetitive rote of negative stories through simple melodies and rhyming rhythms would be encoded in our memories for our lifetime. This modern-day research from multi-disciplinary fields conclusively supports the early philosophers’ teachings of Plato, Aristotle and Pythagoras (500BC) on how music and words affect our personality, behavior, morals and values. It is also interesting to note the damage to the brain with repeated exposure to negative words.

**How does the brain process music and affect emotion?**

Music affects the body and brain in many positive ways, however, until recently, the way in which music is processed by the brain has not been well understood. One hotly debated question in the field of music research has been whether the brain processes music as one entity, or whether the lyrics and music are processed separately. Interest into this topic began when it was discovered that individuals with aphasia, a disorder involving the inability to produce or comprehend language, could still hum a tune. This suggests that the words and the music are, at least in part, processed separately (Warren, 2008).

Further research was conducted to look at whether the music and the words are processed in the same area and it was hypothesized that there are two main systems involved in the processing of music in the brain. One system in the temporal lobe, an area responsible for memory, appears to be activated during familiar melodies or songs. The other system in the frontal lobe is activated when hearing new music and helps us follow the rules that are important to both music and language (such as syntax or rules of harmony).

In a study carried out by Miranda & Ullman (2007), 64 adults were studied using event-related potentials (ERP) which measure electrical activity in the brain. During the task, the participants listened to either familiar songs such as *Twinkle Twinkle Little Star* or novel songs created by the research team. For those listening to the familiar songs,
there were three versions of each song: melodies containing an in-key deviant note, melodies that contained an out-of-key note, and the normal version. It was hypothesized that for the songs containing an in-key deviant note, that it would only be detected if the song was familiar and memorized; otherwise, the song would sound acceptable. However, the out-of-key note would violate rules of harmony and be noticeable even if the song was not well known. When the ERP’s were analyzed, it was found that those who listened to songs that violated the memory of music corresponded to a pattern called N400. This pattern has been seen in violations with spoken word. For example, when a person is read the sentence “I’ll have my coffee with sugar and concrete”. Out-of-key violations of both familiar and novel melodies led to a brain-wave pattern over frontal lobe electrodes similar to patterns previously found for violations of rules in both language and music. Finally, out-of-key violations of familiar melodies also led to an N400-like pattern of brain activity, as expected because these are violations of memory as well as rules. This confirmed that music depends on two separate brain areas – memory of music being located in the temporal lobe and the general rules of music in the frontal lobe.

Understanding how music is processed can also lead to a clearer understanding of how music can affect emotions, thoughts and even the physical body. As discussed earlier, the temporal lobe is an important area in the processing of music. One structure within the temporal lobe is the amygdala, an area involved in the processing of emotional stimuli, memorizing emotional reactions and activating anxiety responses. Deficits in amygdala function have been associated with depression, anxiety and post-traumatic stress disorder among many others. This important brain area is affected when we are exposed to negative words and negative music but can be positively modulated by positive and pleasurable music (Popescu et al., 2004). Brain imaging studies have also demonstrated that music listening generates a neural activity in the limbic and paralimbic regions which modulate both emotion and behavior (Koelsch et al., 2004, 2006; Popescu et al., 2004).

Current research has been confirming what has been known for centuries: music can both positively or negatively affect your emotions, behaviors and actions. This leads to the important discussion about how to ensure music is used to positively modulate feelings and behavior.

The Changing Brain with our use of Words
Neuroscience had traditionally accepted that the brain has localized functions and by adulthood is set. We now know that this is not true – almost every brain function is widely distributed across brain regions. In addition, there seems to be continual change based on the interactions between brain areas that are often used together. While there are critical periods of brain development, mostly in childhood and adolescents, the brain does not become stagnant after this time. The growth of new neurons and synaptic transmissions has been demonstrated to occur throughout the lifespan. These new connections are referred to as neuroplasticity. Changes in the brain, or neuroplasticity were also noted in the research discussed earlier on the effects of words. As we recall, with repeated exposure to negative words, various parts of the brain was negatively affected or damaged causing non-integration of its parts.
Dr. Dan Siegel has important research to contribute to our understanding of the mind-body connection. He states: “Where attention goes, neural firing flows, and neural connection grows”. Dr. Siegel also discussed how what you do with your mind, changes the function of your body, literally changing molecules that maintain the health of your cells. Integration of the brain parts is the basis of health. He discussed how non-integration of the brain creates chaos, rigidity, and disconnection, whereas harmony is created through integration of the brain parts. When we recall the research on how the corpus callosum is damaged from negative words, which connects the right, and left hemispheres of the brain, it is easy to understand how non-integration of the brain occurs. This in turn affects the health of the body.

Studies have shown that when doctors and therapists teach patients to turn negative thoughts and worries into positive affirmations, the communication process improves and the patient is able to regain confidence and self-control (Hansen & Bejenke, 2010). The use of positive words helps activate areas of the brain involved in motivation (Alia-Kelin et al., 2007) and helps increase resilience when faced with a problem (Cohn et al., 2009). Positive words can alter the expression of genes and modify areas of the frontal lobes. This area of the brain contains specific language centers that connect directly to the motor cortex, which moves the body into action. The longer you concentrate on positive words, the more you can begin to affect other areas of the brain such as the parietal lobe, which changes the perception of and those you interact with. A positive view of yourself will bias you toward seeing the good in others, whereas a negative self-image will tend you toward suspicion and doubt. Over time, the thalamus will change in response to conscious words, thoughts and feelings. This can affect the way you perceive reality and respond to the world. For example, repetition of positive words will activate genes that lower stress (Dusek et al., 2008), you can live longer (Fredrickson et al, 2005) and build deeper relationships with others (Losada et al., 2004). Music and medicine research show how every part of the brain is stimulated with music. We hypothesize that with the use of positive lyrics in music, we are integrating the brain parts when we consider “Where attention goes, neural firing flows, and neural connection grows”. This is turn enables the brain to manage the body at optimal level for the child’s well-being.

Nursery Rhymes for Early Childhood Education
The Alphabet Song and Twinkle Twinkle Little Star and many others are examples of very empowering nursery rhymes. All of the words are positive, and the content is educational and uplifting. These nursery rhymes would have a very favourable effect on the developing brain and throughout the lifespan. Jack and Jill, London Bridges, Ring Around the Rosie, Humpty Dumpty and many others have negative stories. It’s time to ask ourselves if we want these negative stories to fill our children’s minds and stay with them for their lifetime, given the research presented in this paper. Repetition of negative rhymes becomes encoded into our memories, which causes damage in the brain over time, and disintegration of the brain parts, which affects the long-term physical health of our bodies. It is important to review all nursery rhymes being used in early music education programs and discard any negative rhymes.
A New Early Music Education Program: *Wee Musicians Club*

In Canada, a new program, *Wee Musicians Club*, was developed for babies, based on this research in 2019. All of the nursery rhymes are positive, uplifting and empowering the developing brain. Most of the rhymes are newly created, and very few are used from our past. It involves simple melodies of five notes maximum, catchy tunes and rhythms so they are easily learned, basic actions like clapping and tapping and the playing of easy percussion instruments such as shakers, bells, wooden blocks and drums.

**Conclusions**

The impact of repetitive negative words and stories in music has harmful effects on the developing brain and, therefore, should not be used as teaching material. Early childhood education needs to teach valuable information that empowers the child to reach their potential and contribute to their well-being. A careful review of commonly taught nursery rhymes is necessary by early childhood music educators. The newly created model for early childhood music education is the *Wee Musicians Club*, started in Canada, 2019.

**References**


Taking into account individual differences in music listening activities by using visual representations of music
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Abstract
In listening activities in music classes, it is difficult to provide guidance while taking into account individual differences. Moreover, it is difficult for teachers to grasp how children hear music in activities dedicated only to listening. The purpose of this study is to propose a way to use music visualization as a teaching method to help children listen to and understand musical elements and structures in an individualized way. Previous research distinguishes two types of teaching methods, each dependent on the type of visualization of the music used for music listening instruction. One method promotes the understanding of music by having children listen to music while watching musical features represented as colors, geometric figures and symbols. The other is to encourage children to understand music by expressing themselves with colors, shapes, lines, etc. that indicate what they have heard and felt.

This research aims to promote active listening activities that take into account individual differences in musical understanding by combining the above two methods. Concretely, children listen to music while watching a visual representation of the main melody of a piece, and then add to the visual representation of this melody what they have noticed while listening to music. This method was carried out by fourth-grade elementary school students. The Children listened to “In the Hall of the Mountain King” from Grieg’s “Peer Gynt Suite No. 1.” This piece has two similar repeated melodies using an ostinato rhythm. It contains off-beat rhythms and there are changes in instrumentation, tempo, dynamics, etc. By using this method, children were able to listen to music in their own way and teachers could better understand how the children listened to music. While listening to the piece one child expressed visually the main melody in a repeated manner and thereby confirmed that the main melody was repeated. The teacher was able to confirm this fact through the repeated penciled traces of the visual representation. Another child drew off-beat rhythms and changes in pitch in the visual representations of the melody. In this way, the teacher could grasp the music listening situation of each child and tailor listening activities to the individual differences amongst children. The visual representation by the children of the main melody with colors, symbols, words, etc. indicates that they are capturing melodic repetition and change.

Setting goals for understanding music is difficult. It is necessary for children to share with teachers their perception of musical elements and structures while being guided by teachers who take into account individual differences.

Keywords: Music Listening Activities, Visual Representations of Music, Musical Understanding, Individual Differences
Theoretical and Pedagogical Background

In listening activities in music classes, it is difficult to provide guidance while taking into account individual differences. Moreover, it is difficult for teachers to grasp how children hear music in activities dedicated only to listening. Musical elements and structures are complex and diverse, and each child differs in its abilities to hear and understand them. It is necessary to provide guidance focused on what each child notices about musical elements and structures and how each child listens to music.

In music listening instruction, visualization of musical elements and structures are utilized. Previous research distinguishes two types of teaching methods, each dependent on the type of visualization of the music used for music listening instruction. One method promotes the understanding of music by having children listen to music while watching musical features represented as colors, geometric figures and symbols (Palheiros & Wuytack, 2006). The other is to encourage children to understand music by expressing themselves with colors, shapes, lines, etc. that indicate what they have heard and felt (Kanehira, 2014; Kojima, 2010, 2012; Kojima, 2011; Kojima & Kanehira, 2010; Yokotama, 2013). These two methods are insufficient for taking into account individual differences, although they aim to help children understand musical elements and structures in activities that are more than mere listening activities. This research aims to promote active listening activities that take into account individual differences in musical understanding by combining the above two methods.

Focus of the work

Two methods dominating previous research cause difficulties for children. First of all, some children seem to have difficulties in grasping the whole structure of music even if they listen to music while watching visual representations of the entire musical structure. By using a simple visual representation of music that anyone can understand one may take into account individual differences. Secondly, when children express visually what they felt when listening to music, some cannot easily express what they are hearing in visual figures. The teacher can respond to individual differences by creating a visualization of parts of a piece such as the main melody.

In this research, children listen to music while watching a visual representation of the main melody of a piece, and then add to the visual representation of this melody what they have noticed while listening to music. Teachers aim to grasp the music listening situation of each child based on differences in their visual representation.

Approach of Work

Listening classes were conducted using a visual representation of the main melody of a piece devised by the author.

Practice Overview

Participants: Fourteen fourth-grade children attending Elementary School “K” were recruited.

Dates: Two classes were held in November 2016.
**Purpose:** To clarify the effect of using a visual representation of music devised by the author as a teaching method to help children listen to and understand musical elements and structures in an individualized way.

**Contents:** The Children listened to “In the Hall of the Mountain King” from Grieg’s “Peer Gynt Suite No. 1.” This piece has two similar repeated melodies using an ostinato rhythm. It contains off-beat rhythms and there are changes in instrumentation, tempo, dynamics, etc. This ostinato rhythm and the first melody were used to produce visual representations of the main melody of this piece (figure 1). Children listened to music while watching this, and then added to this what they noticed while listening to music. On the second day visual representations were used to understand that there are two similar melodies (figure 2). Children listened to music while watching figure 2 with the goal of choosing between A and B as a representation of the melody that appears in this song.

![Figure 1. Visual representation of the main melody of “In the Hall of the Mountain King”](image)

![Figure 2. Visual representations for finding the two main correct melodies](image)
Result and Summary of the Main Ideas
By using this method, children were able to listen to music in their own way and teachers could better understand how the children listened to music. While listening to the piece one child expressed visually the main melody in a repeated manner and thereby confirmed that the main melody was repeated. The teacher was able to confirm this fact through the repeated penciled traces of the visual representation. Another child drew off-beat rhythms and changes in pitch in the visual representations of the melody (figure 3). In this way, children added in their own way to the visual representation of this melody what they noticed while listening to the music. In the class of the second day, fewer children were able to choose the correct melody. The correct choice of a visual representation of two different melodies was a goal to indicate an understanding of music, but this could not be achieved. However, some children added musical features they noticed in addition to what they had noticed in class on the first day. It became clear that using a visual representation of music devised by the author is an effective teaching method to help children listen to and understand musical elements and structures in an individualized way even when the degree of understanding of music remains inadequate.

Conclusion and Implications for Music Education
The teacher could grasp the music listening situation of each child and tailor listening activities to the individual differences amongst children. The visual representation by the children of the main melody with colors, symbols, words, etc. indicates that children are capturing melodic repetition and change. In other words, children understand musical elements and structures, but each child has a different level of understanding. Setting goals for understanding music is difficult because children with a low level of understanding of musical elements and structures have their own way of listening. It is necessary for children to share with teachers their perception of musical elements and structures while being guided by teachers who take into account individual differences. It remains a task of future research to clarify the effect of this method by engaging in similar activities using visual representations of different types of pieces.
References:
Changing practices—Exploring an opportunity for meaningful, respectful and more inclusive student-centred multicultural music education.

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Abstract:
Our society is changing rapidly, and social tension as a result of cultural misunderstanding is increasing. In order to develop students' understanding of the multicultural society they live in, music educators have the shared responsibility to change their approach to teaching multicultural music and make their music lessons more meaningful, respectful, and inclusive. This paper aims to discuss and elaborate on an alternative approach to teaching in order to transform music education practices to embrace equity and diversity and to include as many musical traditions as possible into the music curriculum and, thus, the lives of students. This paper critiques both the teacher-centred and student-centred approach and describes multicultural music education with a student-centred approach. Additionally, this paper contains a practical translation of the theory discussed for multicultural music education.

Keywords: Education, multicultural, inclusive, respectful, meaningful, change

Changing Practices
Multicultural education teaches students about traditions, perspectives, values, and beliefs from people with backgrounds differing from what is familiar to students. Therefore, it may seem evident that multicultural music education should serve the same purpose and use a multitude of musical traditions as an educational tool for students to develop their understanding of cultures unknown to them. Unfortunately, the currently dominating teacher-centred approach to teaching music seems to enforce the misunderstandings of musical traditions other than those rooted in Western-art music. The teacher-centred approach is often perceived as elitist and considered a threat to the existence of the majority of the world's musical traditions (Green, 2011, in Cox & Stevens, 2016, p. 271). This paper offers an alternative to support changes in teaching practices regarding multicultural music education in order to acknowledge and value the cultural richness available in schools and increase students' engagement and motivation to learn and appreciate musical traditions other than their own.

Multicultural education brings traditions, perspectives, values, and beliefs from people with various backgrounds into classrooms around the world. Students growing up in one dominant culture learn to understand and respect cultures and traditions unfamiliar to them and become global citizens. Multicultural education prepares students for their role and responsibilities in an interdependent world and develops attitudes and values necessary to understand the meaning of freedom, justice, equality, equity, and human dignity in a democratic society (National Association for Multicultural Education, 2003). The knowledge regarding the need for multicultural education has been around for decades, and some changes are noticeable. However, it is still necessary to emphasize
what multicultural education is fundamentally for because teachers still have a lot of
development and growth to go through (Sleeter, 2018, p. 15).

Music education is still far behind in its multicultural development and does not
embrace equity and diversity sufficiently, nor does it include as many musical traditions
as possible. Music curricula, generally, lack proper inclusion of multicultural education
due to minimal changes in teaching practices and learning goals over time (Teachout,
2018, p. 326). Nowadays, Western-art music is the standard content for music education
at the majority of schools around the world (Nettle, 2005, p. 295; Schippers, 2009, xvii),
meaning that students learn only one out of the many musical traditions around the world.
Additionally, music educators are not prepared to teach music outside the Western-art
standard because their training lacks the resources and expertise necessary to develop and
teach truly multicultural music lessons (Schippers, 2009, p. 18; Teicher, 1997, in Wu,
2012, p. 311). As a result, music lessons are almost exclusively teacher-centred and,
therefore, students will have a narrow and limited understanding of music (Nettle, 2005,
p. 394). Because music educators with a Western-art music dominated training are
generally incapable of including multicultural diversity into their practices, they are
inevitably promoting a musical monoculture (Herbert & Kertz-Welzel, 2012, in Cox &
Stevens, 2016, p. 273). Thus, students might not learn to understand music as a result of
social interactions within communities around the world or, as Blacking perfectly
described, understand music as "humanly organized sound" (Blacking, 1973, p. 10). Even
though music educators should welcome more diversity into their music classroom, the
current, teacher-centred approach, does not meet the fundamental ideology of
multicultural education. By now, it must be evident that "the traditional – Western –
approach to teaching music cannot be maintained" (Schippers, 1996, p. 20).

The key to teaching multicultural music education meaningfully, respectfully, and
as inclusive as possible lies in breaking the outdated patterns in the music classroom. To
embrace equity and diversity, and include as many musical traditions as possible,
educators must step aside and offer a podium to the expertise already present in their
music classroom and community. Instead of deriving the music lesson content from the
training and repertoire of the educator, music lessons should have the students' musical
experiences in their day-to-day life at the core: a student-centred approach in order to
teach multicultural music education meaningfully, respectfully, and inclusively.
Unfortunately, changing the practices of educators who lack expertise and resources to
transform their approach to teaching is not an easy task, and can evoke much resistance.
When educators are trained to teach music from a teacher-centred approach, switching to
a student-centred approach is difficult due to the lack of direction.

A teacher-centred approach provides academically supported methods of inquiry
and legitimated knowledge and information (Kain, 2003, p. 104); it ensures that
objectives in music curricula are met successfully (Campbell, 1996, in McCarthy, p. 29).
Also, it matches the current state of teacher training concerning multicultural education
since the majority of music educators have experienced Western-dominated musical
training. According to Campbell, a teacher-centred approach to multicultural music
education is more beneficial to understand music because a continuously thought-out
curriculum does not reduce music (and the arts) to decorative functions that hang from
the lesson content of the social studies (Campbell, 1996, in McCarthy, pp. 25-26). The
author claims that students need to become more knowledgeable listeners of the musical
traditions that are important to the nation's heritage and social structures, rather than
that, Reimer, a key figure in the development of the music education as aesthetic
education philosophy (MEAE), pointed out that music education could enrich people's
insights into the nature of human feeling by developing responsiveness to the aesthetic
qualities of sound (Reimer, 1970, p. 39). Finally, a teacher-centred approach, the music
lessons are generally more structured, and the workload is lower for teachers (Otara,
Uworwabayeho, Nzabalirwa, & Kayisenga, 2019, p. 8).

On the other hand, the student-centred approach to teaching multicultural music
education is rooted in the students' knowledge and lived experiences. Students become
personally invested, which supports the autonomy and relevance of their learning. The
progression from something familiar to students to more unfamiliar concepts might make
more sense, and students more likely want to master material they already know
(Schippers, 2010, p. 84). Based on their research, Lee and Hannafin claim that the
student-centred approach increases students' engagement, persistence, and use of
academic skills as a result of being personally invested with the lesson content (Lee &
Hannafin, 2016, p. 722-723). Also, the student-centred approach enables a musical
connection with local and regional communities and develops students' understanding of
belonging, respect, community, and identity (Schippers, 2010, p. 135). The student-
centred approach creates educational experiences when students can develop their
sensitivity, understanding and respect for a broad spectrum of cultural backgrounds. That
development additionally increases the students' willingness to meet, understand, and
 colaborate with people from a multitude of unfamiliar cultures (Georgii-Hemming &
Westvall, 2010, p. 31) and, therefore, creating opportunities to experience culture as a
process, continual development, identity, and site of negotiation within the safe
environment of the music classroom (Dunbar-Hall, 2009, p. 65). Thus, multicultural
music education can provide students with an opportunity to learn about non-musical
aspects of society using their music as a common meter (Reyes, 2018, p. 13). Finally, the
student-centred approach to teaching is gaining in popularity in general, and research
results in its favour have multiplied over the past several decades (Kain, 2003, p. 104).

Concluding the arguments in favour of both the teacher-centred approach and the
student-centred approach, it is evident that the student-centred approach is in agreement
with what multicultural education is fundamentally for: teaching students about
traditions, perspectives, values, and beliefs from people with different backgrounds other
than theirs. Only the student-centred approach develops the awareness that music is part
of a broader cultural and social concept and enables students to gain insight into the
personal and social benefits of involvement with different cultural traditions (Goble,
2008, p. 88). The following paragraphs of this paper provide a direction to stimulate the
change in teaching practices, albeit that there are several other options one might
investigate.

In 2008, Goble proposed a model to include North American indigenous people's
musical traditions in the Canadian and United States' (U.S.) music curricula. The author
designed a student-centred approach to teaching multicultural music education
meaningfully, respectfully, and as inclusive as possible: the "concentric circles
curriculum model" (Goble, 2008, p. 85). The model aims to foster students' awareness of
the complexity of musical meaning in the world and expand their cultural perspective, as
well as explore the effectiveness of different kinds of music in their respective social contexts (Goble, 2008, p. 87). Students learn about different communities' forms of musical engagement within their local environment as well as the social essence of those traditions. The approach meets the ideology of the National Association for Music Education stating that "to participate fully in a diverse, global society, students must understand their own historical and cultural heritage and those of others within their communities and beyond" (National Association for Music Education, 1994, in Bazinet & Marshall, 2015, p. 6). In other words, to develop students who are to be considered global students, it is essential to have an understanding of their roots as well as the roots of other people who are part of their (extended) community.

Goble's concentric circles curriculum model for multicultural music education consists of three circles representing three levels of expansion of students' knowledge of musical traditions. During students' time in school, the focus expands from the musical traditions and social relevance of music from local communities to those of communities in more distant places (Goble, 2008, p. 85). The core of the model, the centre circle, represents students' home traditions and contemporary popular music. It is the students' sonic environment of present music and contains a significant portion of music introduced during the early elementary grades. The second circle represents the music of local communities. Students are encouraged to go out into the surrounding geographical area and attend or participate in different musical traditions to learn and understand their characteristics and social relevance. The third and final circle represents the musical traditions of more distant communities and might involve a semiotic analysis of musical traditions far beyond students' sonic environment. Within each circle, the music educator can introduce kinds of music unfamiliar to the students to broaden their horizons. Nonetheless, it is up to the students to further investigate those musical traditions.

Even though the aim of the model is initially meant for Canada and the U.S. music curricula, the model translates well to many other nations around the world. Even in nations where the indigenous people are representatives of the dominant culture, such as in many European nations, the student-centred approach described by Goble can encourage students to learn and understand the musical traditions introduced into their nations by immigrants. To use the model properly within any music classroom in the world, the music educator needs to consider certain conditions to fit the educational needs and opportunities for the location. It is important to consider what is suitable considering the age of the students, the geographical location of the school, and the musical cultures represented in students' homes before defining the reach of each of the concentric circles. For example, what works best for a second-grade class in Monterrey, Mexico, will vary strongly for a sixth-grade class in Amsterdam, the Netherlands. The following paragraphs provide a general description of how to implement the concentric circles curriculum model into music classrooms around the globe, albeit that the examples used will be the cities mentioned above.

As described earlier, the core of Goble's concentric circles curriculum model represents the sonic environment of the students in the music classroom. The teacher must be familiar with the music students interact with within their homes as well as being up to date with contemporary popular music. For example, a music educator at an inner-city school in Amsterdam needs to have some familiarity with contemporary popular music as well as traditional music from the Maghreb region, Turkey, Surinam, and
Indonesia since the local population is quite diverse. Contrarily, an educator in Monterrey needs to be familiar with contemporary popular music and *música norteña*.

The second circle represents the musical traditions of local communities. It is up to the music educator to define the meaning of local communities. Since communities in Mexico are relatively wide-spread, the educator in Monterrey will define local communities as the music from southern Mexican states and the southern states of the United States of America. The educator in Amsterdam might define the local communities as the music from other provinces of the country or neighbouring countries due to the density of the population. Nonetheless, students need to be able to interact with the musical traditions surrounding the geographical area and attend or participate in different musical traditions to learn and understand their characteristics and social relevance. In some cases, it is not possible to let the students go outside and interact with music; then there may be options to bring those inside the school.

For the model's third and final circle, the music educator has to consider the geographical area and the availability of musical cultures again. It is up to the educator to define more distant communities and which musical traditions are far beyond students' sonic environment. For example, the music educators in both Amsterdam and Monterrey may reach out to each other to set up a border-crossing collaboration and share the musical expertise their students have to offer. In the end, a student-centred approach means that the students provide the input for the lesson content and the educators offer a platform for their students' expertise. However, the educator still has an active role and will define the conditions to facilitate an environment where students can reach their full potential.

In sum, as our society is changing rapidly and social tension as a result of cultural misunderstandings are increasing, music educators share the responsibility to make their multicultural music lessons more meaningful, respectful, and inclusive. By breaking with outdated patterns in the music classroom and embracing a student-centred approach, multicultural music education becomes a culturally responsive, life-long journey of transformation and growth of the cultural understanding and appreciation of culturally rich environments students interact with every day. Music classes cannot focus only on music rooted in Western-art music anymore, and music educators have an obligation to transform music education practices to embrace equity and diversity and include as many musical traditions as possible. This paper described the need for a change in teachers' practices, supported with arguments in favour of a student-centred approach. Finally, an explanation and practical translation of the concentric circles curriculum model for multicultural music education were provided as well.

References:


Metaphorical music concept perceptions of elementary school students getting instrumental training
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Abstract
Instrument training is given by music teachers or instrument teachers in different branches within compulsory music classes in private schools in Turkey. This situation causes an inequality of opportunity in compulsory basic music education. The aim of this study was to determine the musical perceptions of private school students receiving individual instrument training other than common music classes in the first stage of compulsory education in Turkey. Phenomenological pattern among qualitative research patterns was used. The study was made with 35 students of two private schools in Istanbul during the 2018-2019 school year. A form including individual questions to fill in: "Music is like ...... Because ........." statements to determine the perceptions of the study group on the concept of music were used. Data analysis was made with content analysis. Metaphorical perceptions of the participants towards music were grouped under five categories: the representation of moods, the sound of the universe, natural fluency, giving pleasure, expressing oneself. The results indicated that when children were given opportunities and diversity was provided in musical training, they had a positive perception of music. Similar studies are suggested for other students who are not in equal conditions.

Keywords: musical training, music course, instrument training, metaphor, metaphorical perception.

Introduction
Musical training in schools in Turkey covers the music class and activities provided in kindergartens, elementary, secondary and high schools affiliated to the Ministry of National Education. The basic aims of the musical education given in schools are to convey and improve the national musical culture and to introduce the musical cultures of other nations. The special aims of the musical training given in schools are to improve the auditory perceptions, musical information, musical cultures and tastes and playing/singing/production skills of the students and to introduce national cultures and international cultural product samples (Türkmen, 2017).

In line with the general objectives and basic principles of Turkish National Education, the objectives of musical education program are to improve the aesthetical aspect of the students, provide them the chance to express their feelings, ideas/experiences, improve their cognitive abilities, individual and social relations and the feelings of love/sharing/responsibility, provide their participation in different types of music listening, singing and playing activities individually or in groups, improve their creativity and talents through music production, introduce local/regional/national/international musical cultures, contribute to their character and self-confidence improvement, improve their musical perception and knowledge,
providing their correct and efficient use of Turkish, the ability to sing Turkish National Anthem and other anthems correctly, provide them the musical culture and knowledge which contributes to the national unity and makes the integration with the world easier, understand the ideas of Atatürk on the improvement of Turkish music and provide that they are raised as cultured individuals living up to Atatürk's principles and reforms all through the help of music (Ministry of National Education, 2018).

Compulsory education includes two stages of four years each. In the first four years, the music class was decreased to one hour a week and is given by the class teachers. Thus, the students start the second four years without acquiring the necessary and satisfactory basic education. In this stage, the music lesson lasts an hour and is given by music teachers and can also be selected as an elective course (Türkmen, 2017). It is also known that individual instrument training is given by music teachers or instrument teachers in different branches within compulsory music classes in both stages of compulsory training in private schools in Turkey. This situation causes an inequality of opportunity in compulsory basic music education.

The aim of this study was to determine the musical perceptions of private school students getting individual instrument training in the first stage of compulsory education.

Method
Research Model
Phenomenological pattern among qualitative research patterns was used in this study. It focuses on phenomena of which we are aware but don't have a deep and detailed understanding. The phenomena may occur in different shapes such as events, experiences, perceptions, tendencies, concepts and conditions in our world (Yıldırım & Şimşek, 2013).

Study Group
A suitable sampling among purposive sampling technique was preferred to determine the study group. The study was made on 35 students educated in the elementary schools within Private Marmara Schools (n=18) in the Asian side and Private Hisar Schools (n=17) in the European side of Istanbul in 2018-2019 school year.

65.71% of the study group were female (n=23) and 34.29% were male (n=12). 48.6% of the study group were at 8 years of age (n=17), 51.4% of the study group were at 9 years of age (n=18). The instruments of the study group were as follows: 48.6% piano (n=17), 17.15% violin (n=6), 17.15% guitar (n=6), 5.7% clarinet (n=2), 5.7% flute (n=2), 5.7% percussion (n=2). The music preferences of the study group were as follows: 60% pop (n=21), 22.85% classical (n=8), 11.43% rock (n=4), 2.86% rap (n=1), 2.86% jazz (n=1).

Data Collection Tool
The origin of the word "Metaphor" comes from the "metaherein" word in Greek. It has meanings such as carrying, transferring and transmitting. Metaphor can be defined as the use of a concept or condition together with another concept or condition based on the symbolic aimed use of the language. Metaphors are used as a data collection tool in scientific studies formed by qualitative research paradigm in education studies and acts as a tool to discover the perceptions of the data collection population on the concept.
available in metaphor form (Kılcan, 2017). The form developed by the researcher to determine the perceptions of the study group on the concept of music was used in this study. The following statement was present in the questions on demographical characteristics in this form: "Music is like ...... because ..........". During the application, the participants were asked to fill in the first space with metaphors and the second space with the reasons why they used this metaphor.

**Data Analysis**

Content analysis was used for the analysis of qualitative data acquired from our study. The following stages were followed in order: 1. Metaphor coding and elimination (52 participants filled in the form in the first stage and these forms were numbered and 17 forms which were empty and incomplete were eliminated. 2. Category development stage (Excel program was used in this stage. Categorization was made based on the reasons for the metaphors. 3. Validity and Reliability Provision Stage (The three academicians expertized in the field were asked to examine the metaphor lists of the participants and the lists containing these categories in this stage. It was observed that 100% reliability was provided based on Consensus/Consensus+Dissensus formula). 4. Transferring Data into the Computer Environment (number of participants (f) representing the category representing the metaphors and the category they are in and the percentage (%) were calculated.

**Findings**

The participants formed 26 metaphors for music (Table 1). Most of the metaphors formed (21) were represented only by a single participant. The frequency distribution of the remaining five metaphors is as follows: "Talking" (f:5), "Friend" (f:3), "Happiness" (f:2), "Play" (f:2), "Water" (f:2).

The metaphors formed by the participants for music were grouped under five categories based on their common characteristics (Table 2). Each metaphor was grouped within the thinking concept forming the metaphor cause in line with the explanations of the participants.

**Category 1: Representation of Moods**

When Table 2 was examined, it was observed that "Representation of Moods" category included a total of 10 metaphors and 12 participants (34.28%). Based on the frequency distribution of the metaphors in this category, the most commonly used were "friend" (f:2) and "happiness" (f:2). When we looked at the causes of the participants to form the metaphors in this group;

"Music is like a friend. Because it makes you feel good and happy." (P, 19)

"Music is like happiness. Because it expresses happy feelings through a melody." (P, 11)
<table>
<thead>
<tr>
<th>Order</th>
<th>Metaphor</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Friend</td>
<td>3</td>
<td>8.57</td>
</tr>
<tr>
<td>2</td>
<td>Cloud</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td>3</td>
<td>Living things</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td>4</td>
<td>Flower</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td>5</td>
<td>A rough sea/lake or river</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td>6</td>
<td>Waves in the sea</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td>7</td>
<td>A close friend</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td>8</td>
<td>World</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td>9</td>
<td>Power</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td>10</td>
<td>Air</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td>11</td>
<td>Life</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td>12</td>
<td>Human being</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td>13</td>
<td>Sword</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td>14</td>
<td>Book</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td>15</td>
<td>Talking</td>
<td>5</td>
<td>14.27</td>
</tr>
<tr>
<td>16</td>
<td>Amusement park</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td>17</td>
<td>Happiness</td>
<td>2</td>
<td>5.70</td>
</tr>
<tr>
<td>18</td>
<td>Play</td>
<td>2</td>
<td>5.70</td>
</tr>
<tr>
<td>19</td>
<td>Spirit</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td>20</td>
<td>Love</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td>21</td>
<td>Wand</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td>22</td>
<td>Eternity</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td>23</td>
<td>Water and nature</td>
<td>1</td>
<td>2.86</td>
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<tr>
<td>24</td>
<td>Water</td>
<td>2</td>
<td>5.70</td>
</tr>
<tr>
<td>25</td>
<td>Salty water</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td>26</td>
<td>Rubik's cube</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>35</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 1. Metaphors Formed by the Participants for Music

<table>
<thead>
<tr>
<th>Order</th>
<th>Category Name</th>
<th>Metaphor</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Natural Fluency</td>
<td>A Rough Sea/Lake/River, Waves on the Sea, Talking, Water, Salty Water.</td>
</tr>
<tr>
<td>4</td>
<td>Giving pleasure</td>
<td>Friend, Amusement Park, Play, Rubik's Cube.</td>
</tr>
<tr>
<td>5</td>
<td>Expressing oneself</td>
<td>Human being, Talking, Spirit.</td>
</tr>
</tbody>
</table>

Table 2. Metaphor Categories Formed by the Participants for Music
Category 2: Sound of the Universe
When Table 2 was examined, it was observed that "Voice of the Universe" category included a total of 7 metaphors and 7 participants (20%). Based on the frequency distribution of the metaphors in this category, each metaphor was represented by a participant. When we looked at the causes of the participants to form the metaphors in this group;

"Music is like eternity. Because sounds have no ends." (P, 7)
"Music is like water and nature. Because both these and music have the sound of silence." (P, 32)

Category 3: Natural Fluency
When Table 2 was examined, it was observed that "Natural Fluency" category included a total of 5 metaphors and 5 participants (14.29%). Based on the frequency distribution of the metaphors in this category, each metaphor was represented by a participant. When we looked at the causes of the participants to form the metaphors in this group;

"Music is like water. Because it flows, the notes flow like water." (P, 10)
"Music is like the waves in the sea. Because sounds follow one another and they are in harmony." (P, 9)

Category 4: Giving pleasure
When Table 2 was examined, it was observed that "Giving Pleasure" category included a total of 4 metaphors and 5 participants (14.29%). Based on the frequency distribution of the metaphors in this group, "game" was the most commonly used (f:2). Considering the causes of the participants to form the metaphors in this category;

"Music is like play. Because it is very entertaining." (P, 31)
"Music is like Rubik's cube. Because it is hard but entertaining to solve music." (P, 36)

Category 5: Expressing oneself
When Table 2 was examined, it was observed that "Expressing Oneself" category included a total of 3 metaphors and 6 participants (17.14%). Based on the frequency distribution of the metaphors in this category, "talking" was the most commonly used (f:4). When we looked at the causes of the participants to form the metaphors in this group;

"Music is like talking. Because we reflect our mood and express ourselves when playing a song." (P, 37)
"Music is like spirit. Because we play our instrument from our inside." (P, 42)

Results
Based on the metaphor categories formed by the metaphors formed by the participants for music, it was observed that most of the participants perceived music as "the representation of moods". When the causes of the participants for this category were examined, the fact that they internalized the characteristics of music such as giving joy/excitement, making feel strong/good and comfortable and relaxed was noticed. This situation may be demonstrating that music especially causes positive emotions and feelings in the participants.
When the causes of the participants for perceiving music as the "sound of the universe" were examined, it was observed that they made abstract and concrete metaphors on the audial dimension of music such as the voices made by living creatures, the infinity of sounds, sounds of nature, silence of nature and the acquisition of the sounds in our imagination. This situation can be the demonstrator of the fact that musical perceptions of the participants were not limited to musical works and that they related the music with the whole universe and comprehended the meaning of sounds and silence in music.

When the causes of the participants for perceiving music as "natural fluency" were examined, examples such as associating upbeat music with rough water and slow music with still water based on the fluency of the notes/sounds in music and the rhythmic fluency of speech were considered. This condition may be a demonstrator that the participants conceived music as a constant motion and comprehended that it had fluency whether it is upbeat or slow.

When the causes of the participants who perceived music as "giving pleasure" was examined, it was observed that they used statements on the entertaining characteristic of music and also with metaphors such as amusement park and Rubik's Cube, they mentioned that learning music is fun although it has some difficulties. This condition may be showing that the participants enjoy music and can have fun although they face difficulties in the learning phase.

When the causes of the participants who perceived music as "expressing oneself" were examined, it was noticed that music reflected the mood and instruments told about themselves and had conversation with one another just like people by playing negative and positive energies. This may be the demonstrator that the participants conceived music as a communication tool to express their feelings and thoughts.

Private school students getting individual instrument training for music classes in the first stage of compulsory education don't perceive music within a certain scope. According to them, music is the combination of infinite and fluent sounds which have no boundaries and provide the individual the chance to express oneself, cause positive moods and give pleasure. A similar study is suggested for the students taking music classes in state schools. It is considered that determination of musical perceptions of children with different levels of knowledge, skills and talents would contribute to the equity and diversity applications in music education.

References
Factors behind the popularity of K-pop among teenagers: A comparative study with Indonesian pop music
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Abstract
Over the past decade, there has been a trend shift in the music industry. While Western music has dominated for the past century, the international music industry is currently witnessing the rapid emergence and domination of K-pop. Most teenagers from around the world, including Indonesia, are now very fond of K-pop. Some Indonesian teenagers even admit that they prefer K-pop to Indonesian pop music. This paper aims to discover the factor behind K-pop is increasing popularity, especially among Indonesian teenagers. It presents the main differences between K-pop and Indonesian pop music, a comparison that will prove useful for the future development of Indonesian pop music. The researchers used the ex post facto analogy. This technique helped identify the unique factors that determined K-pop’s popularity not found in the development of Indonesian pop music. The results show that the factors that contributed to the popularity of K-Pop in Indonesia are as follows: 1) K-pop introduced a new kind of band that is able to attract and hold the attention of teenagers in various countries, including Indonesia, 2) the K-Pop industry understands the perspectives of the fans and does not impose its own perspective upon them, 3) the Korean government has had a hand in managing K-pop to facilitate its development and triumph abroad, and 4) Korea musicians meticulously prepare for K-pop performances so that people can enjoy its beauty in every aspect.

Keywords: K-Pop, Indonesian Pop, Popularity

Introduction
Background of the study
Since the beginning of the 21st century, the global music industry has seen the rise of Korean pop music (K-pop). This is a remarkable phenomenon considering that the Asian music genre has never before been so popular among teenagers around the world.

K-pop is not only popular among Asian teenagers, but also teenagers around the world. Tuk (2012) revealed that YouTube videos for the K-pop category have been viewed more than two billion times by viewers from around 21 countries. As of January 2011, the majority of K-Pop video viewers came from the following countries (number of viewers shown in brackets): Germany (20,114,996), UK (22,705,547), France (26,591,412), Saudi Arabia (42,719,685), Thailand (224,813,564), Malaysia (98,693,969), Singapore (68,546,360), Vietnam (117,358,800), Indonesia (81,128,637), Australia (27,132,121), Canada (46,477,940), the USA (240,748,112), and Japan (423,683,759). The data also shows that K-pop is among the most popular music in the world.

Jung (2010) argues that K-Pop culture gains popularity through audio-visual media, such as music, film, television, and social media. This has allowed K-pop bands have
made headlines in East and South Asian countries (Choi (2011)), and both European countries and the United States have also seen a rise in fanaticism among their teens towards K-pop singers. Oh (2013) further stated that the popularity of K-pop and Korean culture in general has helped K-pop gain significant fans outside Asia, especially in Europe. Ju and Lee (2015) revealed that in the United States, Korean TV dramas have been broadcast on online streaming services such as Hulu, Drama Fever and Netflix.

Indonesian and American teenagers have been known to queue for days - even sleeping on the streets - to buy tickets to watch their K-pop idols such as BTS (Bangtan Boys) perform live. This shows how, for the first time, Korean artists have become very popular among teenagers around the world.

Outside of Korea, the K-pop genre has been identified as both intra-Asian and global phenomena (Yoon, 2017). One of the countries affected is Indonesia. Many Indonesian teenagers prefer K-pop to Indonesian music, as evidenced by the increasing number of K-pop related events in the country, coupled with the high number of ticket sales for K-pop performances in the country. In 2010, more than 120 events related to K-pop were held in Indonesia, including meet-and-greets, festivals and concerts. All K-pop performances in Indonesia have always been in high demand even though the ticket prices are quite expensive, ranging from IDR 750,000 to 6,000,000. This is in line with Jung's opinion in Langit (2019) that K-pop, which consists mainly of girl and boy bands, has gained recognition in Indonesia.

At every K-pop event, a range of merchandise from T-shirts to pins related to K-pop are quickly sold out. K-pop fans - a term for K-pop fans - buy up these items completely, and some even open their own shops, selling K-pop souvenirs to their peers. Some K-pop fans have been known to become fanatical and even more hysterical when they see their idols in person. From a political and economic perspective, this phenomenon is very beneficial for South Korea. With the global youth obsession with K-pop and Korean culture, it is easier for South Korea to market its products and to influence the lifestyles of adolescents in other countries.

This is already becoming the case in Indonesia. Langit (2019) found that, based on a survey of 83 Indonesian K-pop respondents, more than 13% of respondents expressed a desire to change their citizenship to Korean. Although statistically, this number is not significantly large, this is quite alarming for the sovereignty of the nation because it should not be any at all. If this sentiment continues to grow, and as K-pop becomes more mainstream, this could lead to the erosion of national sentiment among Indonesian Youth, as well as the weakening of the domestic economy as the preference for South Korean products over Indonesian products grows.

The concern over the decline of nationalism among adolescents is also found in Thailand. Siriyuvasak and Hyunjoon (2007) examine how Thai youths have become loyal K-pop consumers, following the trends of the neighbour countries. They argue that the growing consumption and mainstreaming of Asian pop might become a problem as it could create a kind of cultural 'McDonaldisation' standardization in the future, although a resurgence in nationalism could possibly overrule this projected standardization.

In this paper, the researchers aimed to examine why K-pop is so popular among teenagers in Asia, by specifically looking at the case of Indonesia. Knowing the factors behind the popularity of K-pop among teenagers can help Indonesians in planning the development of Indonesian pop music to increase its domestic popularity.
Literature review

Pop music in Indonesia

Popular music - usually known as pop music - is a type of music that follows the tastes of the majority of the people as opposed to prioritizing quality. In general, people assume that pop music was born in the mid-20th century. However, according to Booth, G. D., & Kuhn, T. L. (1990: 419) pop music was actually born in major urban areas such as Tokyo and Vienna in the 17th and 18th centuries. Furthermore Booth & Kuhn suggest that pop music is inseparable from the business world.

Pop music pioneers include the Beatles, ABBA, and the Bee gees, figures who inspired a lot of music groups from other countries. Indonesian pop music band legends like Koes-Plus were inspired by the Beatles too. The band's formation also followed the Beatles including their techniques in producing vocal, guitar, bass and keyboard sounds.

Koes-Plus has become a legend in Indonesia, to the point where its vocalist, Yon Koeswoyo, managed to release 100 albums. The songs he wrote were timeless and can still be enjoyed today. 50 years after the albums were released, these songs are still often sung by their long-standing fans and new teen fans.

Well-known Indonesian pop music bands in the following generation include Dewa 19, Slank, and Ungu. These bands wrote pop-rock songs, with arrangements and vocals that were more sophisticated than the previous period. These bands, especially Ungu, also managed to amaze their fans and their performances were always attended by thousands of people. In fact, some of the fans even unfortunately had accidents during the concerts that resulted in their injuries and even died because of being trampled by other fans. This phenomenon shows that Indonesia also has musicians who are very popular among its own people.

Korean pop

Korean culture has been spreading internationally since the 1990s. The huge explosion in the number of Korean dramas brought about a cultural and social phenomenon called the Korean Wave or known as the hallyu (a phenomenon of Korean popular culture). Korean Pop, better known as K-pop, is modern music from Korea. Lie (2011) explains that in the early 20th century, Koreans were unfamiliar with Western music. Before the 1970s, Korean people did not listen to any music with the diatonic scale, as they were only familiar with the pentatonic scale. But from the 1970s onwards, Western musicians gradually began to influence Korean music familiarising Korean society with diatonic scales. Through this interaction, Korean music was able to transform and meet international tastes, including those of North American audiences.

The introduction of K-Pop culture in Indonesia

The popularity of Asian culture among Indonesian teenagers increased after the success of teenage TV dramas from China, Taiwan and Korea such as Meteor Garden, Princess Hours, Full House, Dae Jang Geum, The Legend of the Blue Sea, and My love from the Star. This exposed Indonesian youth to the culture and history of Korea (Langit, 2019). Korean culture was able to penetrate into Indonesia because of the cultural similarities between the two eastern Asian traditions. According to Ryoo (Lee, 2012), "South Korean popular culture is much more readily relevant and accepted to Asian audiences".
The politeness, ethics, lifestyle, and culture shown in these Korean dramas are generally seen as more "refined" than their native culture, and are very attractive to Indonesian teenagers. While in the period 2000-2010 Indonesian teenagers were idolizing actors in dramas from China, Taiwan, and especially Korea, in 2006, Indonesian teenagers started to greatly admire K-pop artists who were also the pioneers of K-pop such as Super Junior, Bigbang, Girls Generation, and 2NE1. The K-pop boom is still occurring today. EXO, BTS, and Blackpink are K-pop groups that are very popular among Indonesian teenagers in the second decade of the 21st century. This phenomenon is apparently also taking place in other Asian countries such as Japan, Vietnam, and China. This is consistent with Lie's statement (2011) that K-pop developed from neighbouring Asian countries close to South Korea, such as Japan and Taiwan, before venturing into America and the Middle East. Book-Rae (2015) also states that hallyu is also a trend among teenagers in China, Taiwan, Hong Kong, and Vietnam.

**Method**

Pearl (2009) says that things which are found in one group but not in another are the causes that distinguish the two groups. For example, to find out the effect of smoking on heart disease, we can gather people who suffer from heart disease and those who do not. If groups of people with heart disease smoke, while those without heart disease do not smoke, then it can be concluded that smoking can cause heart disease. Likewise, in this study, to uncover the factors that cause K-pop to be more popular than Indonesian pop music, we look for factors found in K-pop that are not present in Indonesian pop.

The analysis used was the ex post facto analogy. This technique was used to trace past factors. The things done or that happened to Korean musicians, but that were not done or did not happen to Indonesian musicians were considered as factors causing K-pop to be more popular than Indonesian pop.

**Discussion**

The bands of this decade in Indonesia are not considered legends, unlike the bands of the previous decade, despite their popularity. At present, there are many Indonesian musicians with very good skills, but with few fans, or fans from only one age group. This is in contrast to Rhoma Irama and Koes Plus, whose fans range from the young to the old.

One of the unique features of K-pop is the format of the band, which is generally in the form of boy and girl bands. In addition to singing songs with an interesting mix of sounds, they also entertain audiences with their choreographed dances and strong aesthetic sense, coupled with a focus on beautiful looks. K-pop bands also focus on interactivity with the audience, greeting their fans more often such as through live performances in Indonesia, making these fans feel close to their idols. Moreover, K-pop agencies also provide opportunities for fans from outside Korea to take part in the K-pop vocalist audition. These two-way interaction efforts between the K-pop industry and K-pop fans have had a positive impact on the industry as a whole.

It can be said that South Korea fostered an environment that made the country more endearing to overseas K-pop fans. K-pop managers do not just go with the flow, but they deliberately create an atmosphere to entice teenagers outside Korea into becoming K-poppers, just as corporations such as McDonalds, Pizza Hut, and Coca-Cola make people
outside America love American food. In this regard, South Korea is trying to make
Korean music a phenomenon enjoyed by teenagers around the world.

**Assistance from the Korean government**
The successful spread and development of K-pop cannot be separated from the help of
the state (Langit, 2019). The South Korean government is contributing to the booming of
Korean music as it views K-pop as an agent to promote Korean culture and products.
Jung-a (2016) said that a Korean cosmetics company had achieved a sharp increase in
overseas sales - 44% - as a result of the popularity of Korean artists overseas. In addition,
in 2014, the value of Korean exports reached $ 3,000,000,000.

The support from the South Korean government has formalised programs related to
the arts more formal and helped facilitate business transactions, something that is not
initiated by other countries' governments. In Indonesia, for example, many international
standard performing arts activities are carried out independently by artists without
government intervention. This Factors driving the popularity of K-Pop in Indonesia
include the factors of K-Pop format, K-Pop adjustment to the style of young people,
support from the private sectors and the Korean government, as well as K-Pop
performance that concern to quality in detail. Thus, it can be summed up as follows is
consistent with what Lee said (2012) that the Korean government plays an active role in
providing media for promoting Korean culture throughout the world. In fact, Medina
(2017) found that K-pop is a form of soft diplomacy. Thus, through K-Pop, the Korean
government can introduce Korean culture subtly without always having to go through
formal cooperation. It has been proved successful. Gradually and unconsciously, the
world community recognises and likes Korea.

**K-pop as a diplomatic tool**
As an art, K-pop is a very effective diplomatic tool (Langit, 2019). The beauty of Korean
art, which is performed by good-looking artists, K-pop is an effective tool to attract
people and convince them to ignore other, more negative aspects of a culture. This is one
of the ingenuities of the Korean government in utilizing art as a diplomatic tool,
something that is not done by Indonesia. In some other countries, art is even marginalized
because it is not considered an important asset. Astuti (2011) found that based on
interviews with Dutch teachers, it was stated that in their schools, the arts also was not
appreciated. However, after the art teachers conducted art performances by students, the
parents and stakeholders paid special attention by providing various musical facilities.

The seriousness of the Korean government in supporting K-pop has succeeded in
making Korea a country whose culture is known in various countries. In Indonesia, some
teenagers feel proud if they can wear Korean products and imitate Korean styles, from
hair styles, clothes, to food.

Musicality depends on both innate and environmental factors (Pherson, 1997). In
other words, a star is born not by accident, but is rather nurtured through exercises and a
supportive environment. It means that the success of Korean musicians in becoming
world stars is not a coincidence, but it has been prepared, not only individually but
collectively through the involvement of all parties.
Interpretations

To find out why K-pop is more successful than Indonesian pop music, the researchers looked for things that Indonesian musicians did not do, but Korean musicians did. Knowing this, Indonesian musicians or people can do things that Korean musicians have done to achieve the same success.

Korean musicians understand market demands very well. The songs written are always acceptable because K-Pop always tries to fulfill the demands of its fans by presenting something that fans want. For example, because their main audience is teenagers, the dance movements are lively, unique and quickly performed, even though these movements do not contain a specific meaning as in traditional music and dance, because in this case what is important is the ability to attract attention.

This is different from the current Indonesian musicians, who prioritize the depth of their art, without considering the listener's tastes. As a result, Indonesian artists have fewer fans than Korean artists do because Indonesian artists only satisfy the tastes of certain groups of people.

K-pop bands also follow the latest psychological developments. In this era, people will be happier if they become an active actor rather than a passive one. K-pop is trying to do a two-way interaction by giving an opportunity for fans outside of Korea to actively participate in their bands and also by giving them more personal details about band members’ lives.

The Korean government also fully supports the development of K-pop and actively supports K-pop activities. In fact, K-pop is used as a diplomatic tool to widely market South Korean their culture and products. This strategy is very successful, as seen from the increasing number of Indonesian teenagers who are buying for Korean products.

Based on observations of the latest K-pop performances such as BTS, Super Junior, and Exo, it can be said that K-pop performances pay attention to details where every movement in their show has been prepared beforehand. This is what makes K-pop always look neater and more attractive than Indonesian performances.

Conclusion

Factors promoting the popularity of K-Pop in Indonesia include the factors of K-Pop format, K-Pop adjustment to the style of young people, support from the private sectors and the Korean government, as well as K-Pop performances that concern to quality in detail. Thus, it can be summed up as follows:

1. Factor that increases the popularity of K-pop in Indonesia includes the K-pop format. Korean music performances are presented in groups, which are a new form that did not exist before so it is very attractive for the young generation.
2. K-pop tries to follow the mindset and perspective of its fans. K-pop tries to understand the tastes of teenagers who are their target audience. This can be seen from their use of lively and fast dance movements in accordance with the characteristics of adolescents. In this way, the fans, including those in Indonesia, were entertained and eventually became K-poppers.
3. The Korean government has helped K-pop to flourish and prosper overseas.
4. Korean musicians meticulously prepare for performances in order to impress fans with the beauty and technicality of their performances.
Implications
It is important for Indonesia’s government to pay more attention to popular music arts by supporting musicians. The government must collaborate with musicians to promote Indonesian arts and culture abroad. If the government supports Indonesian musicians as South Korea’s government supports theirs, perhaps people will learn to love Indonesian culture, and Indonesian youth will be more proud of Indonesia’s popular music.

References
Collaborative multi-stage exams in aural skills education: Theoretical underpinnings and two proposed approaches

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Abstract
In postsecondary music education, music dictation remains an essential activity for both learning and assessment of students’ aural skills. Dictation is often focused on the individual pursuit of self-improvement, and takes on a competitive form rather than fostering collaboration between peers in both learning and assessment environments. Through a synthesis of research literature across music education (informal and popular music pedagogy), higher education (collaborative and two-stage exams), and psychology (group dynamics and social loafing), I outline a practice-based research project in which I devised and implemented the first documented instance of a two-stage exam in a music course. Despite positive feedback from students, direct observations revealed instances of social loafing, which although inherent to the two-stage exam design were further compounded by the requirements of assessing written skills in music. Significant changes to the assessment design were identified to enable implementation of collaborative exam in courses where listening tasks are critical. Informed by recent research on two-stage exam methodology in multiple disciplines, as well as the adaptation of five factors that reduces social loafing in group contexts (Forsyth, 2018), I propose two novel multi-stage exams that makes collaborative peer learning a key feature of written assessment in aural skills education.

Keywords: aural skills pedagogy, music theory pedagogy, two-stage exam, collaborative testing, social loafing

Written assessments in aural skills education
In postsecondary music education, music dictation (or transcription) remains an essential activity, used for both learning and assessment of students’ aural skills. When students undertake dictation, they listen to a musical fragment within a set framework (e.g. a particular key or a given starting-note function) and—upon making musical sense of what they perceive aurally—give structural definition to those sounds by conveying their understanding in a written form, most commonly with music notation or chord labels (Karpinski, 2000). An instructor is able to use a student’s transcription for both giving feedback and making assessments against prescribed learning criteria. A well-designed dictation task that assesses a specific skill (e.g. the ability to distinguish two similar rhythmic patterns) provides not only a means of assessing a student’s aural comprehension, but it simultaneously develops essential music notation skills in a practice-based setting.

Dictation has long been reputed as one of the most anxiety-inducing activities in the music academy, to the point where it often has a negative impact on performance and learning outcomes in aural skills education (e.g. Mishra, 2000). There is no indication that the role of dictation will change drastically in the foreseeable future, at least in higher
music education, where written exams are ubiquitous. The introduction of technology-enhanced aural training since the early 2000s has only further shifted the pedagogy of music listening away from group learning, gearing instead towards a lonely, individual pursuit of self-improvement.

Recent innovations in peer learning offers some possible ways of bringing about a more inclusive culture in aural skills pedagogy, but there is scant research in this field. Ilomäki observed the irony that "even though aural skills have traditionally been taught in groups, the conventional learning environment of the aural-skills classroom has often promoted a focus on isolated individual expertise, and competitive rather than collaborative relationships between students" (2013, p. 123). She advocates for the reconceptualising of aural skills as a subject not merely for the development of set skills within a particular course, but rather for "helping […] students to clarify their musicianship goals and to acquire tools for independent learning" (2013, p. 128). By promoting social interaction as a core component of aural skills learning, she illustrates a number of learning activities, from score analysis to group performance, that can enable collaborative aural skills development. Other researchers have also investigated peer learning in the context of aural skills development in higher education (e.g. Furby, 2016). While these studies focus on the processes of peer learning in classroom environments, they do not address the fact that the assessment tasks in aural skills education largely continue to be a peer-less, individual activity.

Informal and popular music pedagogy has made major contributions to peer learning in music education, particularly at the school and elementary levels. In her book Music, Informal Learning, and the School, Green (2008) convincingly illustrates the successes of informal learning practices applied in the UK school system. The centrality of ‘listening’ in informal music learning is a ringing and prominent message throughout her book. But listening in informal learning contexts cannot be easily translated into measurable outcomes, which are expected and required in higher education. As Green states, “music education has developed a sophisticated set of criteria and practices for assessing performance. […] However, the assessment of music listening is generally much less developed” (2008, p. 67).

Lebler (2013), on the other hand, considers three essential types of assessment in a Bachelor of Popular Music degree programme: Assessment of learning, Assessment for learning, and Assessment as learning. His contribution to peer learning approaches in popular music pedagogy is one example of this tripartite classification of assessment in practice (2008). Music pedagogy in many settings, including in aural skills education, often focuses solely on assessment of learning, which has also been labelled ‘assessment-for-evaluation’ (Mahoney & Harris-Reeves, 2019), whereas Lebler consciously forefronts assessment as learning, “which involves students in the act of assessment as active participants and this involvement is intended to produce learning in itself” (2013, p. 114). The resulting assessment process in his curriculum provides students with the freedom of devising and implementing their own creative group project, from the proposal stage, through progress and track reports, to a final recorded portfolio. While this process holds much promise in popular music pedagogy, its implementation in an aural skills curriculum would face challenges due to importance of students receiving regular and timely feedback on their skill development over the course of study. Can the benefits of project-based peer collaboration, wherein students contribute to a final output over a
period of several weeks, be realised in the acquisition of core musical skills, such as listening skills in music dictation, which are assessed and practised ‘live’ in real-time?

Two-stage exams in higher education

In recent decades, there has been a growing trend in collaborative assessment practices in higher education. Specifically, some educators have investigated a form of collaborative testing known as the ‘two-stage exam’. Research has shown that two-stage exams can reduce student anxiety (Bloom, 2009; Hamilton, 2003; Kapitanoff, 2009; Mitchell & Melton, 2003; Pandey & Kapitanoff, 2011; Rezaei, 2015) and improve student performance (Gilley & Clarkston, 2014; Giuliodori, Lujan, & Dicarlo, 2008; Leight, Saunders, Calkins, & Withers, 2012; Levy, Svoronos, & Klinger, 2018; Meseke, Bovée, & Gran, 2009; Meseke, Nafziger, & Meseke, 2008), while requiring only minimal changes to standard written examination procedures (Carl Wieman Science Education Initiative, 2014; Wieman, Rieger, & Heiner, 2014).

A typical two-stage exam begins with students completing a written exam as usual: individually, in silence, and under exam conditions (Stage 1). Immediately afterwards, students are put into small groups (of usually 3–5), and are given a single exam paper to complete together as a group (Stage 2). The group paper is either identical to the paper in Stage 1, or contains a slightly modified set of questions. In either case, students must agree on answers to each question and submit a single paper as a group, which usually counts towards a fraction of their final grade (typically 15–25%). The vast majority of educators running two-stage exams also implement a policy of not including marks from Stage 2 if it turns out to be lower than the mark in Stage 1 (Rieger & Heiner, 2015). Studies have shown, however, that this outcome is rare, and that in most cases students perform better in the second stage (e.g. Levy et al., 2018; Mahoney & Harris-Reeves, 2019).

Two-stage exams have been increasingly adopted in higher education not only because educators consider it a relatively simple way of adding a formative element to traditionally summative assessment tasks, but students consistently report positive experiences of the new format; they appreciate the value of receiving immediate feedback after a high-stakes assessment like an exam (Martin, Friesen, & De Pau, 2014; Rieger & Heiner, 2015).

Two-stage exams applied to music education

Inspired by the benefits of two-stage testing, in late 2016 I began considering two-stage exams for my music courses. To date, no reports or research has been undertaken on two-stage exams in music courses of any kind. All existing research deals with purely written exams where no other sensory inputs such as sounds and moving images are involved. It made sense to avoid any listening component (which is necessary in aural skills) and focus initially on designing and implementing a two-stage exam in music theory.

Implementation in music theory (2017, 2018)

In late 2016, I began devising a two-stage exam for implementing into a first-year music theory course at an Australian university. In the absence of two-stage exams in music, my sources of inspiration were reports and findings in other disciplines, including physics, sociology, and psychology (Ives, 2014; Zipp, 2007). Mid-semester exams in my music
theory courses were limited to 50 minutes (class time), so I allocated 30 minutes for Stage 1, five minutes for changing over, and 15 minutes for Stage 2. The Stage 2 paper comprised a subset of the Stage 1 paper, plus a few additional conceptual and higher-order test questions (see Mahoney & Harris-Reeves, 2019; Rezaei, 2015). As an assurance policy, and in line with almost all other reported two-stage exams, students were advised that their group marks from Stage 2 would only be counted if it was higher than their individual mark in Stage 1.

Over three semesters in 2017 and 2018, I implemented two-stage exams as a mid-semester assessment in first-year music theory courses. In the first implementation, out of a cohort of 17 enrolled students, 15 participated in the two-stage exam (non-participation was due to absence or inability). Students worked into groups of either 2 or 3 in the collaborative stage. Student ability in each group was balanced based on prior grades in the course, such that high-performing students were generally grouped with low-performing students (see Levy et al., 2018). Later in the same year, following positive feedback from students, I implemented a two-stage exam with a larger cohort (24 enrolled, 22 participated) and adjusted the group size to either 3 or 4 students. In the final implementation in 2018, group size was uniformly 3 students for the whole cohort (27 enrolled, 27 participated).

In each exam, I acted as invigilator in Stage 1 and as facilitator in Stage 2. As facilitator, I moved between the groups, observing the level of engagement and participation, and taking notes shortly afterwards. It was apparent that, from the outset, students were on the whole very receptive to the idea of a two-stage exam, even though for all participants, it was their first experience of this exam format. However, what concerned me was the manner in which students worked together in these two-stage exams. I frequently noticed an imbalance in terms of opportunities to contribute to the submitted answers in the group paper. More specifically, and disappointingly, I expected to find, but only very rarely saw, students genuinely meeting the learning needs of one another. This, I later discovered, was largely due to a phenomenon known as social loafing.

**Group dynamics and social loafing**

Social loafing is defined as “the reduction of individual effort exerted when people work in groups compared to when they work alone” (Forsyth, 2018, p. 314). It is relevant to the implementation of two-stage exams because the benefits of having students work together are drastically reduced not only for the student exerting less effort, but for all members of the student group. In other words, group work does not equate to collaborative and engaging work. Supporting my observations of social loafing in two-stage music theory exams are a number of studies revealing social loafing in two-stage exams (R. A. Green, Cates, White, & Farchione, 2016; Kapitanoff, 2009; Zipp, 2007) as well as in any group situation where certain conditions are met (Deleau, 2017; Simms & Nichols, 2014; Zimbardo, Butler, & Wolfe, 2003).

To avoid the pitfalls of social loafing, Forsyth (2018) identifies five causes and cures for social loafing, which I have adapted to two-stage exams (Table A). Not all of these suggestions can be implemented without changes to the two-stage exam structure. For instance, identifying each student’s contribution would be time consuming if only one student acts as a scribe. Similarly, penalising students who contribute too little would be
hard to implement. Lastly, rewarding the group—rather than the individual—for successes in the collaborative stage would require major changes to the widely accepted grading scheme, which automatically rewards low-performing students with greater score gains.

<table>
<thead>
<tr>
<th>Cures</th>
<th>Relevant key points</th>
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<tbody>
<tr>
<td>Increase identifiability</td>
<td>Increase identifiability of each students’ contribution to the group exam paper</td>
</tr>
<tr>
<td>Minimise free riding</td>
<td>Reduce group size; sanction students who contribute too little; increase students’ sense of indispensability</td>
</tr>
<tr>
<td>Set goals</td>
<td>Clear, sufficiently challenging goals determined at the outset and applied to every student in the group</td>
</tr>
<tr>
<td>Increase involvement</td>
<td>Ensure test questions are meaningful to students; rewards for high performance are group- rather than individual-based</td>
</tr>
<tr>
<td>Increase identification with</td>
<td>Replace social loafing with social labouring by helping students appreciate the learning benefits of the collaborative task</td>
</tr>
<tr>
<td>the group</td>
<td></td>
</tr>
</tbody>
</table>

**Table A. Five ‘cures’ for social loafing (adapted from Forsyth, 2018, pp. 315–318) vis-à-vis two-stage exams**

Despite the overall positive student feedback in all three iterations, the level of student engagement in the second stage, which I closely observed, was lower than that reported in most studies. I noticed that a single student, once nominated as the scribe in Stage 2, worked more than any other student in the group simply because they were in charge of notating all answers onto the exam paper. All of the ideas generated by the group had to be verbally channelled through the scribe. As is expected in a music theory exam, the written answers comprise short textual responses as well as music notation and appropriate nomenclature. Inefficiencies arose when students in the group had to verbally explain concepts to the scribe and other members, rather than notate it themselves. This general imbalance led to group dynamics that were not fully conducive to peer learning in a collaborative environment.

These observations fed into my devising of a two-stage exam for an aural skills course, specifically a music dictation test. In all prior two-stage exam studies conducted over the past few decades, the group paper included either short textual or multiple choice-responses (e.g. Bruno et al., 2017; Ives, 2014; Kapitanoff, 2009). In aural skills classes, however, written exams critically assesses a student’s ability to precisely notate music using standard nomenclature in response to aural identification. Neither textual responses nor multiple-choice questions would suffice when skills in aural perception and music notation are principal to both student learning and assessment. Furthermore, the introduction of an aural stimulus in the testing environment, which has never been documented in a two-stage exam study, would pose challenges in Stage 2 when noise levels rise as students debate and share ideas in their groups. In order to address all foregoing considerations and challenges, a completely novel approach to collaborative exams is needed.
Two proposed approaches: Three-stage testing in aural skills pedagogy
In my quest to devise an effective collaborative exam in aural skills pedagogy, I: (1) referred to the research on group dynamics, specifically social loafing and free riding; (2) reflected upon experiences in earlier implementation of two-stage exams in music theory courses; (3) used the ‘traditional’ format of two-stage exams as a source of inspiration rather than a strict model, and; (4) prioritised peer-learning opportunities in a traditional exam environment.

Proposed Exam A: Three-stage exam with emphasis on peer-assisted learning
The first proposed approach is largely based on the existing two-stage exam format, with a few small but significant alterations:

1. Addition of ‘Stage 3’, during which students are individually tested on an exam paper similar to the Stage 1 paper.
2. Stage 2 repurposed to purely a discussion and peer learning opportunity. Students share their learning experiences with a unified goal of helping each member of the group achieve an improved result in Stage 3.
3. A marking scheme that appends a uniform percentage grade increase to all members of the group. It is calculated based on the average improvement score (the difference between scores in Stages 3 and 1) of each individual member of the group, in order to incentivise peer learning in Stage 2. Each student’s own improvement influences the group score such that a lower initial score in no way disadvantage the group—on the contrary, there is greater potential for improvement in Stage 3.

The addition of a second individual assessment in Stage 3, following peer discussions in Stage 2, addresses the issue of social loafing and lack of identifiability of individual contributions. Free riding has been eradicated in this design, while still retaining a high degree of flexibility in the collaborative stage such that students can creatively devise learning solutions to their shared problems. The new proposed marking scheme rewards all students in a group equally based on individual improvement. Unlike two-stage exams, low-performing students can now make significant contributions to the group with the assistance of high-performing students, who are equally incentivised to provide learning support.

Proposed Exam B: Three-stage exam with emphasis on simultaneous skills development
This second approach represents a major departure from the basic idea of ‘adding’ a collaborative component to a standard written exam. Three skills are simultaneously developed in students through the use of specialised worksheets. Working in groups of three, students alternate between aural identification and peer-assessment tasks on the same music excerpt.

In this proposed exam, each question (audio excerpt) covers three distinct listening skills (e.g. rhythm, pitch, and harmony), but only assesses two of these skills per student. Thus, three questions are needed so that all students are equally assessed. After individual work in Stage 1, students pass their worksheets to their peers at Stages 2 and 3 (see Table
B). Peer assessment and learning occurs for all three skills over the latter two stages. While assessing the work of their peers in the latter stages (which also forms part of the students’ work and is therefore assessed), students are progressively shown answers to their work in Stage 1, and therefore they simultaneously have opportunities for self-assessment. To elucidate the exact procedure of this proposed exam format, Table C summarises Student A’s activities throughout the three stages. Note that the procedure and audio excerpt will be identical for Students B & C, but with different starting worksheets (cf. Table B).

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student A</strong></td>
<td>Complete Worksheet 1 (given rhythm)</td>
<td>Peer-assess Worksheet 2 (received from Student B)</td>
</tr>
<tr>
<td><strong>Student B</strong></td>
<td>Complete Worksheet 2 (given pitch)</td>
<td>Peer-assess Worksheet 3 (received from Student C)</td>
</tr>
<tr>
<td><strong>Student C</strong></td>
<td>Complete Worksheet 3 (given harmony)</td>
<td>Peer-assess Worksheet 1 (received from Student A)</td>
</tr>
</tbody>
</table>

Table B. Proposed Exam B: A three-student workflow of a three-stage aural skills exam

| **Rhythm task** | No tasks (Rhythm is provided on Worksheet 1) | Peer-assessment of Student B’s rhythmic dictation, having seen the answers | Peer-assessment of Student C’s rhythmic dictation, having seen the answers |
| **Pitch (melody) task** | Transcribe melody over the given number of listenings | No tasks (Pitch is provided on Worksheet 2) | Peer-assessment of Student C’s rhythmic dictation, having seen the answers |
| **Harmony (chord) task** | Transcribe chords over the given number of listenings | Peer-assessment of Student B’s rhythmic dictation, having seen the answers | No tasks (Harmony is provided on Worksheet 3) |

Table C. Proposed Exam B: Tracking the progression of Student A

**Conclusion**

Aural skills education must continually evolve as new and relevant pedagogical methodologies emerge in other disciplines and contexts. In this paper, I have outlined a practice-based research project that saw the convergence of recent research on two-stage and collaborative exams with my professional work and experiences as a music educator. Although existing research on two-stage exams, as well as the two multi-stage aural skills exams proposed in this paper, were conceived within the context of higher education, the basic idea of balancing solitary modes of music learning, whether practicing an instrument or acquiring aural skills, with collaborative approaches to learning and assessment, applies at all levels of music education.

The feasibility of collaborative assessments in music education, as in any other discipline, will be guided by quality research and practice-based experiences of music educators.
I hope that this paper instigates challenging discussions and lively experimentation in this vast and exciting field, and that collaborative approaches to students’ development of core musical skills, especially in higher education, will one day be the norm, not the exception.

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The origins of multicultural music education in Chinese secondary schools' general music classes

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Abstract

This historical study examined the origins of multicultural music education in Chinese secondary schools' music classes. Primary sources used were national documents issued by the Chinese Ministry of Education and State Education Commission, including national syllabi, national textbooks, and curricula standards. The origins consist of two periods: emphasizing the diversity of music culture within China (1989–2000) and comprehensive understanding of multicultural music (2000–2010). This study explored Chinese multicultural music education including music from 56 Chinese nationalities and world multicultural music. These results help readers to better understand the history of Chinese multicultural music education development. The author calls for continued research about Chinese multicultural music education.

Keywords: Chinese multicultural music, general music education, secondary schools

Introduction

As a result of the global trend toward internationalization in all areas of education, an increasing number of Chinese music educators have begun to realize the necessity of multicultural music education. Guan (2009) discussed the relationship between Chinese ethnomusicology and multicultural music education. Liu (2012) collected significant challenges for Chinese general music teachers to implement multicultural music in their classroom and provided the corresponding strategies.

Existing studies on Chinese school music education provide a broader perspective on the development of Chinese K-12 general music education. For example, Wang (2008) analyzed the development of Chinese school music education since 1949 by reviewing the seven national school music education syllabi. Ma (2001) divided the development of Chinese school music education in the 20th century into six periods, which are the germination period (1901–1919), the initial stage (1919–1949), the construction period (1949–1956), the tortuous development period (1957–1966), the stagnation period (1966–1976), and the rapid development period (1977–2000). However, no scholarly publication has exactly probed the development of multicultural music education in general music classrooms of Chinese secondary schools.

In November 1989, the State Education Commission of China issued a notice on Printing and Distributing the National School Art Education Proposal (1989–2000), which laid a foundation to implement this proposal throughout the country. This proposal declared the major goals and the main tasks of Chinese school art education from 1989 to 2000.1 Also, it contained requirements and guidelines for art education management, art

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1 Art education in China includes music education and fine art education.
instruction, teacher resource distribution, teacher education, teaching equipment, and research. This proposal (1989–2000) established a complete Chinese art education system and promoted the development of the school music education curriculum, indicating that China's art education entered into a new era. Therefore, this study focuses on multicultural music education in the general music classes of Chinese secondary schools from 1989–2010.

There are two primary reasons for studying the origins of Chinese multicultural music education. First, many music educators validated the values of including multicultural music in general music education. For instance, Wei (2007) suggested that a broader range of materials in music education benefited Chinese students in forming their cognition of the music world. Chen-Hafteck (2007) taught Chinese music as a multicultural genre in American classes and found Chinese music instruction made a positive change in American students' attitudes towards Chinese culture and the Chinese people. Thus, exposing students to a wide range of musical genres supports musical development, cognition, and a positive attitude.

Second, turning our attention to the aspect of ethnicity. China is a multi-ethnic country with 56 ethnic groups. Although the music from 56 ethnic groups is collectively called Chinese folk music or Chinese traditional music, each has its own musical culture. It is, therefore, undeniable that there is a multicultural music within China. Multicultural music education promotes the development of traditional music culture of the Chinese nation, which includes Han and the remaining 55 ethnic minorities. Hence, studying Chinese multicultural music education is necessary.

Purpose
This research presents a historical understanding of the origins of multicultural music education in Chinese secondary schools' general music classes since 1989. Analyzing the multicultural music aspects in the national syllabi is one way to provide meaningful information for the reform of multicultural music education in Chinese secondary schools. Knowledge of how the secondary schools' multicultural music education evolved and why changes occurred may help illuminate the philosophical foundations for today's multicultural music education, as well as encourage other researchers to investigate the multicultural music education origins in their countries.

The Definition of Multicultural Music
In the field of music education, there is no accurate and uniform definition of multicultural music. Palmer (1990) used the term "world music" to represent multicultural music. Kim and Yoon (2015) mentioned that many music educators identify "multicultural music" as music from a "specific nationality or ethnicity" (p. 291). Due to the previous definitions, multicultural music in this research includes two parts: folk music from 56 ethnic groups in China and world multicultural music. World multicultural music means folk music from other countries in addition to Chinese traditional music, Western classical music, and revolutionary music. The terms of "world music," "foreign

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2 The Chinese nation is a political term which intertwined with the construction and ethnic history of modern China. The Chinese nation includes diverse ethnic minorities and Han. Han is the largest ethnic group in China.
music," and "international music" in this study were indicative of non-Chinese traditional (folk) music.³

Research Questions
1. What was the definition of multicultural music in Chinese education?
2. What was the development trend of multicultural music education in Chinese secondary school?
3. What was the purpose of multicultural music education in Chinese secondary schools' general music classes?

Methodology
The primary sources consist of documents issued by the Chinese Ministry of Education, such as the National School Art Education Proposal (1989–2000) and Music Curriculum Standardization for Compulsory Education (2001). These national syllabi impacted the goals of China's secondary school music education, as well as the teaching materials and instructional strategies that teachers implement in their classroom. Also, I collected data from a set of national music textbooks for secondary schools, such as Compulsory Education Textbook · Music (Year 7–9) to supplement the findings from the syllabi.

Based on the collected data and Ma's (2001) six stages of China's school music education in the 20th century, the author divided this study into two periods: emphasizing the diversity of music culture within China (1989–2000) and comprehensive understanding of multicultural music (2000–2010). The author discussed each period by analyzing the documents issued by the Ministry of Education.

Chinese Music Education System
The level of the education committee in China is tied by national, provincial, city, and county. The national-level committee is responsible for setting the standards, curricula, syllabi and all other related policies to be followed throughout the country by schools at all levels. The city-level education committee set the local curricula based on the guidelines of the national syllabi and the local education situation. Also, the city-level committee is responsible for selecting the textbooks and any reading material that will be used (Rogers, 1989, p. 43–44).

The primary purpose of Chinese general music education is to teach music theory, the diversity of music culture within China, and world music with the hope of developing students' sense of aesthetics and respect for the cultures of other ethnic groups. General music education is a means of promoting nationalism and encouraging patriotism (Ministry of Education, 2001b, p. 4). The general music class is the only form of music education which is compulsory up to the first year of high school (10th grade). The way of engaging music in general music class is simple. Considering the big class size (more than 50 students in each class), lecture is an easy way for teachers to implement music education. The music classes in middle schools (grades 7–9) include singing, listening, instrumental performance, and music appreciation and analysis (Ministry of Education, 2001b, p. 8–9).

³ Foreign music, the original term "foreign music" in Chinese is “外国音乐." The use of "foreign music" may not be correct, since "foreign music" is not the best term in the English language. However, this is the closest term can be applied.
Emphasizing the Diversity of Music Culture Within China (1989–2000)

Historical Background

From 1989 to 2000, many international and domestic conferences were held to bring music education scholars together to discuss what is multicultural music education and how to implement instruction in the schools. In particular, the sixth National Music Education Symposium, which was held by the Chinese State Education Commission and the Chinese Musicians Association in December 1995, had a historical significance in the history of the evolution of Chinese multicultural music education.

At this seminar, the Chinese Ministry of Education put forward the idea of establishing a school music education system based on Chinese national culture, including cultures from 56 ethnic groups (Institute of Music, 1996, p. 599). This concept is a foothold for implementing multicultural music education in Chinese schools. Also, this idea encouraged the practice of Chinese multicultural music education to be based on the diversity of music from the 56 ethnic groups. In addition, the Ministry of Education encouraged teachers to use music from other ethnic groups outside of China.

School Music Education

The State Education Commission of China distributed the Nine-Year of Compulsory Education Full-Time Middle School Music Teaching Syllabus (Trial) in August 1992. In the education purpose section, the requirement of multicultural music education in the middle school was developing students' recognition of Chinese folk music from 56 nationalities. Meanwhile, in light of the argument that music education was a crucial means to help students raise awareness of national culture, national identity, and nationalist sentiments. Also, students are required to learn excellent music from other countries. The 1992 syllabus included the required repertoire for singing instruction and suggested repertoire for music appreciation content.

The requirement for the content of music appreciation indicated that "the music appreciation instruction must include excellent Chinese and foreign music works. Chinese folk music from 56 ethnic groups, including folk songs, folk rap music, and opera, is the focus of music appreciation instruction" (National Education Commission, 1992, p. 2). In this syllabus (1992), "foreign music" was defined in detail as Western opera and dance music. The requirements listed the names of Western musicians who need to be covered, such as Mozart, Beethoven, and Chopin. Among the six pieces of music in the required repertoire, there was no Chinese folk song from ethnic minorities and only one French revolutionary song: L'Internationale (See Table 1). Among the sixteen pieces of music in the suggested repertoire, there were five pieces of Chinese folk music and three pieces of foreign music (See Table 1). These three foreign songs contain one Soviet revolutionary song and two pieces of Western music.

According to the requirements of the teaching content and the repertoire, we found that Chinese folk music accounts for 22% of the repertoire (5 out of 22 pieces) and international musical works account for 18% (4 out of 22 pieces). All of these international music works were either revolutionary songs or Western music. Therefore, in the 1992 syllabus, there was no music from other ethnic groups outside of China. During this period, multicultural music education in Chinese middle school merely emphasized the diversity of music culture within China. This was the first time we know
the specific content of multicultural music education in Chinese middle school. Also, the syllabus allowed us to know the proportion of Chinese national folk music and foreign folk music in Chinese multicultural music education.

<table>
<thead>
<tr>
<th>Required Repertoire</th>
</tr>
</thead>
<tbody>
<tr>
<td>● 中华人民共和国国歌 National Anthem of the People's Republic of China (&quot;March of the Volunteers&quot;)</td>
</tr>
<tr>
<td>● 没有共产党就没有新中国 Without the Communist Party, There Would Be No New China</td>
</tr>
<tr>
<td>● L'Internationale (France, by Eugen Bautier)</td>
</tr>
<tr>
<td>● 歌唱祖国 Ode to the Motherland</td>
</tr>
<tr>
<td>● 团结就是力量 Unity is strength</td>
</tr>
<tr>
<td>● 毕业歌 Graduation Song</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Suggested Repertoire</th>
</tr>
</thead>
<tbody>
<tr>
<td>● 少年，少年祖国的春天 Juvenile, Juvenile, Spring of the Motherland</td>
</tr>
<tr>
<td>● 接过雷锋的枪 Took over Lei Feng's gun</td>
</tr>
<tr>
<td>● 长江之歌 The Song of the Yangtze River</td>
</tr>
<tr>
<td>● КОМСОМОЛЬСКАЯ ПЕСНЯ (&quot;Komsomol Song&quot;)</td>
</tr>
<tr>
<td>● 我的祖国 My Homeland</td>
</tr>
<tr>
<td>● 黄河大合唱 Yellow River Cantata</td>
</tr>
<tr>
<td>● 长征组歌 Long March Song (Large Vocal Suite)</td>
</tr>
<tr>
<td>● 牧歌 Pastoral (Unaccompanied Chorus)</td>
</tr>
<tr>
<td>● 在希望的田野上 On the field of hope</td>
</tr>
<tr>
<td>● 祖国颂 Ode to the Motherland</td>
</tr>
<tr>
<td>● 春江花月夜 Spring Moon Flower Night</td>
</tr>
<tr>
<td>● 尼日里月 Niizumi Egetsu</td>
</tr>
<tr>
<td>● 草原英雄小姐妹 Little prairie heroes (Instrumental piece performed by Pipa)</td>
</tr>
<tr>
<td>● The Symphony No. 5 in C minor of Ludwig van Beethoven (First Movement)</td>
</tr>
<tr>
<td>● Vltava (Symphonic poem)</td>
</tr>
</tbody>
</table>

Table 1. The Repertoire Section from the Middle School's Music Education Syllabus (1992)

**Comprehensive Understanding of the Multicultural Music (2000–2010)**

**Historical Background**

As a result of China's entry into the World Trade Organization and its successful bid for the 2008 Olympics, the conception of globalization has begun to integrate into China's economic society and education system. The significant economic changes that China has experienced in this decade (2000–2010) have led to an increase in cross-cultural exchanges. Under this circumstance, Chinese school music education started to adopt global perspectives by further encouraging students to learn music from other countries, regions, and ethnic groups.

In 2001, the Ministry of Education issued *Music Curriculum Standard for Full-Time Compulsory Education (Experimental Version)* to advocate for middle school students to understand the different musical characteristics of world folk music. Since then, the terms "foreign/international music" did not only refer to Western music. In May 2002, the Ministry of Education released a notice on Printing and Distributing the *National School Art Education Proposal (2001–2010)*. This proposal emphasized the importance of quality education and curriculum reform and provided requirements for the art education popularization.
School Music Education

After revising the secondary the syllabus in 1992, at the end of 2000, the Ministry of Education promulgated the *Nine-Year of Compulsory Education Full-Time Middle School Music Teaching Syllabus (Revised Draft)*. In 2001 the Ministry of Education released *Music Curriculum Standards of Compulsory Education (Trial)*. Although the multicultural music education part in the revised draft in 2000 was similar to the syllabus in 1992, the 2001 *Music Curriculum Standards* highlighted the multicultural education. The requirements of multicultural music education were listed in the nature of the course section, the curriculum design concept section, the curriculum-objectives section, the teaching-content section, and the section of the "textbook compiling suggestions."

The curriculum design concept section stated that music education should develop Chinese traditional music and assist students to understand multiculturalism. Students must learn the music culture from other countries and nationalities to understand the diversity of music culture in the world. Although emphasizing the Chinese traditional music culture from 56 ethnic groups is important, students should also be provided with opportunities to experience, understand, and respect the music culture from other ethnic groups in the world.

The nature of the course section and the curriculum-objectives section pointed out that students should understand and respect cultural diversity by learning the musical traditions and excellent musical works from different countries. Multicultural music education enables students to cultivate a multicultural perspective, cherish cultural heritage, and prepare them to participate in international exchange activities. The content-standard section suggested that students should know about the national and cultural features in music, and understand the relationship between national folk music and people's lives, labor, and cultural customs by learning Chinese traditional music and world folk music.

The "suggestions of textbook compiling" proposed that the content of music textbooks must include both Chinese traditional music and the world multicultural music. In the requirement of the repertoire, world multicultural music was first mentioned as independent content, rather than being included in the foreign/international music. This changed the previous practice in which Chinese multicultural music was dominated by Chinese national folk music. Also, this policy change was the first time that the specific requirement of learning multicultural music had been presented in the national standards. Since then, foreign/international music included two parts: Western music and world multicultural music.

Since there was no repertoire in the national standards (2001), the author looked through national music textbooks used in secondary schools, *Compulsory Education Textbook · Music (Year 7–9)*. There were 170 pieces of musical works in the repertoire of which multicultural music accounts for 20% (34 pieces). Also, we found multicultural music in secondary schools' textbooks including African music, European folk music, Latin American music, Southeast Asian Music, and Central Asian music. During this period, the content of multicultural music became broader and more inclusive.

By looking through all of these world multicultural musical pieces in the textbook, the authenticity of these pieces needs to be questioned. For example, African Alleluia as a representative African piece was collected in the textbook. However, this piece was choir
music written by Jay Althouse, a composer from America. In addition, since all of the multicultural music from other countries was translated into Chinese, it is extremely difficult to chase back the origin of some music pieces. Therefore, it is not convincing to tell their authenticity.

Conclusion
From 1989 to 2010, multicultural music education in Chinese secondary schools has undergone a series of profound changes. In the first (1989–2000), according to the repertoire listed in the syllabi, we found music from Chinese 56 ethnic groups was the only content in school multicultural music education. Hence, in this decade, multicultural music education in Chinese secondary schools was dominated by the music from Chinese 56 nationalities. During the first ten years in the 21st century, Chinese multicultural music education has become more comprehensive, which did not merely concentrate on the diversity of music culture within China, but turns its eyes to the global scale. The concept of world multicultural music has been included in the secondary school music syllabi as an independent category.

While Chinese music education has attempted to embrace music from ethnic groups in other countries in the 21st century, multicultural music education still focuses more on the diversity of Chinese national folk music. The main reason is that China is a country that constrains the 56 nationalities. One of Chinese multicultural music education purposes is to achieve educational equality and enhance students' national identities. From this point of view, it is reasonable that China's multicultural music education emphasizes the diversity of music cultures within China rather than the world multicultural music.

Chinese multicultural music education in the secondary schools' music classes included world multicultural music and the music from Chinese 56 nationalities. The main purpose of learning world multicultural music is to show students a broader view of the music world and to expand students' sense of aesthetics. Also, students were expected to understand, love and respect folk music from other countries or ethnic groups. The purpose of learning the music from 56 nationalities are to inherit Chinese national music culture, develop Chinese folk music and let students bring Chinese folk music to the world.

According to the findings, 2001 is a turning point in the history of Chinese secondary schools' multicultural music education. In 2011, the Chinese Ministry of Education released a new middle schools' music teaching syllabus. Thus, further research is needed on the history of the development of multicultural music education in Chinese secondary schools' music classes after 2010. For future researchers who want to conduct a study on Chinese multicultural music education could examine the change in the proportion of multicultural music in the music textbooks. All those findings could help to further develop multicultural music education in Chinese school music education.

References


Music education models in the 21st century: the music mediation model for social engagement

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Abstract
The notion of social commitment as a cross-curricular element in curricula design in educational institutions has pervaded over the last 25 years in a very uneven and disparate way in its day-to-day implementation within the classroom. Music education taught at music schools should aim to have a positive impact on the social well-being of the community, and should also contribute to alleviate social dysfunctions in the nearby surroundings, creating social cohesion and feelings of community belonging and identity. Nevertheless, there is some inertia to perpetuation of traditional models of education in music where there is no room for innovative projects with authentic social engagement. To alleviate this issue, the educational model for mediation and intervention through music is introduced, which adds a new educational orientation to the traditional offer in music schools. This paper pursues the following objectives: 1) to offer some reflections on traditional educational models; and 2) introduce the music mediation model that can lend support to socio-community education projects and integrate social commitment. The main contribution of this work is the presentation of a classification of updated music education models, including the most recent, like the gamification model, and introducing in this taxonomy the music mediation model. In this new educational model, music teachers use their musical knowledge applied to educational activities to cause changes and transformations in people, thus contributing to alleviate the social dysfunctions of the environment and contributing to the welfare state of the community.

Keywords: music education model, music mediation model, social engagement, gamification model, amateur model, socio-educational mediation

Introduction
The notion of social commitment as a cross-curricular element in curricula design in educational institutions has pervaded over the last 25 years in practically all educational communities. Even so, the way the Key Skills Qualification has materialised in programs and educational activities is, to this day, very uneven and disparate in its day-to-day implementation within the classroom. In the field of music education, an effort has been made over the last decade especially, to integrate values within the curriculum such as solidarity, community well-being and social engagement at all institutional levels (from elementary education to professional, superior, non-regulated, public and private).

Over the last years, teaching professionals on national and international forums on music education have repeatedly voiced the need to address the efficient and effective implementation of programs, workshops, activities and all manner of projects with a vocation of service to communities and members of society who are at a social disadvantage using music as a tool for mediation and intervention (depending on each case). The use of music as part of the process of social reintegration on a local level is a
recurring example often talked about on these forums where it is also suggested that projects be created in the music education institutions by way of response to the social demands as a service to the community and as a way of giving back the results of their educational activities to the community they are a part of.

Community style music programs are also strong transversal pillars that music education and music centres of all levels can lean on directly and specifically, thus fostering social cohesion and cultural vitality within a social context that is familiar, recognised, and within reach. It is especially striking to observe how most music projects at a socio-community level have originated outside of the educational field, and are held together without support, help, or advice from nearby music institutions. It is as though musicians that receive training in these institutions, the teachers and in general the entire educational community nurtured music within the walls, but without letting it go beyond those walls. It would then seem logical that music schools should be the driving force that moves music culture in a community, contributing to its social well-being and that of the more disadvantaged groups through socio-educational projects putting their human capital and resources at the service of the surrounding needs.

However, the real scenario is quite different. It is true that there are initiatives that stand out, in particular from some non-regulated music schools, and that there is increasing awareness of the need to contribute to the state of social well-being. Nevertheless, most obstacles in kick-starting these innovative initiatives are lack of specific methodologies, lack of teacher training in the field of social and community work, and tendency to remain inert when confronting the uncertain situation of working on unknown projects with unknown results that require a lot of work, reflection and other educational habits that people are not used to. Terms such as social mediation, socio-educational intervention or socio-community project need to be seen and treated without prejudice or fear.

Models of music education in the 21st Century
There are various models of arts education that are recognised by experts. An overview of these from the music education perspective shows a backdrop with recognisable models, although often slightly overlapping. The difference between these models is where the emphasis on education lies. Indeed, these models are not mutually exclusive and music schools can opt for various models at the same time, as has been done until now in education centres with non-regulated teaching (amateur model), and regulated teaching (academic conservatory model). Interestingly, this new proposal for educational models allows a combination of any of the traditional ones with the emerging models (such as the gamification model, or the cultural entertainment education model), of which we’d like to highlight the intervention/mediation model that puts educational actions in collectives not contemplated until now in the spotlight.

Academic Model
This model brings together western musical tradition and how it is done, interpreted, written, and thought about from the point of view of important classical composers in particular. This educational model promotes reproduction in academic terms of its entire body of knowledge and is mainly focused towards understanding the object of study. Its purpose is to master techniques and processes that lead to the production of a work of art
with its different significance throughout history and in this case, history of western music. This is the model used in music conservatories.

The expressionist model
This model sees music as a conduit of expressivity and personal creativity. It evolves parallel to other arts post-World War II. The idea is to allow individuals to express themselves with freedom through music, even if the result is not done with the rigour and standards of a work of art. This space does not teach how to produce an artistic musical object, but rather strives towards a person’s expression of their inner world. This model is part of non-regulated teaching that takes place in music schools or private centres aimed primarily at children’s first contact with music, for instance. It is also found in workshops for music and body expression offered by academies and schools with extracurricular activities, etc. The type of music that is broached is varied. Some ideas can be taken from this model that are put forward in the intervention/mediation model.

Amateur Model
This model is frequently found in non-regulated musical education systems as a direct consequence of the democratisation of arts and the access of the middle class. This is a mixed model, which from an academic point of view of education trains people in symbolic language of music with the aim to know how to use an instrument or the voice at a basic level, understanding that said levels would be enough for the personal and collective enjoyment of music. The goal is for the students to enjoy music with basic knowledge of its language and technical principles. This model coincides with non-regulated music teaching, and comes from the idea, not shared by all, that music can only be enjoyed if you know its language and you know the basics on playing an instrument. Furthermore, amongst its critics, it is noted that this type of music education perpetuates an elitist consumption of a specific type of music which is also elitist, in turn favouring academic education, but which does not allow the community as a whole to access its knowledge and enjoyment. The type of music is varied, though the aim is to be able to play a classical repertoire, even at a basic level. The main objective is to create amateur musicians. This model also shows the type of music education that takes place in local amateur collectives such as choirs, bands or community orchestras where technical training is essential to be able to handle an instrument or voice with the minimum standards.

Music education for leisure and cultural entertainment model
This model, as opposed to the amateur one, does not work on music instrumentally with the aim of obtaining a musical product more or less artistic, but rather aspires towards the well-being of the person. The main objective in this model is to reach a minimum training in music for a better understanding of it, but never handling the artistic product or trying to emulate it. This model is widely used in institutions for training in cultural entertainment where consumers are usually adults who generally have access to more elitist musical and artistic representations, but lack the training to understand the complexity of musical art, despite having intuition and enjoying it. This enjoyment leads to epistemic curiosity towards a deeper understanding of music: its history, styles, composers, genres, etc.
**Gamification model**

There are two trends in this model. On the one hand, this model uses music as an element that can be used in educational games where the aim could be music itself, or more often, to teach, through music, other aspects of the human being. Here, educational actions are centred on games and are especially useful in the pre-school collective in school surroundings where music, generally songs – music with lyrics – serve as a way of leading to transversal concepts, values, and ideas in education. This model does not teach music even though the activities are carried out in the music curriculum. This model uses popular songs or songs where the focus (be it the refrain or the theme) is its textual relation with a specific topic. Structure and musical elements are not studied. The games are diverse and cover actions like changing the original text of a well-known song, performing it with gestures as a collective group, giving music to lyrics personally and within a group, etc. On the other hand, this gamification model is also being used in contexts of regulated music, such as conservatories, since the programs and technological applications that use the game as a learning tool also have a place in the teaching of the musical technique itself. This type of technological gamification also includes activities through games that take place in the early stages of music education in children in pre-school.

**Music Mediation Model**

This model values music as a tool in itself, the objective being the art experience and what can be changed or transformed through it, regardless of the specific results in sound. The quality of technique or art derived from music mediation does not matter; the aim is not to train musicians. The music workshop becomes a tool of social reinsertion and transformation. Moreno (2010) attributes Music Mediation to some concepts widely used in pedagogy, psychology and social work (p. 5): a) comprehensive development of the person b) symbolic elaboration and overcoming of conflicts c) becoming aware of the current situation and starting a process of transformation and reinsertion.

*Art therapy* and *music therapy* are not types of art/music education, but rather therapy through art/music. Interest shifts from the final product to the process (Moreno, 2010).

**Socio-educational and community projects in the current context**

The economic crisis at the start of the millennium as well as factors such as the transition into a post-industrial society, the individualism that is characteristic of capitalist societies, the emergence of new situations of social risk, globalisation, the transformation of the labour market, the integration of women into the latter, ageing populations, changes in family structures, and others, are inexorably leading towards a neglect of the new challenges in the so called welfare society fundamentally due to a lack of resources. Social changes cause a remaking in how we perceive social inclusion and exclusion and the models of intervention have become obsolete. Segado (2011) believes in a new type of social intervention through which the aim is not an immediate one, but rather long-term and which can aspire to long lasting changes in people.

The community is a genuine space for dialogue, it is dynamic, lively, and within a historical context which evolves and in which there is room for diversity, individualism,
as well as a strong feeling of belonging. The idea that schools –music schools included—should integrate themselves within the community fabric and respond to social needs is of major pedagogical and social significance and linked to the idea of permanent education as well as education throughout life (Ortega, 2005). Another idea which is linked to social pedagogy is that educational centres, regardless of the subject they are teaching, should engage in education for social participation and transformation, thus becoming authentic social agents within and for the community.

The rise of art therapy and the use of artistic tools as mediators in social and community intervention has rocketed in the last few years, even though in the field of music there isn’t as much research as there is for instance in relation to the use of drawing, images, painting and other visual arts.

**What is socio-educational mediation? Models of mediation**

There are two significant models that summarise socio-educational actions for mediation: the technological or reproductive model, and the critical or reconstructive model.

According to Sáez Carreras (1993), the focus at university and in centres for higher education is on the technological, scientific, or positivist model, making these educational spaces what he calls cognitive prescription. There is a big gap in this model between university and school since, in Sáez Carreras’s opinion, some subjects design knowledge (scientists and researchers), whilst others apply it (teachers), meaning there is a vacuum between planners and doers, between theory and practice; “whilst scientists devise their theories in the laboratory, others try to retranslate these theories into practice” (Sáez Carreras, 1993, p. 92).

The other important model of mediation as a critical social practice has been defined by House and Mathison (1983) as a fundamentally political action: actions that are neither neutral nor sterile but fraught with values, interests. The concept of intervention/mediation in this case is dialogical, defined not because of its scientific and technological design, but rather because “it is personal and socially significant for the subjects who receive it” (Sáez Carreras, 1993, p. 96). Advocates of the critical approach to intervention aim for there to be social and personal emancipation of people in their programs and for them to also be key actors in their own process of emancipation and self-determination (Bachman y Simonín, 1981). The beacon in this social and educational model is undoubtedly Freire, who believes in engagement, participation, and democracy in education.

Eisner (1995), expert in art education, drew up a draft approach to two general models in art education that justified art education from different perspectives: on one hand, an essentialist trend, and on the other hand, the contextual trend. Followers of the essentialist trend believe that the artistic experience given off in learning art cultivates a series of emotions in people, sensitivities and representations that are not created in any other area of teaching. What is learnt through the artistic experience, be it creation or interpretation, is unique. It follows from this that this model of art deserves to be in a field of knowledge on its own, regardless of its possibilities in contributing to learning in other fields or with other educational ends.

According to Barragán and Moreno (2004), the social educator is closer to the contextual model of arts education since the aim is to improve the personal and social
situation of people within a group instead of being able to assimilate artistic procedures and end up with a final product that has artistic value.

It is common to find institutions within a social network that organise workshops and activities with artistic content. Social educators who do not have specific training in the arts develop these workshops. This means that the quality of said workshops depends on the imagination and/or intuition of the teachers, which is the reason they are not developed within an adequate theoretical framework or specific artistic methods.

This reveals the need to combine specific efforts, knowledge, and methodologies to carry out workshops where the artistic actions – in our case, music and dance – are mediators. It seems logical to think that art intervention teams are made up of professionals who come from the artistic field that they will be using as a tool. However, it must be highlighted that the concept of an artistic action is an educational tool in these social contexts; the main aim is not that people who use it learn to create an artistic object in accordance with academic norms, but rather that these activities encourage their independence as well as their cultural identity and social inclusion. In this type of mediation musicians, for instance, don’t have psychological training, but do have the skills and necessary knowledge to imagine and create activities that are related to music in its multiple aspects. Art education professionals can and should complement the teams where workshops and activities are planned and developed with art mediation/intervention.

**Final reflections**

- Possible inertia due to traditional models of music education can be overcome with imagination and creativity, and educational projects should give a response to real demands of the social collectives of the surroundings. Music education will thus see a widened network of users including individuals with different interests rather than traditional ones. This will lead teachers to face adequate methodologies, different from those experienced in the past.
- It is important that educational institutions know the different educational models that can be implemented to be able to manage curricula and specifically target them to the selected model, and not disperse the training of students without a clearly identified objective.
- Music educational centers can opt for the coexistence of various models within the same institution. This can be enriching for students of both models, and even unify efforts for collective projects in which social commitment is visible throughout the community educational.
- New social contexts originated by the economic crisis, migration, the consequences of globalization, the state of the labor market and employment, cultural and social policies, and more recently health emergencies, have created a new social ecosystem. Music cannot remain apart from these social changes and transformations. New challenges must be faced with innovation and creativity.
- Research in socio-educational and community music education is necessary to respond to the demand of the needs of other target groups that traditionally have not had access to the benefits that music can bring if it is properly oriented. This research would be oriented to take advantage of all the transformative and change
potential that music can have when it is used properly. The fundamental question is: How to use music for social welfare?

- The training of music teachers of the future must include tools to be able to function in all educational models, or specialize in one or more of them. The traditional musical training of teachers, based on models inherited from the 19th century, have become obsolete or do not respond to the interests of all learners. For this reason, music education cannot continue to be outside the new educational needs generated by a changing society.

- We must rethink the skills and competencies of music teachers, incorporating those that enable them not only to teach the academic or amateur model. Opening up to other educational models, in addition, can generate a future employability option not contemplated in the past.

- Interdisciplinary work is vital in the planning and development of socially committed pedagogical models. The work teams that design workshops and projects in which music mediates conflicts must work from different specialties: the social educator, the pedagogue, the musician / music teacher, the psychologist, the social institutions, etc.

References

A study on strategies of postsecondary music teaching reform in China under new media environment
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Abstract
The influence of a new media environment on Chinese higher music teaching is all-round. However, many measures in the reform of music teaching in Colleges and universities in China have not fundamentally solved this problem. This research focuses on the new media environment, how to conform to the trend of the times and seek further progress in the reform. This paper uses the data collection method to grasp the development trend of new media macroscopically, combines the field survey method and interview method to investigate innovative figures and organizations in different dimensions of the music education industry, and uses the case study method to deeply explore new species in postsecondary music teaching. Finally, based on the above research results, the strategy and path of music teaching reform in Chinese universities are proposed, which mainly includes the following three aspects: 1) Adapt to new media changes and change the teaching concept. 2) Adjust teaching methods and content by making use of advantages of new media. 3) Carry out the certification system of new media learning, attach importance to the sustainable development of ecological environment of music education, and provide a professional learning path for front-line music teachers. In the field of global music education, including Chinese music education, we should pay close attention to this development, conform to the development of the times, and carry out corresponding reforms and explorations in a timely manner. I also look forward to more exchanges and discussions with other experts and scholars in this regard.

Keywords: postsecondary music teaching reform, new media environment, strategies, China

Pedagogical background of the paper
Along with the rapid development of new media, various new teaching modes have been widely used in classroom teaching (Teng, 2016). Various platforms have emerged to change teaching methods, including MOOCs, Flipped Classroom, Blended Learning, Electronic Learning, distance learning and many other forms. Relevant teaching contents have also been added to music teaching in many colleges and universities, trying to reform the teaching of digital courses (Zhou & Liang, 2013). Under such circumstances, the new media is applied to postsecondary music teaching, which greatly promotes the reform of postsecondary music teaching and creates a lively and active atmosphere for music learning in colleges and universities. It plays an important role in cultivating college students' artistic accomplishment, internal accomplishment and good comprehensive quality (Xu & Li, 2015).
Focus of the research reported
The influence of new media environment on Chinese higher music teaching is all-round. But many measures in the teaching reform in colleges and universities did not solve the fundamental problem. They only realize the changes in teaching forms and teaching methods and do not fully understand the great change of music education industry in the new media environment from the macroscopic and integrated industry development trend.

In the face of these problems, this research is devoted to finding out on the new media environment, which aspects of China's higher music education has carried out useful exploration and attempt? And then, focuses Facing the future, how to conform to the trend of the times and seek further progress in the reform?

Research methods and process
Interview and data collection
Through the interview with Ms. Gao Peng, an expert in the Internet industry and an innovative figure in music education of new media, the author learned that the technical means and big data analysis of new media could assist music teaching from precise feedback, personality needs and other aspects. This conclusion is consistent with that of British scholar Viktor Mayer-Schönberger and Kenneth Cukier, who have slightly different focuses. Ms. Gao Peng emphasized the overall auxiliary role of new media in music education. Viktor Mayer-Schönberger and Kenneth Cukier focus on using big data as a powerful and empirical tool to help optimize individual learning of students (Mayer-Schönberger & Cukier, 2015).

Case study of Chinese Online Chorus College
In the new media environment, the case study of Chinese Online Chorus College, a new species in the music teaching field in colleges and universities, is carried out. Chinese Online Chorus College is the extension of college continuing education, which includes two basic majors: choral conductor and choral vocal music. Below are tables (Tables 1 and 2) for detailed curriculum and credit setting of these two majors respectively. From the tables, we can clearly see that “face-to-face tutoring module” accounts for a very small proportion of the whole course content. Most other courses are taught through online media, especially new media. Different from the one-way propagation mode between media and audiences in traditional remote education, it fully uses the multidirectional communication advantage of new media. In app of mobile phone, the real-time communication between students and teachers in the process of teaching can be realized. The teacher may correct homework of students and feed back in time, review the work of singing or command of students, and realize music score synchronization and real-time voice message. By setting up a collaborative learning group across time and space, students led by teachers work together to construct knowledge content. Through mutual discussion, communication and cooperation, a deeper understanding and grasp of learning content can be achieved. It is worth mentioning that Chinese Online Chorus College has not only courses, but also certification system. Through the evaluation, classification of professional grades, and certification of learning results, students' learning enthusiasm and initiative are mobilized.
### Table 1: Courses and credit settings of chorus conductor major in Chinese Online Chorus College

<table>
<thead>
<tr>
<th>serial number</th>
<th>course name</th>
<th>credits</th>
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</tr>
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<tbody>
<tr>
<td>1</td>
<td>Fundamentals of Vocal Music</td>
<td>6</td>
<td>Compulsory</td>
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<tr>
<td>2</td>
<td>Solfeggio and Basic Music Theory</td>
<td>4</td>
<td>Compulsory</td>
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<tr>
<td>3</td>
<td>Chorus Voice Training</td>
<td>4</td>
<td>Compulsory</td>
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<td>4</td>
<td>Form and Analysis of Works B</td>
<td>3</td>
<td>Compulsory</td>
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<tr>
<td>5</td>
<td>Teaching methods, rehearsal skills</td>
<td>3</td>
<td>Elective</td>
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<tr>
<td>6</td>
<td>Phonetics</td>
<td>2</td>
<td>Elective</td>
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<td>7</td>
<td>Chorus History and Style Change</td>
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<td>8</td>
<td>Harmony Foundation</td>
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<td>9</td>
<td>Chorus Conduct Foundation</td>
<td>2</td>
<td>Elective</td>
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<tr>
<td>10</td>
<td>Face-to-face course</td>
<td>6</td>
<td>Two times</td>
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### Table 2: Courses and credit settings of chorus vocal music major in Chinese Online Chorus College

<table>
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<tr>
<th>serial number</th>
<th>course name</th>
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### Case study of remote intelligent automatic self-playing piano

In the new media environment, remote intelligent automatic self-playing piano appeared in the piano field. It is a self-playing piano integrating original and digital sound. The audio, video and performance of remote intelligent automatic self-playing piano played in a place can be transformed into data for acquisition and synthesis, and through the network all information is transferred to another remote intelligent automatic self-playing piano at the other end of the world for live broadcast. All the touch and foot movements of player on a piano will be accurately and remotely displayed on the piano on the other end of the world in real time, which can realize transnational piano course teaching. In China, the Zhejiang Conservatory of Music started this exploration earlier. It not only used this technology to successfully connect with the Hamburg Conservatory of Music in Germany, realized the international teaching of master classes; but also as one of the promoters, jointly established the “University Distance Arts Education Alliance” with other 7 institutions, including the Central Conservatory of Music, Northeast Normal University, Mianyang Normal College, etc. At present, more and more music colleges and departments in China have offered international piano courses, lectures and master
classes based on this technology, enabling students to achieve international learning and exchange without leaving home. Lisa Yui, a piano teacher of Manhattan School of Music, describes the teaching experience as follows:

It is an unprecedented experience. I can listen to the students playing in the distance. The precise keyboard restoration of remote intelligent automatic self-playing piano Disklavier allows us to feel comfortable to discuss. This is unique in most distance education technologies.

Due to the advantages and convenience of new media communication, postsecondary music teaching began to break through the traditional set limits gradually and become more diversified. It changed from the following aspects: First, the flexibility of music teaching time has increased. If we say that music teaching in the past mainly focused on the classroom, now due to the improvement of new media technology, the flexibility of teaching time has greatly increased. Long or short fragmented time can be used for learning during the day or in the evening. Second, the span of music teaching space has increased. Traditional music teaching is largely confined by space and mainly concentrated in a certain classroom or musical instrument room. With the improvement of new media technology, music teaching means with a larger space span are developing day by day, and music teaching is becoming a globalized information space field without geographical restrictions. Third, music teaching content has become richer and the acquisition is faster. Learning centered on text and audio changed to learning of massive video data. The acquisition of information is faster, and the electronic library is more convenient to search. In the new media era, the network gathers various learning information, learning courseware, teaching video and other resources, and the search engine is able to meet the needs of learners in time with its powerful retrieval ability. Fourth, the convenience of music teaching certification is enhanced. Traditional music teaching certification is limited to “face-to-face” time and space. With the technical support of new media, the network certification of music teaching is possible.

Summary of the main ideas
To sum up, in the new media environment, the reform strategies of postsecondary music teaching should give full play to the aid of new media, adjust the teaching methods and content by changing teaching ideas (Partti & Karlsen, 2010), develop the certification system of new media learning (Thibeault & Matthew, 2012), make various and cohesive discipline teaching reform and professional comprehensive reform, promote the deep integration and innovation of information technology and courses, and improve the overall quality of teaching of music major in colleges and universities.

Adapt & change
Adapt to new media changes and change the teaching concept. In the environment of the new media era, postsecondary music teaching needs to follow the time development, adhere to the concept of advancing with the times, set up the new concept, change the role positioning, build the new education concept of equality and interaction, actively guide students to make full use of new media technology, take students as the main body in the process of course teaching, abandon the infusion mode of traditional courses, give
full play to the subjectivity of the students as the object of education, and stimulate students’ enthusiasm of participation and learning.

**Adjust teaching methods and content**
Adjust teaching methods and content by making use of advantages of new media. *First*, advocate participatory learning. In the new media era, dynamic classroom has the characteristics of participation and interaction. The raising of a question will leave “traces” in the network and can find answers for more questioners, which can be called “knowledge reuse”. Through this shift, students change from the original “question raisers” to “the participants of question answering”, and make full use of the knowledge experience of participants to gain new knowledge. It can cultivate students’ innovative thinking, behavior and sustainable development ability, create easy and happy learning atmosphere, and maintain lasting interest and sense of achievements of students. At the same time, with the increase of quantity and improvement of quality of educational information, educational resources and educational services in new media, the advantages of initiative and openness of mobile learning are shown continuously. Students' learning choices are becoming more and more diversified. *Second*, enhance international academic exchanges of music. The internationalization trend of higher education of music continuously strengthens. International academic exchanges of music supported by new media technology can greatly increase the frequency and breadth, further consolidate students' professional knowledge, and help students to get in touch with more updated music works, and understand different music culture and professional views, so as to expand their professional horizon.

**Carry out the certification system**
Carry out the certification system of new media learning, attach importance to the sustainable development of ecological environment of music education, and provide a professional learning path for front-line music teachers. In the teaching environment of new media, there are higher requirements for music teachers. They are required to expand in a larger scope, continuously accumulate, summarize practical work experience, and gradually improve their professional level. The new media learning certification system is a kind of learning method that can realize two-way communication by using mobile communication technology, and can realize learning whenever and wherever possible. Music teachers who have entered the workplace can have time, opportunity and results to further study, providing a learning path for their professional development. On the one hand, new media learning content is presented by practical and short blocks, which greatly improves the timeliness of learning. On the other hand, new media technology can be used to evaluate their learning results, thus completing the certification and mobilizing their enthusiasm and initiative in learning.

**Conclusions and implications for music education**
The development of new media has brought about great changes in the way of communication in the whole society, which will inevitably lead to changes and innovations in ways and methods in the field of education. In the field of global music education, including Chinese music education, we should pay close attention to this
development, conform to the development of the times, and carry out corresponding reforms and explorations in a timely manner.

In this paper, three reform paths are discussed, i.e. the change of ideas — the change of teaching concepts; the change of process — the adjustment of teaching methods and contents; the establishment of security — the implementation of the new media learning certification system. I also look forward to more exchanges and discussions with other experts and scholars in this regard.

Acknowledgments and legal responsibility
In the process of case study of Chinese Online Chorus College, I got great support from Mr. Zhu Yuan. Ms. Gao Peng accepted my interview and shared online information with me. In this paper, the table of the Courses and Credit Settings comes from Chinese Online Chorus College. I acknowledge their help to this paper.

References
The teaching of music in the municipal school “criança feliz” (happy child) in Olinda (Pernambuco/Brazil)

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Universidade De Pernambuco (Brazil)

Abstract
The goal of this essay is to analyze the applicability of music teaching in public schools of Pernambuco state (Brazil), with the execution of an intervention project in a school unit of child education, School “criança feliz” (happy child) located in Olinda city-Pernambuco. The project intends to analyze and put in practice the public policies of musical education in force in Brazil. The research is based on the law 11.769/2008, which examines the obligation of music teaching in all basic education. Developed in the qualitative method, following the methodology of action research, which is a methodological strategy of the applied social research, that allows the dynamic study of the conflicts, problems, actions and decision-making, seeking the solution of a problem. (Thiollent,2011). The data collection instruments are: the simple observation and the intervention a project of children's musicalization in the cited school. The research uses the Brazilian legislation as the theoretical support: the resolutions of the national consul of education and the new guidelines of the common national curriculum basis. Also, with the theorists: (Wazlawick,2010); Karl Orff (1982); Duarte Jr. (2010) and Schiller (2002). The results point to an unfamiliarity about the legal precept and a distorted vision of its applicability. The lack of licensed music teachers in this and others school units of the city was observed, inadequate physical space, lack of instruments and specific didactic resources to the implementation of a quality musical education. What makes us ponder, regardless of the registers included in the common national curriculum basis and the legality of music teaching in schools, its practice happens without a systemic planning, not being valued as a mandatory curriculum component. The research brings its contribution to all education fields with the proposal: at the level of political actions, the regulation is suggested, at state and city level, of the music teaching on offer in schools. It is not enough to say that music is important; it is needed to reassure its conditions in order to be integrative and fulfill fundamental functions. At the academic actions level, it must also encourage the reflection and debates to strengthen the music field and its teaching. At the practical actions level, the professional qualification of music instructors is pointed out, amplifying the hiring of teachers in the area. Seeking the preparation of committed professionals, who are conscious about their roles. The school finds itself well developed with the project, therefore it is registered that this experience has been successful.

Keywords: Musical Education, Art, Music, Law 11.769/08.

Introduction
Musical education has many different meanings as a forming component of a human being. Overall, it focuses on what type of people we will become. To think about musical education is also to think about what world we intend to develop for the future. This way,
to talk about musical education, we are referencing its relation to the fully shaping of an individual from childhood.

This research, as well as an intervention project, has been developed with the purpose of overcoming the functional or utilitarian character of music actions being experienced in the majority of schools, regardless of the importance of some actions that are executed in different school contexts. It is understood that music teaching should compose an interdisciplinary curriculum which could dialogue with other knowledge areas; it is our wish and proposal to accomplish an intervention in the municipal school “criança feliz” (happy child), working on the project called ‘music in school’, following the methodology of action research and having as a main goal the reinforcement of the applicability of music teaching in schools in Olinda city, following the resolutions of the national education consul and the guidelines of the common national curriculum. Furthermore, in the course of the project we followed these specific goals: a) interviewing in a school unit with practical activities which help the inclusion of the law 11.769/2009; b) propose new possibilities of creating music in a school space; c) analyze the configuration of music teaching and its contribution to the fully shaping of the student; d) indicate pedagogical strategies to cooperate with music teaching in the school; e) arouse interest in teachers to enhance their pedagogical practice; f) obtaining a model of a project to be reproduced in other schools in the municipal teaching network.

We believe that knowledge and experience of music as a human and cultural expression should be systematically integrated into different areas of the curriculum in this and other schools in Olinda/Pernambuco county. Of the mandatory account of the law and the school’s reality it needs to be comprehended that the school is a forming space of the individual, where thinkers, researchers, doctors, professors, politicians, not to mention, artists and musicians are shaped.

It’s considered that music teaching in school can support the formation of a better and more creative human being, and for that reason we are writing, proposing and developing the project.

It is own nature of musical education, of the relationship that music establishes with the subject in relation to their equals, a cooperative practice which grows in a world where music is present ever since the first years of their life. The value of music, therefore, is not only its execution, focused on the aesthetics, but is intrinsically connected to the educational process through the music, as well as in relation to the forming process to be developed by the person in the world.

It is in this purport that music can be known as a form of reflexive and affective language. In this plot of psychological processes, the perception it is premised to the musical making, at the same time in which it propagates and from it a quality education (Maheirie, 2003). Through the teaching and learning processes of music, emerge and produces the perception, hence, the student can open up to a new world perception.

Beyond that, children, teenagers, young and adults, in their course of life, life concrete situations meanwhile build themselves as subjects, what is given the live usage of music, which makes itself present in their daily basis, therefore the music of their culture. This use is personal and social where are built meanings and feelings for the same. Thus, music is an integrant part of the identity construction of a subject (Wazlawick, 2010).

Therefore, the goal of this article is to analyze the teaching of music in public schools of the Pernambuco state, from what is proposed to an ongoing public policy in
Brazil, concerned in establishing mandatory music education in Brazilian schools. Our main focus will be the policy which is established by the law 11.769/2008, which addresses the obligation of music teaching in all basic education. Fixating in its qualitative and action-research methodological principles, having as a data collecting tool the simple observation and the intervention with a project of infantile musicalization in the school “criança feliz” (happy child), located in Olinda/Pernambuco city (Brazil).

Also, to be analyzed in this article, is the scholar practice’s context, where administrators, teachers, students and staff are directly involved with the micro political context, in which educational public policies are put into action. In schools there occurs clashes and redefinitions of these policies. The context of the practice is the local where politics produces effects and consequences which may represent changes and significant transformations in the original policy, according to Mainardes, 2007, p. 30.

Public policies: legal documents about the education of music in public schools of Pernambuco (Brazil)
The Law of Guidelines and Bases of Brazilian National Education (LDB 9394/96) inserted in 2008, in article 26, clause 6, the regulation that makes music as a compulsory but not exclusive content of the arts curriculum component. This achievement came from a long period of debate. This discussion has expanded since 2004, integrating groups of researchers in music education and both national and international societies, among which is remarked the presence of the Brazilian association of musical education (Associação Brasileira de Educação Musical (ABEM)), the national association of research and post graduation in music (Associação Nacional de Pesquisa e Pós-Graduação em Música (ANPPOM)) and the International Society for Music Education (ISME). These teachers and researchers, together with singers and composers of Brazilian music discussed a policy for music education in the country, which culminated in the elaboration of a Bill that refers to the compulsory teaching of music in Basic Education (Pereira, 2010).

This process of searching for the construction of the field of music education, has been marked by from the struggle to insert music in schools, as suggested in the document of the Council Opinion. National Education, (Resolution No. 2 - May 10, 2016), which defines National Guidelines for the operationalization of Music education in Basic Education. (approved in 2016). Items of the document:

Paragraph 1. The schools are responsible for:
I – to include the teaching of music in their pedagogical political projects as compulsory curricular content, treated in different ways in their times and educational spaces;
II - create or adapt time and space for the teaching of music, without prejudice to other artistic languages;
III - perform musical activities for all students, preferably with the participation of the other members of the school and local community; (Resolution No. 2, 2016 - National Guidelines for Music teaching).

Above, we recorded the attributions of schools to make the law operational. It is worth noting that unfortunately many managers and educators are unaware of this document. Below, we refer to the performance of each Department of Education of each Brazilian state.
Paragraph 2 The Education Secretariats are responsible for:
I - identify, in their teaching staff and employees, vocational professionals who can collaborate with the teaching of music in schools.
II - promote continuing education courses on the teaching of music for teachers of basic education school networks; III - support the formation of teachers and other education professionals in second degree courses in Music;
As seen in the above citations, the opinion of the National Education Council is very clear regarding what each department of education of the municipalities of the state of Pernambuco must do.

Upon the affluence of the document we formulated the intervention project. Another important document in the actual educational state in Brazil is called national common curricular basis (Base Nacional Comum Curricular (BNCC)). The latest version was approved by the National Education Council (CNE) on December 15, 2017. On December 15, the opinion and draft resolution presented by the CNE Reporting Councilors were voted. With this result, they proceeded to the homologation in the MEC (Ministry of Education), which happened on December 20th. On December 22, 2017 was published the resolution CNE / CP No. 2, which establishes and guides the implementation of the Common National Curriculum Base to be respected throughout the stages and respective modalities in the Basic Education.

For a better understanding of the proposal we have written for intervention in a school unit, here are some quotes from this important document (BNCC):
“... In elementary school, the curricular component “Art” focuses on the following languages: the visual arts, dance, music and theater. These languages articulate knowledge related to products and artistic phenomena and involve the practices of creating, reading, producing, constructing, externalizing and reflecting on artistic forms”. (BNCC pg. 190)

Following the dimensions of the “Art” component mentioned above, we mention that during the project we experience the following sequences described in the BNCC:
1) Creation: refers to the artistic making, when subjects create, produce and build; 2) Criticism: refers to the impressions that drive the subjects towards new understandings of the space in which they live.; 3) Esthesia: refers to the sensitive experience of the subjects in relation to space, time, sound.; 4) Expression: refers to the possibilities of externalizing and manifesting subjective creations through artistic procedures; 5) Enjoyment: refers to delight, the pleasure, the strangeness and the willingness to sensitize while participating in artistic and cultural practices; 6) Reflexion: refers to the process of creating arguments and thoughts about the fruition of creative, artistorical and cultural processes. (BNCC, pg 192.193)

The BNCC also records that music is the artistic expression that materializes through sounds, which are gaining shape, meaning and sense within the scope of sensitivity as well as in social interactions, as a result of diverse knowledge and values established in the domain of different cultures. (BNCC, p. 195)

Following the guidelines of the BNCC, the project carried out in the aforementioned school is following the proposal presented in the official document of our
country. The following are being contemplated during Music classes: Context and practices; Elements of musical language; Materials; Notation and musical record.

Languages-Art / Teaching Fundamentals from the 1st to the 5th grade. We also worked on some goals to develop student skills within the Music component:

1. Identify and critically appreciate various forms and genres of musical expression, recognizing and analyzing the uses and functions of music in various contexts of circulation, especially those of everyday life.
2. Understand and explore the constituent elements of music (pitch, intensity, timbre, melody, rhythm, etc.);
3. Explore diverse sound sources, such as those in the body itself (clapping, voice, body percussion);
4. Explore different forms of unconventional musical recording (graphic representation of sounds, creative sheet music, etc.), as well as procedures and techniques for audio and audiovisual recording, and recognize conventional music notation;
5. Experiment with improvisations, songwriting, and storytelling, among others, using conventional or unconventional voices, body sounds, and/or musical instruments individually, collectively, and collaboratively.

(BNCC pg. 200, 201) (BNCC pg. 200, 201)

Educational Proposal with the music education

We understand that it is healthy to include music in the school space and that with its help we can contribute to the integral development of students. We noticed every day during the development of the project that the educators were getting involved as well; and also, the management gave us full support. At the time of choosing the theme for the knowledge fair, we were surprised by the choice of the faculty that among the themes suggested by the pedagogical coordination, decided to opt for the theme, Music: An educational and social transformation tool. This shows the interest of all educators for the appreciation of music within each school unit, which is already one of the results predicted before in the objectives proposed in the project, which was to arouse interest in teachers to improve their pedagogical practice.

Regarding the knowledge fair after dialogues and listening to suggestions, some subthemes were decided for each class, following the sequence presented below:

Children education: Group V: Subtheme (Music is in me), to give students the knowledge of the sounds that the body produces; Group VI: Subtheme (The sounds around us), show students the various sounds of nature; 1st grade: Subtheme (The sound of the instruments), allow students to learn about some musical instruments and participate in the making of scrap instruments, ie rhythm band instruments; 2nd grade: Subtheme (Human voice a complete instrument), the Phoner apparatus and its execution were studied while singing; 3rd grade: Subtheme (The Music of My City), we provided the opportunity for students to study the history of the author and composer of the anthem of the city of Olinda, the state anthem of Pernambuco, and the Brazilian national anthem; 4th grade: Subtheme (The Music of the World), we seek to make the student recognize the continents and realize that each has its own musical identity, to understand that music is present throughout the world (Europe, Asia, America, Africa and Oceania); 5th grade: Subtheme (Knowing the great composers), we worked on activities to make the student
understand that the music of these composers crossed borders and eras. We studied Johann Sebastian Bach and Ludwig van Beethoven (German composers).

**Results**

At the present moment the school was greatly involved with the project, and for this reason we recognized that it has been a successful experience worthy of being recorded and shared. The results already pointed out the good commitment and acceptance of the students in activities performed at the school. In some situations, we acknowledged shy students loosen up and taking over their potential in class. In other situation we realized students who struggled with orality, improving their speech and executing phonemes due to the help of the music while singing, the motor coordination being strengthen through rhythmic activities performed. And the relationship between classmates being also strengthen through the singing plays and games shown. In everything it is noticed positive results with the execution of the project that still intends to continue until the end of the year 2030, where it is intended to realize a culmination with presentations of students. So that the family and the community around the school can also see the results.

Another important point was the choice of the knowledge fair to be developed with educational actions, with the inclusion of music in all rooms, showing that it is possible to have an interdisciplinary action happening with a collective construction among all educators. There was even a record of the activity of the knowledge fair held at school in an article on the website of the city's Education Secretariat. Also, as a result of the Knowledge Fair, the civic parade took to the streets the theme of music as a tool for social transformation. This parade is held annually in Brazil, always on September 7, the date that celebrates the independence of Brazil from the Portuguese domain. It was truly wonderful to realize that a project that included music in an interdisciplinary action could gain such a large and positive proportion.

I had the joy of knowing that our name was nominated for the award of outstanding professional 2019. The delivery of the award will be in November (2019), in the City Council of Olinda, which in this year they are again promoting a tribute to the best student of each school and also for the first time they are selecting a teacher from each school that has stood out with a project to receive the award. The criteria for the selection of the education professional was to have developed a didactic project whose actions promoted positive results that had repercussions throughout the school community. Another criterion was that the professional had a collaborative spirit, good relationship with the students, their families and professional colleagues. Then, with the indication of my name I realized that what had really won was the education and training of each student. To see the musical growth in every one of them and their intellectual development is already the greatest achievement.

**Final Considerations**

The teaching of music can be identified with the use of musical and rhythmic activities, based on Karl Orff's drawing (1895-1982), which makes an excellent contribution in his musical proposal which can be used in schools. He proposes that music in school can provide "play-making", thus stimulating the student in their education and a great satisfaction in the act of learning. This author dialogues with Duarte Jr. (2010) and Schiller (2002) about how music is performed in the classroom, in order to affirm it as a
pleasurable activity and committed to the welfare of the other, to the construction of sensitivity, in tune with the formation of a more ethical and sensitive citizen.

Lastly, we present some suggestions for strategies to improve the effectiveness of music teaching policy in the school, from three levels, namely: the levels of political actions, academic actions, and the actions of pedagogical practices. At the level of political actions, it is suggested to regulate, at the state and municipal levels, the offer of music education in schools of Basic Education. It is not enough to say that music is important, it is necessary to ensure conditions so that it can be integrative and fulfill fundamental cultural functions.

At the level of academic actions, reflections and debates should also be encouraged to strengthen the area of music and its teaching, above all, to stimulate the creation of materials that make tangible the knowledge produced in the area and to stimulate the creation of didactics resources that help this music teacher.

At the third level are the practical actions, which are related to the preparation of music teachers, expanding the possibilities of training in the area, with committed professionals aware of their role in school education, based on theorists who write, guide and fight for the theme; believing that committed teachers can do an excellent job in their school's music education. This means mobilizing people and institutions, meeting deadlines and goals and developing potentials that we often do not yet have. There are technical and physical space issues in many schools that also need improvement.

Promoting change is an urgent attitude. This text is expected to contribute to a rethinking of music practice in schools in the municipality of Olinda / Pernambuco, understood as part of a broader process, as an instrument for the formation and/or transformation of an ethical, critical and sensitive individual. Whose worldview results from a broad look, capable of multiple readings including the musical one.

We emphasize the importance of understanding what music means to students. Music is good and promotes welfare. Believing that music should be present in the formation of the individual is essential so that barriers can be broken and overcome by reflections and actions in the field of music education.

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Differences in music listening habits in groups with different educational trajectories

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Research Group in Psychology, Communication, and Advertising, Autónoma University of Barcelona

Abstract
Some studies analyse why teenagers listen to so much music and how they listen to it. However, the importance of music in children's lives contrasts with the lower impact lessons have on them. Informal music can change formal music, and home environments are essential for musical development. The main objective of this study was to understand how music students at different levels of achievement experienced listening to music. After an introductory analysis in an initial group, composed of students from elementary music schools, two additional groups of opposite trajectories were included to represent the two polar extremes of a single group. The dropout group consisted of children that had dropped out of the same schools as the initial group, and the success group consisted of talented students from a young orchestra’s members. Thus, the single group (N_UG=159) comprised three sub-groups: the Initial Group (N_IG=139), the Dropout Group (N_DG=10), and the Success Group (N_SG=10). The difference in the number of participants in each group was due to the study's Ex-Post-Facto retrospective design. The study methodology was qualitative and used a structured interview to collect data, which was analysed using codes, Bayesian Networks, and Pearson's Chi-squared test. The results show differences among the three groups: S_G had a high listening habit, listened to classical music, and had a closer relationship to their parents’ habits while U_G and D_G showed the opposite. Our findings contribute knowledge to music education regarding the family environment as a shaper of students' listening habits.

Keywords: Psychology of music, education, performance, listening to music

Introduction
Perception is biocultural: it depends not only on physical stimuli and the sensations involved, but also on their selection and organization (Howes, 2014; Vannini, Waskul, & Gottschalk, 2011). Sensory experiences are interpreted and have meaning if they are understood to be formed by cultural, ideological, and social patterns learned in childhood through developmental experiences based on a concrete context (Vargas, 1994). Moreover, the social desire to relate with others is strongly marked by variables such as learning perception (Smeding, Dompnier, & Darnon, 2017), and individual differences in education are the product of social factors (Selita & Kovas, 2018).
Recent studies continue to contribute importance to cultural context when listening to music (Vuoskoski, Clarke, & DeNora, 2016). Likewise, others have analysed the reasons why teenagers listen to so much music and how they listen to it (North, Hargreaves, & O’Neill, 2000; Tarrant, North, & Hargreaves, 2000; Wai-Chung, 2017). They have focused on different ways of understanding music in daily situations, how
listening to music is used, and the importance it plays in groups (Hallam & Papageorgi, 2016; DeNora, 2000; Sloboda, O’Neill, & Ivaldi, 2001; Randall & Rickard, 2017). The relationship between achievement and listening to music has been approached from different perspectives: tempo, melodies, repetition, and genre (Bailey & Baines, 2012; Hargreaves, 1984; Maxwell, Abrams, & Belgrave, 2016; Shenah, 1985). The majority of this research has been carried out on adolescents, a period of development when families are typically opposed to them listening to music (Bramley, Dibben, & Rowe, 2016; Carroll et al., 2014; Frizzo et al., 2005).

Understanding how listening to music could enhance education should be a central issue. Nowadays, the importance of music in children’s lives is clear, but in musical studies, this is in stark contrast to the minor impact lessons have on them (Gammon, 1996; Lawson, Plummeridge, & Swanwick, 1994; Mills, 1994; Ross, 1995). To understand this issue, research into formal, non-formal, and informal learning has grown recently (Colwell, 2015; Debrah, 2015; Trilla, 2013). Informal listening to music can change experiences in formal music education (Green, 2008), and the home environment is crucial for musical development (McPherson, 2009; Simms et al., 2018). In musical studies, having the family’s support helps students to obtain better results (Creech, 2010), as well as competence, feeling, and interaction (Creech & Hallam, 2003). Family involvement is essential to improve formal music education, but its relationship to student achievement requires better understanding. In a representative sample from Spain, Megías and Rodríguez (2003) showed that 73% of young people have a high interest in music, while, in their opinion, only 60% of their parents were interested.

In this study, we assert that music plays an important role in the lives of music students. On the one hand, we want to understand what students bring to their music studies from their informal listening to music. Our main objective was to understand typical music listening patterns for elementary music school students, their habit to listen to music on their own, and the influence family had on these students. On the other hand, the effects music classes have on students were considered, and we believe that studies on students’ music listening habits have generally not focused on different educational trajectories in music and the relationships between listening to music alone and with their families. Thus, our research question is: Is there a relationship between variables for listening to music (resources available for listening, family musical preferences, and student habits and musical genres) and different achievement groups?

To find out, we analysed the similarities and differences in the way students listened to music in an initial group, a group of students who had dropped out, and a group of students with successful trajectories. This study focused on three topics: listening to music by student, music listened by their parents, and the resources available to listen to music.

**Methodology**

This study was an ex-post-facto retrospective design, carried out in the Southeast of Spain from the 2003-04 academic year through the 2017-18 academic year. This type of design is applied to situations where it is not possible or acceptable to manipulate the characteristics of human participants. In this type of study, the dependent variable is measured and then possible independent variables are identified. It is the systematic covariance between the two types of variables that allows for the identification of
possible explanatory causes of what has been studied (León & Montero, 2006). It is usual
in this type of research that groups are similar save for some characteristics in order to
identify their particularities and, from there, establish the cause-effect relationship (Ávila,
2006). We chose this type of design because we wanted to compare different levels of
achievement and contrast them with an initial group based on variables for listening to
music. As a result, this research is also a multiple cases’ study: initial, dropout, and
success.

An introductory analysis was conducted on the initial group, whose participants
were selected from different elementary music schools in the Southeast of Spain; the only
criteria for selection was to be between the age of 8 and 12. Then, further analysis
prompted including students with similar characteristics regarding age, gender, and the
instrument studied but who had dropped out of the same music education centres. After
including the dropout group, a third group with successful outcomes was added. This
group was comprised of students from the Young Orchestra of the Province of Alicante
[OJPA] due to its proximity to the other groups’ schools, its prestige, and the significant
time commitment required for rehearsals. A total of ten participants for each group was
considered sufficient for an ex-post-facto design, and all of these participants were added
to the initial group to form the single group (Table 1) for data analysis. By way of
comparative analysis, coding (using Aquad software), differences in students’ results in
relation to families’ results using Bayesian Networks (Netica), and the interdependence
of variables using Pearson’s Chi-Squared Test (spss) were analysed.

<table>
<thead>
<tr>
<th>Participants</th>
<th>Girls</th>
<th>Boys</th>
<th>8-10</th>
<th>11-12</th>
<th>Above 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1. Initial</td>
<td>139</td>
<td>84</td>
<td>55</td>
<td>87</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>(60.43%)</td>
<td>(39.57%)</td>
<td>(62.59%)</td>
<td>(37.41%)</td>
<td>(0.00%)</td>
</tr>
<tr>
<td>G2. Dropout</td>
<td>10</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(60.00%)</td>
<td>(40.00%)</td>
<td>(20.00%)</td>
<td>(30.00%)</td>
<td>(50.00%)</td>
</tr>
<tr>
<td>G3. Success</td>
<td>10</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(50.00%)</td>
<td>(50.00%)</td>
<td>(20.00%)</td>
<td>(30.00%)</td>
<td>(50.00%)</td>
</tr>
<tr>
<td>Musical instruments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G1. Initial</td>
<td>103</td>
<td>36</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>(74.10%)</td>
<td>(25.90%)</td>
<td>(1.44%)</td>
<td>(1.44%)</td>
<td>(3.60%)</td>
</tr>
<tr>
<td>G2. Dropout</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>(40.00%)</td>
<td>(50.00%)</td>
<td>(10.00%)</td>
<td>(20.00%)</td>
<td>(20.00%)</td>
</tr>
<tr>
<td>G3. Success</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>(40.00%)</td>
<td>(30.00%)</td>
<td>(20.00%)</td>
<td>(10.00%)</td>
<td>(0.00%)</td>
</tr>
</tbody>
</table>

G1. Initial group 139 students from 8 to 12 years old, in two age ranges: 8 to 10, and 11 to 12.
G2. Dropout group 10 students who had dropped out of music lessons, in three age ranges: 8 to 10, 11 to
12, and more than 12 (due to the similarity with the ages in G1 when they dropped out). At the same
music schools as G1.
G3. Success group 10 students, as in G2, from OJPA that were selected by their conductor.

Table 1. Research Participant Groups

Following a qualitative methodology, a structured interview with open questions
was administered to groups of 8 to 15 students who each recorded their answers on their
own sheet of paper. Students were instructed to answer freely and were given prior
informed consent and their anonymity was ensured. The interview questions focused on
topics related to listening to music at home. The answers were codified into quantitative
and qualitative variables without using a pre-established guide. These are displayed with the results in Table 2.

**Results**
(All results are shown below in Table 2 and Figures 1 and 2)

**Student's music listening habits**
In the initial group, students listening habits were medium to high, in the dropout group they were medium to low, and in the success group they were high for all students (100%).

**Type of music students listened to**
The initial and dropout groups primarily listened to fashionable pop music (64.75% and 70%, respectively); folk music was mentioned by only one student in the dropout group. The success group inclined towards classical and fashionable pop music, followed by exclusively popular music.

**Comparison with the music families listened to**
In all cases, the music listened to by students and their families was different, but the differences were greatest in the dropout group (90%) as compared to the initial and success groups.

**Family habits of listening to music**
There were differences between groups regarding the students' perceptions of their parents' music listening habits. In both the initial and dropout groups, students reported low parental listening habits, but in the dropout group nearly all students (80%) reported low listening habits. In the success group, high parental listening habits were mentioned. It is also noteworthy that all groups said their families listened to less music than they did.

**Resources and Ability to listen to music alone**
All three participant groups reported low resources available to listen to music, thus this variable was not related to the different levels of achievement in the groups (59.71% in initial, 80% in dropout, and 70% in success). Also, all three groups of students generally had a place to listen to music alone, but this was higher in the dropout group than in the other two groups (around 60% in initial and success groups, and 80% in dropout).

**Relationship between family and student listening habits**
When analysing the relationship between how families and children listened to music, the independent variable (family habit) was examined in three possible cases: low, medium, and high. Then, the family’s habit was selected in each case (100% in low, medium, high) in order to observe changes in the student groups (initial, dropout, and success). In the success group, as we showed before, students’ habits were always high and further examination was not necessary. However, the Bayesian Networks were revealing for the initial and dropout groups. Thus, we suspected dependence between variables, which was tested for using a Chi-Squared analysis.
<table>
<thead>
<tr>
<th>Topic</th>
<th>Interview questions</th>
<th>Code</th>
<th>Group 1: initial</th>
<th>Group 2: dropout</th>
<th>Group 3: success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music listening habits of children</td>
<td>Q1.</td>
<td>Low</td>
<td>29.50%</td>
<td>20.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>51.08%</td>
<td>50.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High</td>
<td>19.42%</td>
<td>30.00%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Type of music children listened to</td>
<td>Q2.</td>
<td>Popular</td>
<td>64.75%</td>
<td>70.00%</td>
<td>30.00%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Classical</td>
<td>9.35%</td>
<td>10.00%</td>
<td>20.00%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Popular and Classical</td>
<td>25.90%</td>
<td>20.00%</td>
<td>50.00%</td>
</tr>
<tr>
<td>Family music listening habits</td>
<td>Q3.</td>
<td>Low</td>
<td>58.27%</td>
<td>80.00%</td>
<td>10.00%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>33.82%</td>
<td>10.00%</td>
<td>40.00%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High</td>
<td>7.91%</td>
<td>10.00%</td>
<td>50.00%</td>
</tr>
<tr>
<td>Comparison with music parents listened to</td>
<td>Q4.</td>
<td>Different</td>
<td>53.96%</td>
<td>90.00%</td>
<td>60.00%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Same</td>
<td>46.04%</td>
<td>50.00%</td>
<td>40.00%</td>
</tr>
<tr>
<td>Resources for listening to music</td>
<td></td>
<td>Low</td>
<td>59.71%</td>
<td>80.00%</td>
<td>70.00%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>15.83%</td>
<td>10.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High</td>
<td>24.46%</td>
<td>10.00%</td>
<td>20.00%</td>
</tr>
<tr>
<td>Independence of means</td>
<td></td>
<td>Independent</td>
<td>62.59%</td>
<td>80.00%</td>
<td>60.00%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Common</td>
<td>37.41%</td>
<td>20.00%</td>
<td>40.00%</td>
</tr>
</tbody>
</table>

Q1. Do you usually listen to music? How often?
Q2. What kind of music do you listen to?
Q3. At home, do your parents listen to music? How often?
Q4. Do they listen to the same music as you listen to?
Q5. Do you have resources or a way to listen to music at home?
Q6. Where are they located in your home?

Table 2. Student Music Listening Habits:
Compared with coding results (Table 2), there were variations in the initial group (Figure 1). When children reported a low listening habit for their family, there was an increase in the high code for the children's listening habit (from 19.42% to 28.20%). However, the low and the medium codes decreased slightly (from 29.50% to 24.20% for low, and from 51.08% to 47.60% for medium). When the family had a medium habit, the low code also decreased (from 29.50% to 17.20%), and the medium and high codes increased (from 51.08% to 54.00% for medium, and from 19.42% to 28.80% for high). In the case of a high family listening habit, students' habits showed virtually no difference. These results were dependent in the Chi-Squared analysis, with a value of 25.28, 6 degrees of freedom, and bilateral asymptotic significance of .000. Residuals were greater than expected when the family habit was the same as the student's habit, and less than expected when they were not.
In the dropout group (Figure 2), several small changes were identified. If the parents listened to a lot of music (high), there was very little variance in the results for their children. For parents with a medium habit, the children's results were nearly the same. When the family had a low habit, more variation was observed with more students reporting low habits and fewer reporting medium habits (from 20.0% to 25.60% for low, and from 50.00% to 42.60% for medium). A Chi-squared analysis was not possible due to the small number of participants in this group.

In the case of the success group, there were no differences observed as all participants reported a high habit of listening to music. Nonetheless, it should be pointed out that these parents were the ones who listened to the most music (55.50% reported high, compared to 11.10% in the dropout group and 7.91% in the initial group). A Chi-squared analysis was not possible, due to the small number of the participants in this group, and their overall high habit of listening to music.

**Conclusion**

The results obtained allow us to complete their analysis. With regard to coding, the results for music listening habits were important: the dropout and initial groups had medium habits and all of the success group had high habits. This also applies to the genre of music listened to, which was typically pop music in the initial group (accentuated in the case of dropouts) and classical only or both classical and pop music in the success group. It is also noteworthy that only one student, mentioned listening to folk music.
When analysing the relationship between families and children, all students reported their families listened to less music and from different genres than they did. Regarding habits, from the students' perspective, families in the initial and dropout groups had a low music listening habit. However, families were described by the students in the success group as having high music listening habits. It is also important to note that the dropout group listened to music alone the most. Moreover, they usually listened to music that was different from the music listened to by their families. Finally, the resources available for students to listen to music do not seem relevant because they were usually limited and located in a place where they could listen alone in both the success and initial groups. However, the dropout group had access to more music listening means and was its members are the ones who listen more frequently to music alone; this coincides with the differences in the type of music they listened to in relation to their families.

From this, we can conclude that the major differences between the groups’ answers do not indicate characteristics specific to each group because they were typically the same for the initial and dropout groups and opposite for the success group. This applies to all of the variables for listening to music analysed: student habits and genres, parental habits and whether the genre listened to by their children was the same, resources and places available to listen to music. Nonetheless, the dropout group is also different from the initial group for some codes that are more closely related to the informal environment, listening alone, and low listening habits. Given that all these issues are closely related to the family, this seems to be of paramount importance to successful students, and not so relevant to initial and dropouts ones. Thus, we believe that continued investigation into the influence family has on music listening habits and students' achievement in music studies is necessary.

Furthermore, the results of the relationship analysis between the family variables and the student variables show they were connected to the initial group. However, they were not related to the success group because these students’ habits were always high, nor were they connected to the dropout group as these students were more likely to listen to music alone. In this way, when students reported a low music listening habit for their families, this was related to the students' habit, increasing the incidence of low habits in the initial group, although it had practically no effect on the dropout group. When students mentioned a medium listening habit for their family, the incidence of low music listening habits of the students decreased and the incidence of medium habits increased for students, except in the dropout group which showed no differences. Finally, when a high listening habit was reported for the family, variation was only observed in the initial group, with lower incidence of low habits and higher incidence of medium habits for the students. Therefore, we conclude that there is a relationship between family and student music listening habits, above all for the initial group. In the dropout group there is no relationship, and the family seems to be less involved in their children's education. In the success group, listening to music is of great importance to both the family and the students in their everyday life.

In conclusion, the substantial differences found among the three participant groups' listening practices demonstrate relationships between listening to music and achievement, as well as the importance that music assumes as common ground between parents and children. Overall, the results show how the family environment is a shaper of student
music listening culture, which also identifies a new area for research in the studies that were the basis for this investigation (Creech, 2010; Wai-Chung, 2017).

References


Katalin Forrai and the early childhood music education commission of ISME
Beth Mattingly

University of Nebraska at Kearney (United States)

Abstract
The research for this paper was conducted in 2013-2014 as part of the research for my doctoral dissertation. I was very fortunate to have been granted a Fulbright Student Grant, an International Kodály Society Scholarship, and the Jenő Ádám Scholarship awarded by the Organization of American Kodály Educators. This funding allowed me to live in Kecskemét, Hungary for nine months, where I was able to study and conduct research at the Zoltán Kodály Pedagogical Institute of Music.

The focus of this research project was to determine the contribution of Katalin Forrai (1926-2004) in the development of early childhood music education in Hungary and its influence internationally. The research methodology for this project followed the protocol for narrative-biographical research within a historical study. An emergent design was followed as data was collected through primary and secondary sources found within the Katalin Forrai special collection held in the Archives of the Zoltán Kodály Pedagogical Institute in Kecskemét, Hungary. Data was collected through fifteen in-depth interviews with people of significance who knew and worked with Katalin Forrai, including members of her family, Elizabeth Moll, Erzsébet Szönyi, Helga Dietrich, Dr. Gábor Róbert, and Dr. Ittzés Mihály.

Katalin Forrai was an outstanding music educator who worked with Zoltán Kodály (1882-1967) to develop early childhood music education in Hungary. She developed an education model that has greatly influenced the international field of early childhood music education. In 1952, she began her most famous teaching at the kindergarten of Csobánc utca, where she taught for forty-eight years. From 1953 to 1985, she provided music programs for kindergarten and nursery school children, which were broadcast twice a week through the Hungarian Radio. Forrai also became the national supervisor of early childhood music education at the National Pedagogical Institute in Budapest. This position placed her in charge of coordinating the country’s kindergartens and teacher training program. Katalin Forrai raised the standards for the field of early childhood music education by developing a carefully designed curriculum for kindergarteners and implementing higher standards in the training of kindergarten teachers, serving as a model for the development of music education programs today. Forrai was active and held positions of leadership in international music education organizations, serving as vice-president of the International Kodály Society (IKS), president of ISME, and founder of ISME’s Early Childhood Music Education Commission.

Keywords: Katalin Forrai, Early Childhood Music Education, ECME Commission, ISME, ISME President

Katalin Forrai (1926-2004) was an outstanding music educator who worked with Zoltán Kodály (1882-1967) to develop early childhood music education in Hungary. She
developed an education model that has greatly influenced the international field of early childhood music education. In 1952, Forrai began her most famous teaching at the kindergarten\(^1\) of Csobánc utca in Budapest, Hungary, where she taught for forty-eight years. People came from all around the world to watch her teach at this impoverished primary school in Budapest. From 1953 to 1985, she provided music programs for kindergarten and nursery school children, which were broadcast twice a week through the Hungarian Radio. While she continued her regular broadcasts with the Hungarian Radio and taught at the kindergarten of Csobánc utca, Forrai also became the national supervisor of early childhood music education at the National Pedagogical Institute in Budapest. This position placed her in charge of coordinating the country’s kindergartens and their teacher training program, where she developed a national music curriculum not only for kindergarten students, but also for the training of kindergarten teachers. Through her work, Katalin Forrai raised the standards for the field of early childhood music education by developing a carefully designed curriculum for kindergarteners and implementing higher standards in the training of kindergarten teachers. Forrai later worked at the National Methodological Institute of Nurseries, where she conducted research concerning the musical development of children who were three years of age and under. She was active in several music organizations in Hungary, including the Hungarian Music Council for which she served as president. She received numerous awards for her outstanding work in Hungary, including the Apáczai Csere János Prize, which is the country’s highest award for unparalleled teaching activity. Forrai presented lectures and workshops around the world, beginning in 1964, when she first presented a demonstration workshop in Budapest at the Sixth International Society for Music Education (ISME) conference. Altogether, she gave at least 136 presentations in twenty-six countries, was active and held positions of leadership in international music education organizations, serving as vice-president of the International Kodály Society (IKS), president of ISME, and founder of ISME’s Early Childhood Music Education Commission.

Forrai became a member of ISME in 1964 as she represented the Hungarian National Committee. She remained an active member for more than thirty years and is remembered for her outstanding contribution to this organization. ISME had been founded eleven years earlier in Brussels, Belgium during the International Conference on the Role and Place of Music in the Education of Youth and Adults. It was the vision of Charles Seeger and Vanett Lawler and was described by Seeger as an “interest group” in his original proposal for the organization. This group has grown and developed into an organization today that includes members representing over eighty countries. The original focus of ISME was in “sustaining commitment to a society that was able to transcend the varied and different political ideologies of its international membership toward achieving harmony regarding the role and value of music and music education” (McCarthy, 2004). ISME was formed just after World War II at a time "when world peace dominated the political agendas of nations worldwide" (McCarthy, 2004). It was developed under the auspices of the United Nations Educational, Scientific, and Cultural Organization (UNESCO), and was aimed at promoting understanding among varying cultures while improving international relations: “Global communities such as ISME grow out of individuals communicating in meaningful ways across cultures. Therein lay the

\(^1\) Kindergarten in Hungary refers to children of the ages three to six.
challenge, the reward, the humanity, and the magnificence of this noble endeavor” (McCarthy, 2004). During the first twenty-five years, ISME developed several commissions, which were focused on areas of importance deemed by the ISME Board of Directors. By 1980, there were six commissions, including (a) Research; (b) Education of the Professional Musician; (c) Music in Schools and Teacher Training; (d) Technical Media in Music Education; (e) Music Therapy and Music Education; and (f) Music in Cultural, Educational and Mass Media Policies.

The development of the seventh commission on Early Childhood Music Education began in 1978 when Katalin Forrai raised the topic with the ISME Board of Directors at the thirteenth ISME conference in London, Ontario of Canada. She later wrote, “At every ISME Conference since 1964, I found that the music education of preschool children was regarded as an important field... Thus, in my capacity as a board member I suggested at the 1978 Conference in London, Ontario, Canada, that in addition to the existing six commissions...a group for the music education of young children be established” (McCarthy, 2004). The Minutes from the Board of Directors Meetings on August 11 and August 12, 1978 showed that Forrai was advised by the Board to prepare a proposal for the formation of such a commission (Forrai, 1978).

Forrai chose four leading music educators to accompany her as founding members of the Early Childhood Music Education Commission (ECME). These included Dr. Carol Rogel Scott of the United States, Olive MacMahon of Australia, Margaret Perron of Canada, and Professor N.A. Vetlugina of the USSR. On January 30, 1979, Forrai addressed letters to Carol Scott, Olive MacMahon, Margaret Perron, and Dmitri Kabalevsky. All four letters were similar in content, but each was personalized according to its recipient. In her letter to Olive MacMahon, she wrote:

At the 13th conference of ISME held in London, Ontario, in the summer of 1978, there arose a request to establish a separate section for experts specialized in early childhood apart from the seven commissions working within the organization. The aim of this section would be to concentrate on the music education of zero- to seven-year-old children and on the background in music of their teachers (Forrai, 1979).

According to the letter, MacMahon had been recommended by Doreen Bridges and Ann Caroll, both highly respected music educators from Queensland, Australia. Forrai also wrote to Margaret Perron of Canada:

If you are ready to collaborate with us will you, please, inform me briefly of your activities so far, of your special field of interest, research and publications. I shall ask the same from the other three section members invited to take part in this work. My idea is that although we may be far away from each other geographically, let us do everything in our power to get closer on a professional level so that cooperation should by no means be formal only but rich in content (Forrai, 1979).

In a letter to Carol Scott, Forrai wrote:

The next XIV ISME conference will be held in Warsaw in 1980. Until then we should like to outline the basic principles and schedule of the section called
“Early Childhood Education” so that they can be submitted for approval to the Board of Directors (Forrai, 1979).

Forrai asked Dimitri Kabalevsky to recommend a music educator from Russia: This is the reason why I turn to you to ask your assistance as honorary president of ISME and music teacher who has so much done [sic] for the musical education of the very young. We should like to have an excellent music expert of the kindergartens from the Soviet Union who will cooperate in the activities of this section. Could you please suggest a name? From my personal acquaintances N.A. Vetlugina, whom I very much appreciate, could perhaps assist you in finding an appropriate expert from among her own collaborators (Forrai, 1979).

Boris Dimentman, a colleague of Kabalevsky, replied to Forrai in his letter stating that Professor N.A. Vetlugina agreed to participate in the Commission. These distinguished music educators were chosen by Katalin Forrai to serve on the ECME because they held positions of leadership in their own countries or were highly respected teachers. Forrai also considered the geographical location of these experts in order to “reflect the international nature of the undertaking” (Forrai, 1980). Dr. Carol Rogel Scott, the U.S. representative, was the Chair of Music Education at Seattle Pacific University. Olive MacMahon was a professor at the North Brisbane College of Advanced Education in Brisbane, Queensland, Australia. Professor N.A. Vetlugina was a professor at the Institute of Preschool Education of the USSR Academy of Pedagogical Sciences in Moscow, USSR. Margaret Perron was a teacher from Canada who had a great deal of experience teaching K-6 music and afterschool music classes to preschool children. All four of these educators accepted the invitation from Katalin Forrai and in the Minutes of Meeting of the 1979-1980 ISME Board of Directors held in July of 1980 in Warsaw, Poland, it was moved and carried that an Early Childhood Music Education Commission be established.

In 1980, the founding members presented the goals of the ECME in a report to the ISME Board of Directors. “The Commission is to deal with preschool music education with the age group between zero and six or seven years of age. Its goals include the promulgation on the widest scale possible of results, achieved by experts specialized in this field. The activities of the commission should be based on the results of scientific research” (Forrai, 1980). The General Principles listed were:

1. From the moment of birth on, every child has the right to play and within this to the development of aesthetic and musical skills.
2. At this age musical influence should be based on personal contact, voice, joint singing and playing rather than on sound sources like radio, recordings, television to counterbalance alienation so much prevalent in our century. Children learning to speak should get acquainted first, as far as possible, with their own musical mother tongue, the traditional children’s games rooted in folk tradition.
3. Music educators knowledgeable about child development in music are encouraged to increase contact with families and people responsible for
childcare should help them to gain confidence in effectively dealing with music with children (Forrai, 1980).

It was also stated that the ECME should establish and maintain close relations with other ISME commissions.

Six papers were selected for the first ECME Special Session at the 1980 ISME Conference, which was held in Warsaw, Poland. Dr. Dorothy M. Wilson of California State University submitted the paper “Implications of Brain and Learning Research for Early Childhood Music Education.” Professor Ann Osborn of the University of Western Ontario in London, Canada submitted the paper, “In Defence of the Child: A Re-Examination of the Contribution of Zoltán Kodály to the Development of a Child’s Musical Education Within His Cultural Framework.” Dr. Shirley O’Brien of the University of Arizona submitted the paper, “Music and the First Three Years of Life: Early Childhood Music Education.” “Early Childhood Music Education” was another paper submitted by Marilyn P. Zimmerman from Champaign, Illinois, as well as, “Montessorian Music Education: A Unique Approach,” by Jeanne S. Rubin of Kent State University in Canton, Ohio. “The Influence of Music on the Development of Young Children: Music Research with Children between 6 and 40 Months,” was the paper submitted by Katalin Forrai.

In a letter addressed to the Secretary General of ISME, Professor J.A. Ritchie, Katalin Forrai asked permission to assign Carol Scott as co-chairperson of the ECME. Katalin Forrai and Carol Scott carefully reviewed papers submitted for the ECME Session, and evaluated them according to their adherence to the following criteria: (1) the theme of the conference, (2) contribution to the theory of music instruction, (3) effective communication, and (4) sound scholarship.

Forrai served as the founding chair of the ECME commission from 1978 to 1982. "Few among our ranks have served ISME with such distinction" (McPherson, 2006). In her address at the 2013 International Kodály Society Symposium, held in Kecskemét, Hungary, Elizabeth Moll stated:

It is very important here to state that before Katalin Forrai, there was no established field of early childhood music. … It was Katalin Forrai who established the Early Childhood Commission of the International Society for Music Education. This was the first international platform for the exchange of ideas and information about young children’s music education that was developmentally appropriate. This was new: early childhood music education based upon research and understanding of the universal musical development of the young child. Kati’s work through ISME set the example, the gold-standard, for the world. In fact, Kati was the first and only early childhood specialist to become President of ISME (Moll, 2013).

From 1976 to 1986, Forrai served on the ISME Board of Directors and from 1986 to 1992 she held the offices of President Elect, President, and Past-President. In her acceptance speech, she said: “I feel greatly honored to assume the presidency of the International Society of Music Education which I accept respectfully and at the same time with a deep sense of responsibility. This honor has not been conferred only on me personally, but also upon my country, Hungary, and my special field, preschool music education and teacher training” (Forrai, 1988). Forrai attended twelve ISME conferences
and six ECME Seminars, where she presented two demonstration workshops and seven research papers.

In 1993, Forrai organized the ISME Early Childhood Course, which was held in Kecskemét, Hungary from June 14th through the 25th. This special course was designed to provide an opportunity for teachers interested in music education for preschool and kindergarten aged children. The ECME and the Hungarian section of ISME sponsored the event. While the course was held at the Kodály Institute, it was not a Kodály course. The informal goals provided opportunities for teachers from around the world to meet and share videotapes of their own teaching, songs and games, ideas and materials, common concerns and interests" (Sims, 1992). The course was taught in English by a faculty of internationally known music educators from around the world. There were forty-four participants representing various countries, including Korea, Japan, Malaysia, China, Taiwan, Argentina, Brazil, New Zealand, South Africa, Australia, the United States, Mexico, Canada, Finland, Holland, Belgium, Germany, Italy, and Hungary. Classes included vocal training, games, musicianship, musical styles, pedagogy, and group singing.

In 1994, Forrai was awarded an ISME lifelong honorary membership in recognition for establishing the field of early childhood music education around the world. In an article featuring Forrai, János Breuer wrote:

No matter how much Katalin Forrai has done for the Hungarian music culture for more than forty years, it cannot monopolize her personality and activity. She has become more and more an international phenomenon since the ISME conference in Budapest; she has held lectures, courses in four continents…; she has been invited back to several countries that is an expression of appreciation. She has been a board member of ISME since 1976. In 1978, she founded the Early Childhood Commission of ISME and she was chairman of it for four years. She became President Elect at the XVII Conference in 1986 in Innsbruck and she has been President since the General Assembly of the organization held in Canberra in 1988. She has a great practice not only in music education but in music diplomacy as well. Her capacity to make contacts and her gentle but resolute personality has already become widely known in the international music life. Katalin Forrai possesses many awards. She was the first among the Hungarian music educators to get the highest Hungarian award for pedagogy, the Apáczai Csere János Prize in 1982, on the 100th anniversary of Zoltán Kodály’s birth. But, for her, it is the greatest award to see the smiling faces of the small, singing children, the expression of joy that only music can give to our life (Breuer, 1988).

The ECME is still active today, and the goals of this organization are similar to those established by its founding members. Its current primary focus is to promote music in the lives of all young children and to encourage an international forum for the exchange of ideas and research concerning the music education of young child. The current commission has expanded the age range to include pre-birth to eight years. The goals now include the “examination of issues which are of importance to the future of music in the lives of young children such as the influence of mass media and technology; the rapid change of society; the role of the family in musical development; the role of the
culture and schooling in musical development; and preservation of cultural traditions in the light of the breakdown of cultural barriers” (McCarthy, 2003). The Commission continues to hold biennial conferences or seminars in conjunction with ISME world conferences every two years, as well as presenting early childhood sessions at larger ISME world conferences.

References
A survey of elementary instrumental music assessment practices in the United States

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Abstract

While much attention has been given to the need for assessment and accountability in education, little research has been done showing how to assess and grade music students effectively. Most of the research related to music assessment involves surveys of music teachers’ assessment and grading practices. There is little research examining assessment practices in elementary instrumental music programs, a stage that might possibly be the most important concerning instrumental music. The purpose of this study was to identify what elementary instrumental music programs look like across the nation; identify assessment techniques and strategies being used in the classroom, determine what skills and knowledge are being assessed, pinpoint barriers for assessment practices, and examine perceptions of assessment in the classroom.

Surveys were sent to 2,102 elementary instrumental music teachers across the United States. The survey asked the participants to rate how often they used various assessment tools, how important various categories are in a performance assessment, how often various musical skills are assessed in an elementary band/strings class, identify barriers to the assessment of student learning, and provide information regarding their program structure. Surveys were returned by 537 participants.

Results found that performing on instruments and note/rhythm reading music were the most commonly assessed skills by the participants. The most commonly used assessment tools were found to be the individual playing test, self-assessment, and rubrics. The participants rated posture and hand position/bow hold as the two most important criteria in a beginning instrumental music student performance assessment. Results of this survey are consistent with existing research on assessment practices in elementary and secondary music classrooms. Teachers are assessing their students. However, assessment occurs on an inconsistent basis and is not always based on a devised curriculum. Elementary instrumental music teachers are using a mixture of traditional assessments and assessments based on current shifts in educational trends.

A majority of assessments used in elementary instrumental music classrooms can be considered summative assessments. The world of assessment is changing. No longer does assessment mean test or final evaluation. In music education, current attention to student-centered approaches for learning affects our understanding of student assessment. This view to curriculum reform requires new perspectives for assessment. There is a need to move beyond the summative use of assessment to assign grades to examining the roles of assessment in supporting and enhancing learning.

Keywords: assessment, instrumental music, music performance, elementary.
Introduction

Assessment is at the center of current efforts to improve education in the United States, and the act of assessing student learning is one of the most important responsibilities a teacher assumes (Miller, Linn, & Gronlund, 2009). Most of the research related to music assessment involves surveys of elementary and secondary music teachers’ assessment and grading practices. Over the years, researchers have confirmed that assessment approaches adopted by music teachers in elementary general music (Barkley, 2006; Carter, 1986; Nightingale-Abell, 1994), secondary choral music (Kotora, 2005; McClung, 1996; McCoy, 1988; Tracy, 2002), and secondary instrumental music (Hanzlik, 2001; Kancianic, 2006; McCoy, 1988; Sears, 2002; Sherman, 2006; Simanton, 2000) are distinctive and seldom align with the recommendations of assessment experts.

Policy initiatives often require the implementation of specific assessment measures to provide evidence of student achievement (Ciorba & Smith, 2009). National standards and the widespread adoption of standards at the state and local levels in music are causing teachers to seek ways to assess their students more effectively. The national standards for arts education were first established with the adoption of the Goals 2000: Educate America Act. Authentic, standards-based assessment was championed as part of this new standards movement. The 1994 standards document did much to establish that simply adopting the standards was not enough and appropriate use of these standards could lead to deeper understandings and authentic connections. In 2014, the standards were updated to account for 20 years of educational and technological progress and to conform to contemporary trends in education. These new standards focus on music literacy beyond reading and notating music, and on using all three artistic processes to create, perform, and respond to music with understanding. With understanding and literacy as the goal, the new national standards have become compatible with many contemporary curriculum designs and also include model cornerstone assessments to serve as examples for appropriate assessment of student achievement in the learning process (Shuler, Norgaard, & Blakeslee, 2014).

Individual assessment in the music classroom can be a difficult task. There are still many music teachers who believe that the subjective nature of the art form prevents them from objectively assessing their students’ achievement (Asmus, 1999). Music classrooms typically have larger student-teacher ratios, and assessment often must be completed one student at a time. Other reasons teachers have cited for not employing effective assessment strategies in their classrooms include inadequate instructional time (Kotora, 2005; Lehman, 1998; Nightingale-Abell, 1994; Russell & Austin, 2010; Simanton, 2000; Tracy, 2002), school size (Hanzlik, 2001; McCoy, 1991; Simanton, 2000), heavy workload in terms of students taught (Kancianic, 2006; Kotora, 2005; Lehman, 1998; Nightingale-Abell, 1994; Russell & Austin, 2010; Simanton, 2000; Tracy, 2002), difficulty in recording results and maintaining control of student behavior while conducting assessments (Kotora, 2005), and lack of training in assessment (Kotora, 2005; Nightingale-Abell, 1994; Russell & Austin, 2010).

Music achievement can be easily measured with a clearly defined learning objective based on a national or state curricular standard (Asmus, 1999; Lehman, 1998). Lehman (1998) critiques that “if the purpose of grades is to document the degree to which students are learning what they are expected to learn, it follows logically that grades
should report to what extent students are meeting the standards (national, state, or local) that represent the goals of the school district” (p. 37).

Standards based grading is a way to provide students and parents with growth-producing feedback about classroom achievement in a reliable and valid way (St. Pierre & Wuttke, 2017). Standards-based grading is criterion-referenced; thus, students must display mastery of objectives within the subject area. Since a set of criteria must be met and grades reflect only student performance within the subject area, teacher subjectivity is reduced and reliability and validity of grades are improved (Paeplow, 2011). In 2010, Russell and Austin found that only 2% of school districts were using standards based grading practices. More recently, St. Pierre and Wuttke (2017) indicated that 39.58% of their survey participants were using standards based grading. When asked to provide the reason(s) why they did not use standards based grading, teachers described lack of knowledge about standards based grading as the reason.

There is little research on assessment practices in elementary instrumental music programs. Assessment at the elementary level is critical as this is the time when fundamentals of instrumental performance are developed. Assessment is a powerful tool that guides instruction, and if used effectively, can improve student learning.

The purpose of this study was to identify what elementary instrumental music programs look like across the nation; identify assessment techniques and strategies being used in the classroom, determine what skills and knowledge are being assessed, pinpoint barriers for assessment practices, and examine perceptions of assessment in the classroom. Research questions for this study are: 1. What is being assessed in a beginning band/orchestra program? 2. How are skills and knowledge being assessed by directors of elementary school band/orchestra programs? 3. How frequently are skills and knowledge being assessed by directors of elementary school band/orchestra programs?

Method
Participants
The population of this study were teachers of instrumental music in an elementary school setting in the United States. In an effort to ensure proportional representation, the goal was to identify a minimum of 50 teachers from each state. Data were collected for 46 states; 4 states did not have instrumental music programs at the elementary level. Schools were classified as urban, suburban, or rural and a stratified random sampling technique was employed (n=2,310). Email addresses were collected and entered into a database by region: North, South, Midwest, Northeast, Mid-Atlantic, West, Pacific Northwest.

Survey
Survey invitations were organized by region and distributed using Survey Monkey. The survey link remained active for 6 weeks. Participants completed a 14-item survey across 3 sections that took between 7 and 10 minutes to complete. The first section consisted of 7 questions related to class type, class format, and program structure. The second section consisted of 4 questions focusing on assessment practices used in their classrooms. The final section consisted of 3 questions examining teacher perceptions of assessment in the elementary instrumental music classroom.

Development of the survey instrument began with an in-depth review of questionnaires used in prior studies of elementary and secondary teachers’ assessment
and grading practices (Antmann, 2007; Hanzlik, 2001; Kotora, 2005; Russell & Austin, 2010; St. Pierre & Wuttke, 2017; Tracy, 2002). As a result, each survey item stemmed from a finding in previous research. Survey items were written as short sentences; terminology was appropriate for the target participants.

A piloting process involving 10 music teachers completed a draft of the survey to determine completion time, make suggestions for clarification of items, and to establish a measure of consistency. The pilot group took the survey twice to allow for test-retest reliability. Cohen’s k was conducted to determine the agreement between the test and retest on each survey item. Results ranged from substantial to almost perfect, k= .80-1.00, thus demonstrating consistency in the survey instrument over time.

Results
Survey
From the 2,102 survey invitations that were deliverable, 537 usable responses were received, yielding a response rate of 26%.

Summary of Survey Results
Section 1 consisted of seven questions related to class type, class format, and program structure. These questions were aimed at describing what elementary instrumental music programs look like across the nation; Question 1: What classes do you teach? Question 2: What grade level do students begin a band instrument at your school? Question 3: What grade level do students begin a string instrument at your school? Question 4: How long are your class sessions? Question 5: How often does a student receive instruction per week? Question 6: How is your program structured? Question 7: How many schools do you teach at?

A majority of the respondents taught both band and orchestra with a small percentage also teaching some form of general music. An additional 1% identified classes taught through the open-ended response. These classes consisted of guitar (1%), ukulele (1%), arts integration (1%), and choir/chorus (3%).

Elementary instrumental music programs tend to start students on a band instrument in either 4th grade (46.15%) or 5th grade (60%) with a small percentage beginning in 6th grade. Three percent have no band programs in the elementary school where they teach.

A majority of programs start students on string instruments in either 4th grade (48.55%) or 5th grade (41.91%) with a smaller percentage starting them as young as 2nd grade or as late as 6th grade. Twenty five percent indicated orchestra was not offered in the schools where they teach.

Classes range in length from 20 minutes to 60 minutes with a few teachers reporting class time less than 20 minutes. Many of the write in comments indicated lessons were typically 30 minutes with full ensemble rehearsals ranging between 45 and 60 minutes.

A majority of students receive instruction either once a week (37.05%) or twice a week (55.36%) with around 10% indicating students receive instruction 3 or more times per week. Two percent indicated students receive instruction 5 times per week. Additionally, 27% indicated they teach on rotating schedules which results in students
receiving instruction ranging from 1 to 3 times per week depending on the schedule rotation.

Elementary instrumental music programs are unique and vary from school to school. A majority are pull out programs (67.42%) where students are pulled from other classes in order to receive instruction. A majority of these programs receive instruction in a combination of group lesson instruction and full ensemble rehearsals. I was pleasantly surprised to see an increasing percentage of programs where instruction is received during a designated class time (34.46%) where students are not missing another class in order to attend. However, there is still a large number of programs that meet before or after school, during recess, or other arts classes.

Elementary instrumental music teachers can teach at as many as 9 different schools. While a majority of the participants taught at 3 or fewer schools, 21.2% taught at 4 or more schools, mainly string orchestra teachers.

Section 2 consisted of four questions related to assessment practices used in elementary instrumental music classrooms. These questions were aimed at gathering insight regarding the types of assessment tools being used in classrooms across the nation and what skills are being assessed by elementary instrumental music teachers in the United States; Question 8: Do you have a set of required instrumental music skills assessments to be administered at the elementary level? Question 9: Please rate how frequently you use the following assessment tools in your band/string classes. Question 11: Please rate the following items as to how frequently you assess them in your beginning band/string classes. Question 13: How do students/parents receive feedback on their performance in your classes?

Question 8 asked if elementary instrumental music teachers have a set of required skills assessments to be administered as part of their curriculum. A majority (57.36%) did not have any required assessments to administer while 42.64% indicated that they did.

The most commonly used assessment tool used is the individual playing test. Other frequently used assessment tools included self-assessment, rubrics, group playing tests, and practice charts/journals. Moderately used assessment tools included the use of games, collaborative learning strategies, and checklists. Many teachers referenced the use of karate belts adapted from the Recorder Karate curriculum as ways of assessing their students. The use of technology, written exams, worksheets, and portfolios are not used as frequently to assess student learning.

The most frequently assessed skills at the elementary level are posture, hand position/bow hold, the performing of notes accurately and the performing of rhythms accurately. Additionally, the ability to identify notes and rhythms is frequently assessed. Assessment of creativity such as improvisation and composition are a rare occurrence. Tone quality, ensemble playing, and sight-reading were indicated as “other” areas being assessed by elementary instrumental music teachers.

Elementary instrumental music teachers report student progress in a variety of ways. A majority of teachers provide summative feedback through report cards indicating either a letter grade or an evaluative grade such as Excellent, Satisfactory, or Unsatisfactory. Formative feedback is provided through verbal feedback given to the student, emails to parents, phone calls, and through online classroom platforms such as Google classroom, Dojo, and Blackboard. Others indicate that no summative feedback is
provided since band and orchestra are not part of the school day and meet outside of the traditional school day.

Section 3 consisted of four questions related to teacher perceptions of assessment in the elementary instrumental music classroom. These questions were aimed at gathering insight as to what teachers perceive as barriers to assessment in the classroom and what skills should be assessed at the elementary level; Question 10: Please Rate the following items as to their importance in the performance assessment of a beginning band/string student. Question 12: Please identify the following items that you consider (or experience) to be barriers to your ability to adequately assess student learning in your classroom. Question 14: What do you consider to be the most important aspect of instrumental music education at the elementary level? Can it be assessed?

The skills we actually assess and the skills we feel are important to assess pretty much line up (see Table 1). The highest ranked skills as to the importance of being assessed by elementary instrumental music teachers are hand position/bow hold, posture, rhythmic accuracy, and note accuracy. These skills were considered as essential to the assessment of student performance. The ability to maintain a steady pulse and air support/bow speed/bow pressure were ranked as very important. Assessment of creativity such as improvisation and composition were considered somewhat important. Tone quality, ensemble playing, sight-reading, and playing by ear were indicated as “other” areas important to the assessment of student performance.

<table>
<thead>
<tr>
<th>Music Skills</th>
<th>Frequency of Assessment in Beginner classes (Scale of 1 to 5, 5 being Very Frequently, 1 being Never)</th>
<th>Importance for Performance (Scale of 1 to 5, 5 being Essential, 1 being Not Important)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posture</td>
<td>4.47</td>
<td>4.40</td>
</tr>
<tr>
<td>Hand position/Bow hold</td>
<td>4.47</td>
<td>4.46</td>
</tr>
<tr>
<td>Note Accuracy (performance of)</td>
<td>4.47</td>
<td>4.23</td>
</tr>
<tr>
<td>Rhythmic Accuracy (performance of)</td>
<td>4.46</td>
<td>4.31</td>
</tr>
<tr>
<td>Note Reading</td>
<td>4.32</td>
<td>4.43</td>
</tr>
<tr>
<td>Rhythm Reading</td>
<td>4.22</td>
<td>4.32</td>
</tr>
<tr>
<td>Pulse/Tempo</td>
<td>3.80</td>
<td>3.93</td>
</tr>
<tr>
<td>Air Support/Bow Speed/Bow pressure</td>
<td>3.79</td>
<td>3.92</td>
</tr>
<tr>
<td>Articulation</td>
<td>3.51</td>
<td>3.49</td>
</tr>
<tr>
<td>Intonation</td>
<td>3.15</td>
<td>3.21</td>
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<tr>
<td><strong>Dynamics</strong></td>
<td>2.66</td>
<td>2.56</td>
</tr>
<tr>
<td><strong>Evaluating Music and Music Performances</strong></td>
<td>2.61</td>
<td>2.89</td>
</tr>
<tr>
<td><strong>Phrasing</strong></td>
<td>2.45</td>
<td>2.47</td>
</tr>
<tr>
<td><strong>Listening to and Analyzing Music</strong></td>
<td>2.29</td>
<td>2.53</td>
</tr>
<tr>
<td><strong>Style</strong></td>
<td>2.22</td>
<td>2.31</td>
</tr>
<tr>
<td><strong>Expression</strong></td>
<td>2.17</td>
<td>2.22</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>2.05</td>
<td>2.20</td>
</tr>
<tr>
<td><strong>Composition/Arranging</strong></td>
<td>1.54</td>
<td>1.74</td>
</tr>
<tr>
<td><strong>Improvisation</strong></td>
<td>1.47</td>
<td>1.88</td>
</tr>
</tbody>
</table>

Table 1. Comparison of Music Skills Assessed to Skills Valued as Important to Performance

There are many situations that function as barriers that prevent a teacher from effectively assessing student learning. Participants indicated inadequate instructional time (70.34%), student forgetfulness, such as failing to bring instruments and supplies to class (67.30%), students’ inability to practice their instruments outside of the school setting (65.4%), and large class sizes (57.79%) as barriers to effective assessment of student learning. Fifteen percent noted inadequate teaching space as a barrier to assessment of student learning; noting teaching in closets, hallways, and stages while physical education classes are taking place or when lunch is occurring.

The final question was an open-ended question. Responses were analyzed and categorized by content. Question 14 asked participants to identify what they consider to be the most important aspect of instrumental music education at the elementary level. Responses to this question ranged from fundamental skills to having fun. A majority (64.4%) indicated that getting students started on the right foot with the fundamental skills needed to be successful musicians was the most important aspect of an elementary instrumental music program. Thirty six percent indicated making learning positive and having fun is what elementary instrumental music is all about. Musical expression, developing ensemble skills, and musical creativity were also mentioned as important aspects of an elementary instrumental music program.

**Discussion**

Results of this survey are consistent with existing research on assessment practices in elementary and secondary music classrooms. Teachers are assessing their students. However, assessment occurs on an inconsistent basis and is not always based on a devised curriculum. Elementary instrumental music teachers are using a mixture of traditional assessments and assessments based on current shifts in educational trends. It was interesting to note the frequent use of self-assessment in the elementary classroom. The use of self-assessment aligns with the student-centered education trends that today’s
educators face. However, research is inconsistent with the reliability and validity of self-assessment when it comes to measuring musical achievement, especially with younger students.

A majority of assessments used in elementary instrumental music classrooms can be considered summative assessments. The world of assessment is changing. No longer does assessment mean test or final evaluation. In music education, current attention to student-centered approaches for learning affects our understanding of student assessment. This view to curriculum reform requires new perspectives for assessment. There is a need to move beyond the summative use of assessment to assign grades to examining the roles of assessment in supporting and enhancing learning.

Music teachers are responsible for providing valid and reliable information of their students' performances in relation to a wide variety of learning outcomes. Teachers are also responsible for providing feedback to help students extend their understanding of musical concepts and to assist all students in enhancing their musical proficiencies. Students are encouraged to reflect on assessment information as a way to gain personal insights into how they are performing and to enhance their perceptions of what they need to do in order to comprehend music with greater understanding and to improve their technical expertise in musical performance.

Many barriers exist for teachers in elementary instrumental music programs. The lack of a permanent teaching space, lack of a consistent instructional time, inadequate instructional time (sometimes less than 20 minutes a week), and large class sizes with behavior management issues provide unique challenges for these teachers both when it comes to delivering instructional content as well as the assessment of student learning. Support from principals and administrators is needed to provide these teachers with the equipment and tools needed to properly assess student learning and improve instruction. “The need for teachers to document student learning in music has become critical for demonstrating that learning is taking place in America’s music classrooms. Assessment information is invaluable to the teacher, student, parents, school, and community for determining the effectiveness of the music instruction in their schools” (Asmus, 1999, p.22).

References


Keeping it real: Renewing contemporary music pedagogy and curricula in higher education

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**Abstract**

The Bachelor of Contemporary Music (BCM) at Southern Cross University (SCU) was the first contemporary music degree offered in Australia. From its 1986 origins, the BCM course remains at the forefront of contemporary music higher education in Australia. This paper discusses the processes and outcomes of curriculum renewal of the BCM and pedagogical approaches that have responded successfully to change; incorporating diverse abilities and needs of generations of learners, significant developments in learning environments, evolutions in contemporary music industries, and integration of technology into education. My curriculum was originally based on Bruner’s Spiral Curriculum (1960, 1996), musical literacy embedded in first year through foundational subjects of music theory, musicianship, instrumental studies, and ensembles; and further developed in second year through recurrent and deeper studies. In third year, concepts are practically applied through large ensemble performance, composition, ensemble direction and conducting, and pre-service teaching. Recent curriculum renewal has strengthened this curriculum by including elements of Efland’s (1995) Lattice, and Kolb and Kolb’s (2005) Experiential models. Advanced knowledge of subject matter and expertise within the knowledge domain (Efland, 1995) are concepts particularly relevant for contemporary music and jazz studies, building a knowledge base in genre-specific music theory, advanced harmonic vocabulary, scales and modes and their application for improvisation, and applicable and transferable musical skills.

This research focuses on: 1. considerations for contemporary music and jazz curricula and pedagogies, 2. strategies to enhance capacity development and inclusion, 3. the imbalance of instruments played and over-representation of guitarists and vocalists, 4. innovations in learning/teaching, assessments and resource creation, 5. teacher training and industry preparation. Multiple qualitative methods frame this research, aligning with practice-led and practice-based research. Formal data collection includes regular cycles of peer review, student feedback, focus group discussions, reflective practice, autoethnography and five-yearly course reviews.

The curriculum and pedagogy described in this paper is highly relevant to musicians from school leavers, to mid-career professionals and mature-aged lifelong learners. Underpinned by constant musical principles of musicianship, musical practice and creativity, these concepts are frequently revisited through deeper and richer levels of learning; being applied in individual performance and ensemble practice and composition and arranging tasks. Through this process, students gradually transform into self-directed, autonomous learners, applying contemporary musical knowledge and skills to new learning, performance and teaching situations, whilst engaging in individual learning projects forming a cycle of renewal that can sustain a musical career and a lifetime of creative and professional fulfilment.

**Keywords:** Contemporary music, jazz, curriculum, pedagogy
Introduction
The Bachelor of Contemporary Music (BCM) at Southern Cross University (SCU) was the first contemporary or popular music degree offered in Australia. From its initial inception as a Bachelor of Arts program in popular music at the Northern Rivers College of Advanced Education in 1986, this course has remained at the forefront of contemporary and popular music higher education in Australia. Throughout my almost twenty-year tenure lecturing into this program, I have implemented recurrent cycles of curriculum renewal and adapted pedagogy to accommodate: the diverse abilities and needs of generations of learners, significant developments in higher education learning environments, evolutions in contemporary music industries, and greater integration of technology into teaching and learning. This paper discusses the processes and outcomes of curriculum renewal of the BCM course and pedagogical approaches that have succeeded in responding to external and internal agents of change.

Theoretical/Pedagogical Background
Pedagogical models of contemporary music curricula are usually performance-based, geared towards learners who already possess an interest in the subject matter and aspire to success in the contemporary music industry. The model that Brown (2019) suggests for a K-12 curriculum in jazz education reflects traditional approaches to classical music education, namely: jazz history and styles, jazz eras, jazz appreciation, performance, listening, improvisation, and ensemble. While this approach emulates the pedagogy and content type found in classical music studies, Lebler and Weston (2015, p.129) advocate the importance of popular music programs remaining industry-relevant and responsive to change. Referring to Griffith University’s Bachelor of Popular Music (BPM) degree, they argue that graduate outcomes “are dependent on a dynamic and arguably volatile music industry”, therefore “the relevance of the degree to that industry is crucial”. Following program revision of the BPM, important changes were implemented into their degree to align it more closely with the popular music industry. These revisions included genuine engagement with live performance practice, work-integrated learning, employment in related industry fields such as recording studios and music management (Lebler & Weston, 2015, p.131-2). Lebler and Weston document a 15-year history of the BPM at Griffith University, Australia, and argue how curriculum and “pedagogy can respond to a continually changing industry demands” (p. 125).

My areas of teaching in SCU’s Bachelor of Contemporary Music degree are contemporary musicianship (theory, aural training), ensemble practice, choir, ensemble direction, Western Art music, and pre-service teacher preparation. The curriculum I originally created was based on Bruner’s Spiral Curriculum (1960, 1996), musical literacy being embedded in first year through foundational subjects of music theory, aural musicianship, instrumental studies, small and large ensembles. In second year, musical literacy and skills are further developed through recurrent and deeper studies. In third year, they are practically applied through large ensemble performance, studies in various musical genres, training in ensemble direction, conducting and pre-service teaching.

Elements of Efland’s (1995) model underpinning my revised curriculum are advanced knowledge of subject matter and expertise within the knowledge domain. These concepts are particularly relevant for contemporary music and jazz studies, building a knowledge base in genre-specific music theory, advanced harmonic vocabulary, a range of scales and modes and their application for improvisation. Other key features of Efland’s (1995) lattice model are diverse strategies and approaches, and applicable and transferable skills.

An array of teaching strategies is utilized: aural training, music listening and analysis, score reading and analysis, solo and ensemble performance, choir and guitar ensemble, composition and arrangement. These activities also exemplify Kolb and Kolb’s (2005) experiential learning, facilitating active engagement in environments conducive to learning through an “ingenious blend of challenge and support” (Kegan, 1994, p. 42 in Kolb and Kolb, 2005, p. 207). In second and third years, knowledge is created by transformation (Kolb and Kolb, 2005), through higher-level development of instrumental technique, performance practices and learning of increasingly advanced repertoire. Students learn practical performance and ensemble skills, and develop industry expertise which can facilitate their holistic adaption to the world (Kolb and Kolb, 2005). Similarly, musicianship skills are applied and extended into original compositions and arrangements, creative knowledge and outputs achieved by transformation of theory and practice into original musical works.

Aim/focus of work
This paper aims to report on the reviews and refinement of the contemporary music and jazz curricula I have developed through teaching into an Australian contemporary music university degree. The focus of this curriculum is creative practice, combining instrumental/vocal studies, music theory, musicianship, practical ensemble classes and choir. The research involves identifying best practice teaching strategies in each of these subject areas, and pedagogical models underpinning these teaching strategies. Approximately two-thirds of the students are male, mostly young adults. The cohort comprises learners with diverse musical backgrounds, some with formal music education but mainly students possessing little formal music training, self-taught in popular music and predominantly guitarist and singers. A long-term objective of the music curriculum is to develop knowledge and skills applicable to music industries and music teaching, at a level qualifying graduates to transition successfully into vocations in the contemporary music industry.

This research focuses on: 1. wide-ranging considerations for contemporary music and jazz curricula and pedagogies, 2. strategies used in this curriculum for capacity development and inclusion (particularly of female learners), 3. the imbalance of instruments played and the over-representation of guitarists and vocalists, 4. innovations in learning/teaching and assessments, e.g. resource creation, and 5. teacher training and industry preparation.

Methods/approach
Multiple qualitative methods over two decades of teaching contemporary music in higher education frame this research into curriculum development, pedagogical practice and resource development. The methodologies align with practice-led research (Candy,
2006), interrogating the processes of knowledge creation, my personal pedagogical strategies, and the process of creative work in the context of resource creation. Practice-based research (Candy, 2006) is the other significant approach, with creative works constituting research outcomes, resulting in musical resources, compositions and arrangements essential to the facilitation of my pedagogy. Interrogation of my own and colleagues’ teaching practices has continuously occurred during this time. Formal research includes regular cycles of peer review, student feedback, focus group discussions, reflective practice and autoethnography. This research is also informed by five-yearly course reviews, the most recent being 2018.

Results/summary of main ideas

Considerations for contemporary music and jazz curricula and pedagogies

Significant considerations for developing and renewing contemporary music and jazz curricula are: instrumental/vocal abilities, musical literacy, ensemble skills and improvisatory expertise. Contemporary music students enter the BCM course with diverse levels of experience and expertise, ranging from very limited to professionally adept. Such variety greatly impacts group and ensemble work, requiring discernment from teachers about what content and learning pathways are appropriate to each student, and how each student blends with, and contributes to, group and ensemble classes.

Similarly, the reading ability (or lack thereof) of individual students dictates pedagogical approaches. Most students entering from a popular music background have little notation reading ability. Ensemble classes are an ideal vehicle for improving reading provided that students undertake sufficient independent sight-reading practice. Charts may be amended to accommodate the range of instruments available in each ensemble, and modified to allow for individual student’s reading ability. In ensemble classes, students are allocated melodic lines forming an instrumental section’s part, the lines ranging from advanced, intermediate to beginner levels. Lines are allocated according to each player’s ability, their graduated levels of difficulty motivating students to accomplish the easier levels and work towards the more challenging. Techniques of improvisation, for instrumentalists and vocalists, are taught in individual studio lessons, supported by musicianship classes covering the application of scales, modes and arpeggios to chord passages and song sections. These concepts are further applied in small and large ensemble classes, and refined by practising building solos and shaping the structure of improvisations.

Strategies for capacity development, inclusion and transformation

The strategies described above are designed to facilitate capacity development in all music students. Inclusion is an underpinning ethic permeating all SCU’s courses. Many of our students are first-in-family to undertake tertiary education, and most are from rural and regional locations. Many of the female students are singers, and all singers are taught to multi-task in ensemble classes by playing another instrument, such as keyboard, guitar or percussion as well as singing in ensembles. They are expected to acquire musical literacy and competence in each performance genre to enable them to knowledgeably contribute to ensemble classes, interpret musical genres with stylistic authenticity, and compose and arrange their own music in a variety of styles. At the end of each academic year, the most accomplished students present a musical showcase concert, available to the
public and the university community. This showcase, which positively exhibits the talents of our students and reflects their progress through the course, is enthusiastically supported by students’ family and friendship networks. Transformation occurs when students transition from being passive learners or recipients to self-directed autonomous learners. This transformation occurs at various stages throughout the course, but is particularly noticeable in third year and at Honours level. During third year, many students undertake capstone subjects such as Independent Project or Professional Placement or an equivalent work-integrated learning or community-engaged opportunity. These subjects, whose activities and learning outcomes are devised by each student with minimal academic supervision, are semi-autonomous learning projects that demonstrate the increasing independent learning of the student. Many are performance, composition and/or recording projects of students’ original creative works which may eventually be extended to Honours, Masters or PhD research.

**Imbalance of instruments played and over-representation of guitarists and vocalists**

Because the majority of our student cohort are guitarists and singers, the roles of these instruments in ensembles need to be extended to acquire the learning objectives of the BCM course. Instrumental parts of notated charts in ensembles are transcribed for voices, e.g. melody and harmony parts. Similarly, section parts (e.g. for horns or saxes) are transcribed for different guitarists. This teaching strategy engages all the students in ensemble, giving each an individual part, but making each part a necessary tier of a cohesive whole arrangement. Students benefit by mainly playing in rhythmic unison, but having a distinctly different melodic line that requires specific reading study and practice. Vocalists are also given written vocal parts, sharing melodic and harmonic functions, and creating a fuller vocal section for each arrangement rather than solo vocal melody. I write melodic vocalese lines to augment each arrangement, requiring singers to read and interpret written parts. Singers also have to scat solo over arrangement sections, demonstrating the same musical understanding of scale-harmony, modal or chordal application, and solo architecture as expected from instrumentalists.

**Innovations in learning/teaching, assessments and resource creation**

One innovation that has greatly enhanced the delivery of my subjects in the BCM is the creation of specific resources for this course. Aligned with the Chord Vocabulary that prefaces each *Real Book*, I have created piano chord voicings of this harmonic vocabulary ranging from standard voicings, shell accompaniment chords to lush solo chords. This vocabulary is foundational to each Musicianship subject I teach. These chords are used for aural training, practised in keyboard instrumental classes and applied to repertoire performance, and also applied in composition and arrangement creative activities.

Another innovation is creating SATB choral arrangements of contemporary repertoire, particularly songs where charts are unavailable. These arrangements are learned and performed by the university choir, and an analytical study of the arrangement nuances features in musicianship and composition classes. Similarly, students learn big band and orchestral arranging through studying my original arrangements of jazz and contemporary repertoire, big band and orchestral compositions.
**Teacher training and industry preparation**

The strategies described above are excellent pedagogical models for pre-service teachers learning to create their own educational resources and also for composition students wanting to arrange their original repertoire. All students learn how to apply the music theory they have learned into performable, industry-relevant contemporary repertoire. Consistently student feedback, after returning from education practicum, has affirmed the usefulness of learning to create original resources for music education. This vocational skill makes pre-service and early career teachers more adaptable, flexible and prepared for accommodating the diverse learning cohorts they face in schools. Students pursuing careers in song writing and composition have superior skills in music writing and arranging, which provide more variety and depth to enhance their initial compositions. Performance students, by learning composition and arranging, extend their musical skill set into a portfolio of graduate attributes that are directly applicable to contemporary music industry requirements. In addition to being able to perform music professionally, they are trained to compose, arrange and often record and produce music, providing them opportunities to enjoy diverse and sustainable music careers.

**Conclusions and Implications**

Student achievements from undertaking these subjects in the BCM course include the ability to play in a variety of contemporary music genres including jazz, funk, Latin, popular, rhythm and blues and big band. Students learn not only to perform authentically in these styles, but to apply their knowledge to create original compositions that demonstrate a sophisticated knowledge of contemporary rhythms, extended and altered harmonies, extended formal structures, and structured and harmonically-correct improvisations crafted over compositions.

Assessment tasks in musicianship, composition and ensemble classes, such as writing arrangements of popular songs, creating and arranging original works, and playing a variety of contemporary styles from professional charts, prepare pre-service teachers for the vocational requirements of secondary school music teaching. They are skilled to create arrangements for ensembles readily found in schools, such as pop bands, big band, choir, stage band and musical theatre orchestra; and to adapt repertoire to the diverse cohorts of learners they have to teach. Feedback from pre-service and early career teachers affirms the value of these learning activities in successfully preparing them for practicum and entry into the classroom.

The transition from university to workplace, either the education or music industry, can be greatly enhanced by work-integrated learning and/or community-engaged learning activities begun during university. The collegial fraternity that is nurtured in SCU’s Contemporary Music degree frequently results in students forming bands that transition into the music industry, starting with local gigs, then touring, performing in university band competitions and festivals, recording, establishing a genuine following then maintaining a professional career. Our university is partnered with Lismore Symphony Orchestra, where gifted students are auditioned to perform with the orchestra, based on entry criteria of instrumental proficiency and reading ability. This experience significantly extends the genres and repertoire students are able to play in. It also develops professional ensemble and performance etiquette, sight reading, and the ability to follow conductors. Some students also perform in local big bands and choirs,
thus refining performance, music reading and large ensemble skills; all attributes underpinning lifelong music vocations.

Established teachers, many of whom are classically trained, can benefit from the BCM curriculum by upskilling in contemporary music performance practice, theory and application. For example, many classically-trained musicians are unable to improvise, and know little about contemporary harmonic vocabulary or the voicings of chords. Established contemporary music teachers can reinvigorate their teaching practice by upskilling in ensemble practice, learning to conduct, composing original repertoire and arranging new repertoire as it emerges in a dynamic music industry. This is best facilitated through short courses in specific techniques or professional development training.

Finally, some professional contemporary musicians, although proficient players and improvisers in many contemporary genres, hide serious educational deficiencies; i.e. their poor music reading and musical literacy. While many popular musicians have learned by ear, their musical progress has not been paralleled with adequate theoretical training. The BCM course houses a significant population of mature musicians who have enjoyed a successful industry career, but who return to study to understand the musical theory and concepts underpinning their performance practices, and to fill in the gaps that have become evident in their knowledge.

The curriculum and pedagogy in contemporary music higher education described in this paper is highly relevant to musicians from school leavers, to mid-career professionals and mature-aged lifelong learners. Underpinned by constant musical principles of musicianship, musical practice and creativity, these concepts are frequently revisited through deeper and richer levels of learning; being applied in individual performance and ensemble practice and composition and arranging tasks. Through this process, students gradually transform into self-directed, autonomous learners, capable of applying contemporary musical knowledge and skills to new learning situations and to teaching others, whilst directing their own learning projects in a cycle of renewal and further learning that can sustain a portfolio career and a lifetime of creative fulfilment.

References
Rhythm learning and body engagement in teaching
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Abstract
The goal of this contribution is to examine the role of body engagement during rhythm learning activities in primary school classes of six to eight-year-olds.

Previous scientific findings show how the transition from corporality to rhythmicity is carried out by motor function and imply that musical learning is facilitated by embodying musical structures. Students make periodic movements spontaneously while listening to music, and these movements influence their perceptions of musical structures and rhythm. The use of figural descriptions is an efficient tool during rhythm learning. However, students’ personal tempi in the absence of a loud beat of reference represent a challenge to collective rhythmic (re)production.

The aims of this contribution are to better understand the role of the body during rhythm learning activities and to identify how body engagement can contribute to improved rhythmic understanding and performance.

The methodological approach involves video-recording nine lessons, then transcribing and coding the exchanges. Self-confrontation interviews are conducted after each lesson in order to discuss chosen extracts from the recordings.

The results first describe moments of teacher and student actions and interactions when reading, speaking and playing rhythms. These results show teachers and students favouring an embodied experience during the process of acquiring specific rhythmic knowledge. The teachers use their bodies as models and regulators, communicating bodily to avoid explicit articulation of rhythmic notions, thus replacing language resources. This bodily basis for communication helps students to make rhythm through movement and to experience the passage from corporality to rhythmicity via motor function rather than via reasoning processes. These results also highlight that teachers should choose their musical gestures because not all gestures are efficient in transmitting specific information (ex. duration). Particular attention is given to the phenomenon of personal tempo observed in students during rhythm activities, which results in very young children being unlikely to adhere to a collective beat unless it is made very obvious by their teacher. Moreover, these case studies call attention to figural descriptions that can help convey musical concepts alongside embodiment.

To conclude, this study has further implications for music education as it shows some connections between embodied teaching and learning, and improved rhythmic understanding and performance as teachers and students exploit natural links between body movement and rhythm in teaching.

Keywords: Rhythm learning, body engagement, personal tempo, primary school
Introduction
The Swiss-French music curriculum for compulsory schooling (CIIP, 2010) contains rhythmic material that is set out in the form of prescribed learning progressions and fundamental expectations for each of its three cycles. This paper examines rhythmic teaching and learning in two classes of six to eight-year-old students by two generalist primary teachers and one specialist music teacher. The focus of our analysis is the role of body engagement during the teaching/learning process for teachers and students. The theoretical background section mentions several findings prior to presenting the research aims, the methodology and finally the subsequent results and conclusions.

Theoretical Background
The transition from corporality to rhythmicity is carried out by motor function (Bidet, 2007). Jaques-Dalcroze eurhythmics uses the body as a foundation for musical concepts, for example modelling the division of time into measures. Historically, “Engagement in musical action is acceptable and even desirable, but only in modest amounts and as means to ends that are mindful and disembodied” (Bowman & Powell, 2007, p. 2). Aesthetic theories in music education highlighting the importance of feeling (Langer, 1942, 1953; Meyer 1956; Bowman & Powell, 2007) emerged in the fifties, and music teachers’ practices evolved following a “shift in theoretical perspective from feelingful cognition to the music-making body” (Bowman & Powell, 2007, p. 5).

There is a general tendency to move from “knowing Inaction” to “Knowing-in-Action” (Bowman & Powell, 2007, p. 7) illustrated particularly by active methods such as Dalcroze, Kodaly and Orff. For Burger, Thompson, Luck, Saarikallio and Toiviainen (2014) there are neurological links between rhythmic components of music and movement in the form of connections between auditory and motor systems. This could imply that musical learning is facilitated by embodying musical structures. Burger et al. (2014) postulate that “our body movements reflect, imitate, help to parse, or support understanding the structure of music” (p. 3). The involved body can thus be considered as the basis for embodied cognition, required for rhythmic cognitive processes.

Students make periodic movements spontaneously while listening to music, sometimes synchronised with the beat, but making these movements becomes more difficult as students grow older and more self-conscious (Eerola, Luck & Toiviainen, 2006; Garner, 2009; Grahn & Brett, 2007; Maes & Leman, 2013; Overy, 2012; Young, 1992). Experiencing body movement plays an important role in rhythm perception (Phillips-Silver & Trainor, 2005) with body movement influencing students’ perceptions of metrical structures and rhythm in particular (Maes & Leman, 2013). Young (1992) develops the notion of personal tempo referred to by Eerola, Luck et al. (2006) as Spontaneous Motor Tempo. These authors show how the ability to synchronise with an external beat can improve gradually over childhood. This is clear in situations where a teacher asks students to coordinate their movements to a pre-set tempo (Young, 1992). For Bremmer (2015), the “music teacher’s body plays a central role in teaching and learning music” and is “able to communicate rhythm [and] simultaneously transmit and instruct rhythm skills in physical ways and interact with and react to pupils in physical ways” (p. 59). Consequently, the body can be the primary means of communication, replacing language resources.
Can rhythm embodiment help students’ metrical understanding? Upitis (1987) examines the role of figural description and understanding in embodiment, and metrical description and understanding. She finds “teaching is more likely to be effective if the teacher realises that children have different (from adult descriptions and from those of other children) but equally useful descriptions at their disposal” (Upitis, 1987, p. 77). Bremmer (2015) also finds that teachers use developmentally appropriate metaphors and images to facilitate rhythmic productions. Body engagement seems therefore to be indispensable during rhythm learning activities as teachers and students engage their bodies not only to produce or represent sound, but even to replace language resources. Considering these three rhythm-learning scenarios with particular regard to theoretical aspects of body engagement, body movement and beat, personal tempo and figural descriptions, it seems that body engagement for students and also in terms of teacher actions, could improve students’ rhythmic performance.

**Aim**

The aim of this contribution is to better understand the role of the body during rhythm learning activities with six to eight-year-olds in terms of embodiment of musical structures, body movement and beat, personal tempo and figural descriptions in the frame of the observed lessons. In particular, this study attempts to identify how body engagement can contribute to rhythm learning activities in terms of students’ understanding and performance.

**Methodological Approach**

Three teachers plan three lessons each, with two classes of six to seven-year-olds (Teachers 2 and 3) and six to eight-year-olds (Teacher 1), focusing on simple rhythm learning (crotchets, quavers). The lessons are video-recorded and viewed, then verbal and non-verbal exchanges are transcribed and coded in order to trace students’ rhythmic learning progressions over a semester. All teachers have initial interviews before the first lesson with (a) member(s) of the research team to consolidate lesson ideas. After each lesson, one or two researchers conduct(s) a self-confrontation interview (Clot, Fernandez, & Scheller, 2007) with the teacher so they can discuss chosen extracts from the recording. Based on the video recordings and transcripts from subsequent interviews, the researchers examine the role of body engagement, analysing the effect of embodiment on rhythmic understanding and performance, how body engagement can replace language resources and how rhythm learning and body engagement are affected by figural understanding.

**Results**

This section contains an analysis of teacher and student actions and interactions during rhythm learning activities. Body engagement when reading, speaking and playing rhythms is looked at closely, as is the phenomenon of personal tempo and the role of figural description and understanding.

**Body Engagement and Rhythmic Codes**

During lesson 1, Teacher 1 sets the objective for her students that they will be able to differentiate between crochets and quavers while reading a code. Most students cannot read a rhythmic code using conventional musical notation, so the class decides to use
long and short lines to represent these two durations. The students use the terms “long” and “short” to articulate this code. Each student has four rhythms on cards to sight-read. To help them read, Teacher 1 suggests adding body movements representing two instruments: clapping hands (“long”) and stamping feet (“short”). After a time of individual practice, the class plays the first rhythm together. Initially, students make no distinction between long and short durations. The way the rhythm is embodied is not yet representative of the two different durations and students perceive the rhythm incorrectly (Phillips-Silver & Trainor, 2005).

Now adopting the posture of a conductor, Teacher 1 says “Pam!” for the crochets while clapping her hands followed by a symmetrically performed out-and-down circle gesture. This shows the students that “long” is longer than “short”. Thus, Teacher 1 uses her body to communicate that the crotchet occupies twice the space in time as a quaver without verbally articulating the fact. Teacher 1 embodies the code and is the model, and the students experience the rhythm in a more accurately embodied form, feeling the greater space that the crotchets occupy when mimicking her gestures. Via motor function, they cross the passage from ‘corporality’ to ‘rhythmicity’ (Bidet, 2007).

Teacher 2’s final lesson has a similar pedagogical objective. Students read combinations of cards with either a long line (crotchet) or two dots (quavers) on them. Teacher 2 asks the students to speak the rhythm (“boom boom tak” means quaver-quaver-crotchet, for example) while pointing to the code with her finger. Next, she and the students execute the rhythm corporally and verbally (clap-clap-thighs, “boom boom tak”). Finally, the teacher asks them to execute the rhythm uniquely with their bodies. Returning to their tables, the students sight-read new rhythms on cards in groups, and the teacher circulated around the class giving help. However, both bodily experience and verbal articulation of the rhythm remain limited in terms of direct representation of durations or, according to Jaques-Dalcroze’s approach to musical development, “a feeling of bodily rhythm […] by the development of ‘the capacity for perceiving […] in time and space’” (Rogers, 1966, p. 35).

As soon as Teacher 2 shows the students a video extract after a period of relatively autonomous sight-reading, they immediately abandon their cards to watch and imitate a headless person execute the rhythm bodily. They clearly prefer to watch the model than to read their cards. Their body engagement is much more marked and spontaneous when responding to this physical (though audiovisual) model compared to reading a written code. This echoes Bremmer’s (2015) description of music teachers who noticed that students needed exposure to a model of rhythm skill so that the rhythm could be gradually absorbed, or in other words, students needed a bodily model in order to understand and produce rhythms.

Teacher 2 explains that her two strongest supportive gestures are showing the students, bodily, how to execute a rhythm and playing the rhythm, bodily, with the students. Sometimes she will take a student’s hands and play the rhythm with their hands, or hold the instrument with the student and execute the gesture at the same time with the student. On other occasions, a verbal cue will suffice. However, from a Jaques-Dalcroze perspective, this example shows the strength of cross-referencing body movement and musical movement, with Teacher 2 often replacing language resources with embodied articulation of rhythm (Burger, Thompson et al., 2014).
Teacher 3, the specialist music teacher, also uses the quaver-quaver-crotchet rhythmic motif with her class but not overtly, as do her colleagues. This rhythm and its variants appear within other activities, emerging implicitly during warm-up activities and songs, also represented by movements in space. Teacher 3’s objective is simply that students would play the rhythms, and learn them by playing. Correcting every rhythmic error is not her priority at this stage, as she does not know the students well at all, although she adds that Teacher 2 does this correction during a later lesson. Teacher 3 adds, “some children that we can see now [in the video] who are not at all coordinated when playing, […] now, with other activities, they behave well and play properly”. This comment, weeks later, attests to the progress made by students over the semester while learning rhythms with an embodied approach, learning while in action (Bowman & Powell, 2007).

Body movement, specifically gait, is linked to these same simple rhythms during Teacher 1’s third lesson. She centres this lesson around a metronome and asks the students to speak and walk on the beat (“ta-ta”, etc.) and then speak quavers (“ta-ta ta-ta”) over the walked beat. The goal is to feel the beat. This choice reflects Bowman and Powell’s (2007) idea that “we do not just think about music; nor do we simply hear it. We enact it. Things like melodies, rhythms, and textures are as much muscular as they are mental” (p. 50). Students each hear a different beat though, when they can no longer hear the central reference, and they end up following their own personal tempo, further discussed in the next section.

**Personal Tempo**

During the first lesson with Teacher 1, students select small percussion instruments and continue to practise their rhythms, replacing either their hands or their feet with a percussion instrument. The teacher circulates around the classroom helping students individually, but for the students working alone, no correction or adjustment of the rhythms whilst practising is observed. They continue to practise an incorrect rhythm according to the code, or in any case, the beat is not clear. In general, they play crotchets and quavers equally with no difference in length. Students spend their practice time spontaneously improvising as they explore the sound and functioning of their chosen instrument. These spontaneous productions are more accurate versions of crochet-quaver combinations. During Lesson 3, Teacher 1 asks the students to listen carefully to a metronome and to reproduce this beat vocally (“ta, ta”, etc.) and bodily (clapping, then swaying from foot to foot, then walking) before doing the same but dividing the beat in two. The students listen to themselves or each other more than to the metronome and thus deviate significantly from the model beat. When dividing the beat into two (quavers) some students are nowhere near the beat, some divide it perfectly and others divide each beat into two semiquavers followed by a quaver rest. At one point, a student suggests that the metronome is slowing down at times. Teacher 1 suggests in return that the group may rather be speeding up.

These are clear examples of students’ personal tempi gaining pre-eminence, preventing rhythmic synchronisation between members of the class. Young (1992) indicates that in order for students to perform movements slower or faster than their own personal tempi, they need to regulate their energy input, “developing control of the muscles to carry the weight of our body parts at the new speed, and to regulate the
nervous tension which results from variations in tempi” (p. 190-91). In the absence of this regulation, the students adhere to whatever tempo comes naturally.

During Teacher 2’s final lesson, a recurring observation is that while the regulating model (teacher) is with the group, students are attracted to this strong, central beat and they match their quavers more-or-less to hers. However, as soon as the teacher leaves, each student follows his or her individual tempo and the quavers often transform into a semiquaver/semiquaver/quaver rest pattern. This experience echoes the findings of Bremmer who warns that when the “teacher’s body as a model of rhythm skills” (p. 196) is phased out, unless a process of “scaffolding” or a “more symmetric relationship between the pre-schoolers” (p. 196) is developed, this rhythmic attunement disappears and personal tempi establish themselves again.

**Figural Description and Understanding**

To return to the first lesson in Teacher 1’s class and the hand-clapping gesture she used followed by a symmetrically performed out-and-down circle gesture to communicate the need to further elongate the crochet’s duration, it is observed that with each repetition of the rhythm, the teacher’s gestures become bigger and the students execute the rhythm more accurately. However, the students do not spontaneously adopt her exaggerated gesture, so Teacher 1 pauses the activity to draw their attention to the time the gesture takes, and the shape of the gesture, “like a balloon exploding”. Explaining this recourse in the interview, Teacher 1 thinks she is influenced by “a vague souvenir of my own music theory lessons, possibly” and that it was not a conscious decision at the beginning, but noticing the students’ response, “as they became a bit more active […] I started to really exaggerate [and] they understood better, I thought”.

Teacher 2 explains during one of her interviews that using the metaphor of a machine helps one of her students to realise that both the beat and the rhythmic motif they are working on are regular and repetitive. “Sometimes we try to find words that are accessible to children”, she says, adding that the metaphor of a robot works well too. In this way, Teacher 2 uses metaphors to support and accelerate the rhythm-learning process. This mirrors Upitis’ finding where she gives the example of “building on a child’s figural understanding [so that] the teacher can move to a metric (or formal) embodiment of the phenomenon” (p. 80), or as Bremmer (2015) expresses it, bringing students into a world of imagination and eliciting quality rhythm (re)productions simultaneously.

**Conclusions**

This paper discusses the effect of embodiment on the teaching/learning process during rhythm-learning activities. The role of body engagement is scrutinised in reading and executing rhythmic codes, in understanding long and short durations and in maintaining a regular beat. Additionally, the way in which figural descriptions can contribute to this process is examined, especially in terms of understanding and performing to a regular beat. Attention is also given to the effect of students’ personal tempi on collective rhythmic (re)production, the challenge this phenomenon presents and teacher actions used to (temporarily) resolve this problem.

Each teacher who participated in this research project solicits the body, thus favouring an embodied learning experience for students during the process of acquiring
specific rhythmic knowledge. In each case, the body appears to be a vector for rhythm, although rhythms are often simultaneously vocalised and executed bodily. While the students’ bodies are predominantly engaged in imitating a received rhythmic model, the teachers’ bodies are not only rhythmic models, but sometimes also regulators, providing more personalised demonstrations when necessary. The teacher participants of this study use their bodies to transmit rhythmic knowledge implicitly, avoiding explicit articulation of rhythmic notions. This bodily basis for communication not only obliges students to make rhythm through movement, but also to experience the passage from corporeality to rhythmicity via motor function rather than via reasoning processes. This embodiment can carry meaning for students, often replacing language resources.

In terms of further implications for music education, this contribution shows some connections between embodied teaching/learning and improved rhythmic understanding and performance as natural links between body movement and rhythm are exploited. Teachers’ choices of musical gesture can be crucial, however, in order for productive body engagement and effective embodied learning to occur for students. Not all gestures are efficient in transmitting information pertaining to durations implicated in rhythmic learning activities. This study also shows how figural descriptions can help to convey musical concepts and practices alongside embodiment for improved student understanding and performance.

To conclude, it is important to pay particular attention to the occurrence of ‘spontaneous motor tempo’ or ‘personal tempo’ during rhythm learning activities with young children, who are unlikely to adhere to a collective beat unless it is very pronounced.

Although this case study allows for the observation and description of actions and interactions between teachers and students, its scope remains limited and further research is needed in order to gain deeper insight into verbal and bodily regulations during the teaching/learning process of transmitting and acquiring rhythmic knowledge.

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Evaluation of school results in music education

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Abstract
The necessity of adapting the evaluating actions to the changes of emphasis that have occurred in last decades in the field of education, requires the reconceptualization and rethinking of evaluation strategies. This article characterizes the evaluation of the school results at music education discipline in the primary and secondary education system of the Republic of Moldova. The following concepts are defined: school product, evaluating criteria of school products, performance descriptors. Criteria evaluation through descriptors is conceived as an appreciation, as a valuable judgment about what the pupil has learned and how he has learned, based on precise criteria, well established previously and related to the individual performance descriptors.

The approach of the evaluating actions must focus not on the appreciation / measurement / knowledge - abilities - attitudes grading, but on the evolution of the musical experience and the formation degree of the musical competences of the pupils in relation to the content units. Two groups of evaluating methods for music education are established: direct and intuitive-indirect methods. School products for the fields of music education are identified and described: audition, performance, creation.

The evaluating action at the music education lessons can get relevance by claiming the exploration of the laws and principles of art, within the practical forms of knowing the music and techniques of externalization of inner experiences towards the music. In order to design the evaluation process and to develop evaluating tools for the music education discipline, the teacher must select the products relevant to the field of activity according the competence units subjected to the evaluation, by correlating them with the learning content and learning activities. The evaluation should focus on measuring and appreciating school competencies, which are designed as basic finalities of the educational process and as authentic learning results necessary for the pupil in adult life. The teacher's mission is to demonstrate in the educational process that the laws of music overlap with the laws of the human spirit, which brings it to life, and its laws overlap with the laws of universal life.

Keywords: criteria evaluation, school products, school results, evaluation criteria, descriptors.

Evaluation based on criteria: generalities from the experience of the Republic of Moldova.
Evaluation, as a fundamental component of the educational process, continues to be the subject of careful concern of many theoretical and practical educators, which concerns not only the evaluative activity itself, but also at other components of pedagogical practice which it is closely related with. The necessity of adapting the evaluating actions to the changes of emphasis that have occurred in last decades in the field of education, requires the reconceptualization and rethinking of the evaluation strategies. The
evaluation object is the process of acquiring the competencies related to the individual results ascertained by the performance of pupil subscribed to the descriptors (5). In the context of authenticity, integrity and inclusion, the finality of the educational process is the competence. In the evaluation process we do not evaluate the competence, but the products through which the results of the pupils are reached (Meyer, 2007). In this sense, the pupils' results denote the degree of the competence manifestation.

The changes currently occurring in the educational system of the Republic of Moldova are not accidental. The evaluation of pupils' school results based on criteria and descriptors was developed and implemented. Its aim is to eliminate the pupils’ discrimination. School products for each discipline were identified. The elimination of the grades was replaced by introducing qualifications. The importance of evaluative decisions refers to performance descriptors achieved by pupils in relation to a particular school product. The diversity of evaluation functions and its formative valences are ensured by the diversity of evaluating methods and techniques. The major difference that is expected, refers to the elimination of the comparative principle of evaluation. The cancellation of grades, in fact cancels the hierarchies and emphasizes the development of the team spirit, ensures the efficiency of learning. Also, in the process of implementing the evaluation, the principle of confidentiality is required. The pupil and the parent will be provided with personal recommendations, so as to produce qualitative changes in effective communication. Qualitative evaluation will refer to the pupil's strong motivation for learning. The grad will be replaced with performance descriptors, according to the evaluation criteria announced before learning.

Criteria evaluation through descriptors is conceived as an appreciation, as a valuable judgment about what the pupil has learned and how he has learned, based on precise criteria, well established previously and related to the individual performance descriptors. In order to understand the methodology of criterion evaluation through descriptors it is useful to define the terms used: school product, evaluation criteria, performance descriptors.

The school product is a result designed to be achieved by the pupil and measured, appreciated by the teacher, the pupil himself, the colleagues, and possibly, parents. There are more types of school products (Meyer, 2007): (a) intellectual (formulating an idea, a definition, an explanation, providing an argument, developing a scheme, a drawing, an ideal model, a soft etc.), (b) moral (some ethical values are assimilated and internalized - for example, the norms of social coexistence, moral consciousness, moral conduct is formed), (c) material (building a device, an apparatus, an installation, material model etc.).

The evaluating criteria of school products are considered successful criteria and are important sets of qualities found in learning products and which should be presented as a system. There are situations where the same unit of competence can be evaluated by capitalizing on several products, and the same product can allow the evaluation of several units of competences. The teacher has the freedom and responsibility to select the most relevant products in each case, manifesting the evaluative culture, the competences related to the didactics of music education, the pedagogical creativity. The evaluation criteria are announced in advance to the pupils, in the form of success criteria, formulated in accessible language, in short, using verbs, usually from the first person, singular. For
example, we bring a model of success criteria for the product "auditive culture", which can be applied in primary school:

1. I keep triple silence (before, during and immediately after the music sound).
2. I follow the music from the beginning to the end.
3. I live intensely what I listen to.
4. I research the expressiveness of the musical language, the image of music.
5. I explain my own ideas.

The success criteria will serve as benchmarks for a conscious activity. The teacher will capitalize on the success criteria and performance descriptors in the context of learning-evaluation methods and techniques focused on interactivity, value judgments and self-regulation of learning.

The performance descriptors represent qualitative evaluation criteria that describe the manifestation of the pupil's musical competences and allow to determine their degree of achievement (minimum, average, maximum); they are operational indicators directly observable in the performance behavior of the pupils and in the results and products of their concrete activity; describe and appreciate the quality of the evaluated product. Depending on the level reached, the descriptors allow the awarding the performance grades: sufficient; good; very well.

In order to design the evaluation process and to develop evaluating tools for the music education discipline, the teacher must select the product / products relevant to the field of activity, according to the competence units subjected to the evaluation, in correlation with the learning content and recommended learning and evaluation activities. Traditionally, depending on the moment of an evaluative act in a learning path, we distinguish: the initial evaluation - predictive; the formative evaluation - continuous; the summative evaluation - final.

The specifics of evaluating school results in music education.

The evaluating action at music education lessons becomes relevant by claiming the exploration of the laws and principles of art. A support for the evaluating act represents general and specific didactic principles, which express the exigencies of the educational process in music education (Ursu, L. & Marin, M. & Curacîști, A. et al., 2019). The character of the artistic education requires a specific treatment of the evaluation methods (Ursu, L. & Marin, M. & Curacîști, A. et al., 2019): two groups of evaluation methods in music education are established - direct and intuitive-indirect methods. Thus, in addition to the modalities of “objective”, direct evaluation, which are applied especially to the appreciation of the informative-instructive aspect of the learning process (knowledge, musical skills, etc.), indirect, tangential, intuitive methods are also widely used, being applied in determining the formative-educational aspect (attitudes, interests, artistic culture, etc.).

The purpose of the evaluation act at the music education lesson is not only the evidence of pupils' success / failure, but it is more about stimulating pupil’s interest in studying music, self-knowledge and the world through music (National Curriculum, 2019). Communicating in public about failure or demonstrating the poor level of development of musical abilities of some pupils can negatively influence the entire educational process. In music education, the didactic appreciation can be achieved through various tests, which will not be perceived by pupils as evaluation tests, but as
learning activities. The evaluation actions are to be appropriate to the conditions of the music education process. Depending on this criterion, the evaluation method is applied only when it proves its efficiency in measuring / appreciating the nature of the verified contents and is determined by their corresponding objectives. There are educational objectives - especially belonging to the affective field - which contribute decisively to the development of the pupil's personality and which cannot be measured by classical / traditional methods. In the context of music education imperatives, giving up these goals cannot be a solution.

The problem of evaluating musical culture lies in the dysfunctionality of music education, vitiated by taking over the principles of school docimology in general artistic education, without emphasizing the specifics of musical knowledge and education (Guțu, Vl. & Morari, M. & Vitcovschi, A., 2018):

→ Music knowledge is a complex process of consciousness, which provokes emotions, impressions, feelings and ideas within the practices of listening / performing / creating. The access to the essence of music is facilitated by the convergence of experience and understanding, the sensible and the mental parts, delight and thought. The emotional experience of music is the starting point of artistic knowledge, which then accesses the mental experience, making the rationality to vibrate.

→ The specifics of artistic knowledge is manifested in its practical and sensitive nature of receiving the artistic phenomenon; through the value of the act of experience, followed by the rationalization of the music. Thus, the rationality fulfills artistic knowledge, facilitating the understanding of the sensitive world of music.

→ Experiencing the emotion is one of the requirements of music education. The music itself does not educate. The flow of states that appeared during the musical act (of listening - interpretation - creation) can become a stimulus for the educational activity.

→ Music education must focus on the multiple experiences of emotional experience of the artistic image in all moments of the musical act: listening, interpretation, creation, reflection (the formative-applicative aspect of the educational process); and the set of acquired knowledge (the informative-theoretical aspect) comes to facilitate the contemplation and the understanding of the art values, forming the theoretical culture of the pupil.

The teacher's mission is to demonstrate during the teaching-learning-evaluation process that the laws of music overlap with the laws of the human spirit, which bring it to life; and its laws overlap with the laws of universal life (Gagim, 2004, p. 74).

The constituents of knowing and assimilating the musical art in general education institutions are: musical experience (emotional experience/feeling, attitudes) accumulated during auditions / interpretation / musical creation and musical competence (acquired knowledge, musical skills). In the process of music education, the musical culture of the pupils is formed as a constituent part of the spiritual culture. The content of music education is developed on the basis of the modular principle of organizing content units. In conclusion, the themes of the modules are also the fundamental regularities of musical art, and their knowledge builds the musical culture of pupils. The evaluation action focuses not on the appreciation / measurement / grading the acquired knowledge - skills -
attitudes, but on the evolution of musical experience and the degree of formation of pupils' musical skills in relation to the theme of the module.

**School products for the music education discipline**

*The school product* represents a school result designed to be achieved by the pupil and measured, appreciated by the teacher, the pupil himself, colleagues and, eventually, parents. For Music Education, the following products are provided for:

- **(a) in the field of audition**: auditive culture, listener's score, humming of the melody, verbal characterization of the music, etc.;
- **(b) in the field of musical interpretation**: the culture of the song, the repertoire of songs, the rhythmic accompaniment for the melody of a song, etc.;
- **(c) in the field of elementary musical creation**: rhythmic / melodic improvisations, dance / plastic movements, pictographic images, melogestics, etc.

These products are mostly spiritual, they represent the totality of values acquired in the field of musical art and pupils' vision on life (ideals, tastes, needs, beliefs, attitudes, behaviors, etc.). Musical knowledge and knowledge about music have no value without their applicability in the proper musical activities. The evaluation of pupils' musical culture will be carried out mainly within the practical forms of musical interpretation, activities of externalizing the inner experiences/feelings towards music through various techniques: the listener's score, the representation of the melodic contour with the hand gesture in space (with closed eyes), the graphic representation of musical form in the notebook, etc. In this sense, the musical knowledge tests will not exceed 10-15% of the volume of evaluation tests applied in the classroom during a year of study.

In continuation, we briefly describe some school products specific to the field of music listening. These school products are largely spiritual and represent the totality of the values acquired in the field of musical art and pupils' vision on themselves and life (ideals, tastes, needs, beliefs, attitudes, behaviors, etc.).

*Auditive culture* - the totality of skills manifested in the process of receiving a musical creation related to certain rules of knowledge / penetration in its meanings. The auditive culture is related to hearing sensitivity, but it is expressed behaviorally. No less important is the pursuit of the work during the play - the inner "activism" of the receiver, which is spiritual in nature. Auditive culture can be manifested through external behavior and as internal activity. The elements of auditive culture: concentration of attention, keeping quiet (of triple silence: until the music plays, during the play, immediately after the play stops), emotional re-experiencing of sound events, following the evolution / development of the sound message, attributing the significance / understanding the meaning of sound and artistic expressions, meditation / music thinking, etc. As the listening activity is a participatory and creative act, it requires the activation of imagination and thinking, without their involvement the auditive culture cannot be formed.

*The humming of musical themes* - hum (slow reproduction, without words, with closed mouth, as if for himself) of a melody. Songs from heard and performed creations, melodies from musical creations of different genres and musical styles, instrumental / vocal melodies can be hummed. The humming of motifs, melody, musical theme in the process of auditive research of a musical creation facilitates the understanding of the message / image, increases the observation of the evolution in the development of music,
etc. There are several types of humming: (a) in the form of a hum - indistinct singing, (b) by streams of air, (c) by whistling (slowly), (d) by intonation on various vowels / syllables. By the power of the sound intensity, the humming can be: (1) audible, (2) almost inaudible, (3) mute (inaudible / mental). The humming of musical themes is used in the audition activity.

The listener's score - the totality of the notes (verbal, pictographic) which represents the degree of understanding of the music of a creation based on the auditive and inner experienced effort during the audition (re-auditions). The notes can be organized in a table or figure, arranged so that they can be followed simultaneously (during the audition), with reference to: the structural elements, the contour of the melody, the expressiveness of the elements of musical language, image, etc. - various aspects of a musical creation. Depending on the subject of the lesson, the listener's score can be elaborated according to certain criteria, which form the understanding of the music, the pupil's / pupils' vision on musical creation, the pupil-receiver relationship with musical creation is built. In the process of elaborating the listener's score, the following techniques can be used: humming the motifs, musical gesture (melogestica), musical rhythm (meloritmia), musical meditation (reflection), characterization, comment, guided discussion, plastic representation, etc.

The characterization of music - explaining the music as a form of penetration into the musical art as a result of direct contact. The content of a musical creation can be discovered / researched / understood with the sense and the conscience. In order to characterize the music it is necessary to put a problem. In the process of characterizing the music, the degree of understanding of the sound and artistic message is developed / manifested, the habit of using musical terminology is formed. In a creation can be characterized: the image, the form (structure), the elements of language, the emotional drama, etc. Within the characterization can be integrated: the explanation, the analysis, the appreciation of music. The characterization of music can be done orally and in written form, individually and in groups.

Musical gesture (Melogestica) - the spontaneous representation (in actum - in the process of playing live music or in the recorded version) of the melodic line with the help of plastic movements of the hands in space. The hand / hands follow in space the "trajectory" of the motif / melody development. The music gesture (Melogestica) can be performed with one hand or both (in the form of dialogue). Each hand can show different motifs (on different instruments / voices), with a varied configuration. Sometimes, both hands "design" the same movements.

The purpose of the evaluation act at the music education lesson is not only the evidence of pupils' success / failure, but it is more about stimulating pupil’s interest in studying music, self-knowledge and the world through music (National Curriculum, 2019).

In conclusion, the evaluation strategies are designed in such a way as to require students' intellectual, practical-action efforts and to help them to develop and model cognitive, spiritual, and psychomotor, affective and motivational levels. The lack of grading the pupils does not diminish the value of evaluation in the educational process. Thus, the evaluation will focus on the measurement-appreciation of school competences, which are conceived as basic purposes of the educational process and as authentic learning outcomes necessary for the pupil in his adult life.
The teacher will plan the evaluation of the school results at the music education lesson taking into account the following considerations:

— The purpose of the evaluation is to stimulate the evolution of the musical experience and the degree of formation of the musical competences of the pupils;
— The evaluation tests will represent the fields of audition, interpretation and elementary musical creation, and the evaluation forms will be individual and in group; The recording of the evaluation results will be done following several evaluations (current / formative), in specific activities of reception (2-3 in a module), vocal, choral, instrumental musical interpretation (3-5 in a module) and musical elementary creation (3-5 in one module);
— Grades will be awarded on the basis of performance descriptors, which pupils demonstrate at the end of the semester / year of study;
— Each pupil is in competition with himself, the pupil learns to show how much he has accumulated and how well he masters certain skills of music culture, in order to stand out through his whole personality.

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Experiences and affections in the academic training of music educators
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Abstract
This paper presents an ongoing qualitative research at a higher education institution in Brazil regarding the training and development path of music educators from a student perspective. It takes as its starting point the dissatisfaction and lack of motivation towards the current curricular course programs, as stated by most students at a certain point of their undergraduate studies. Many express the desire to graduate as quickly as possible, while others choose to extend the duration of the course and simultaneously attempt to accomplish other musical achievements outside the curriculum. Through data initially collected at course evaluation meetings, as well as questionnaires and in process interviews, it is possible to raise some more specific issues. Taking as a theoretical reference the cultural-historical psychology of Vygotsky, the work presented here focuses on aspects related to the issue of relationships built with and through music. Further investigations have found that one of the main sources of student dissatisfaction comes from the fact that the undergraduate courses are based on classical music and, therefore, do not take into account previous musical references of many students. Although this is an important issue, the problem seems to be much more complex. In an attempt to cover this complexity, the Vygotskian concept of perizhivanie is presented, which integrates, during the process of development of an individual, the influence of the environment and personality. All experiences permeated by music throughout one's life compose a web of musical meanings and affections that will never cease to be activated in situations that, in any way, involve the musical language. Furthermore, these previous experiences with music, refracted in a dialectical process connecting social and environmental aspects, are what will provide a sense of new musical knowledge. However, because of the traditional curricular structure, students are often required to enter a totally foreign musical world. At the same time, through the pedagogical subjects, students learn that they will need to take into account the cultural experiences of their future students. Initial observations point to the fact that if music students are not able to take into consideration their own personal processes with music in their training, probably, as educators, they will not do so later on with their students. Consequently, there is a need to reformulate curricula that, in some manner, would include this full diversity of students' musical experiences.

Keywords: Affective response, meditation, music appropriation, higher education.

Introduction
With the expansion of higher education course programs for music teachers in Brazil in the last decades, discussions about what should be the most suitable curriculum for this specific field of education have consequently increased. In the beginning, teaching degrees in music education were linked directly to the bachelor’s programs in a quite evident manner. However, with time and given new pressing realities, the degrees in music began to gain their own autonomous curricula, mainly due to two important
factors: the specificity of their targeted goals; and the evolving professional demands that have emerged in recent decades.

Although academic research on suitable curricula has been focused predominantly on basic education, there are still some studies approaching higher education issues from various angles. In 2003, in an edition especially dedicated to the training in music education, the Brazilian periodic Revista da Abem published a series of articles that exhaustively covered the many problems on this subject. Among the topics approached, there were: discussions about the relationship between training and the music educator’s frame of work and leeway (Del Ben, 2003; Kleber, 2003; Gomes, 2003); questionings of the past legislation that influenced and molded the Political Pedagogical Projects for Music Degree Courses (Ribeiro, 2003); discussions about the need for an update in the epistemological paradigms that would, in turn, support curricula with a view to greater flexibility (Santos, 2003; Nascimento, 2003); and, especially, the importance of promoting cultural dialogues targeting the harmonization between the course purpose and the students' musical references (Ramalho, 2003).

Besides the above publication, other studies have been raising more in-depth questions about the music education curricular elaboration. For example, they discuss what should be the required knowledge and educational background to obtain a degree in music education and, above all, establish the curriculum boundaries for undergraduate degrees based on the existing music bachelor’s curricula, which should image in its structure the so-called conservatory teaching model that follow primarily the European artistic guidelines and parameters for degree programs (Penna, 2007; Pereira, 2014 and 2015; Queiroz, 2017).

In addition to determining the curriculum content and its format, it is also important to consider the structure adequacy to the current and ever-changing professional demands on music graduates. Cereser (2004), for example, through a simple survey, concluded that the present undergraduate programs are not adequately preparing new teachers for the future, and are not addressing new realities that these professionals may have to face.

Based on several studies, it can be stated that, in general, the undergraduate curricula do not even have built-in mechanisms to act on the ever-present issues raised by their own student bodies in relation to the overall course content and subject matters being offered. And this may still be, perhaps, one of the neuralgic points most poorly addressed in music education. Travassos (1999), in a study conducted with undergraduates in Brazil, found much diversity in musical experiences and tastes among the students of this school and their claim to include the popular music repertoires alongside the traditional classical music training. Following this line of thought, a more recent study (Ramos & Toni, 2016) reached a similar conclusion about this relationship between course content offered and the students' musical experiences and preferences.

The authors of this study found, for example, that the most listened to styles of music were MPB (Brazilian Popular Music), rock, pop and jazz. Therefore, again, there was a conflict between cultural demands and the Music course programs offered.

As pointed out in several studies, despite all attempts in modernizing and upgrading teaching methods and approaches, the observed curriculum detachment from real musical life is perhaps one of the main obstacles that provoke a sense of strangeness and discomfort on undergraduates. In an ethnographic study on the development of creativity in a jazz community, Neder (2012) notes the importance of the affective issues and the
interpersonal relationships in the learning processes. Although there is a difference in context, it appears that in informal learning, closer to real life situations, certain fundamental issues and facets are far removed from what really occurs in learning through abstract, artificial and formal curricular structures.

All of these questions raised by the studies listed here may help to understand some aspects that are causing discontentment among Music students with their curricula. At the university where I work as a lecturer, for example, this dissatisfaction has come up during informal conversations with students, in the semester course evaluations, as well as in surveys conducted by the undergraduates themselves. I teach subjects to undergraduate students in the first three and sixth semesters of the program. The movement that goes on during this period towards a gradual loss of belief and enthusiasm for the course is highly noticeable. Upon entering university, the students are fully involved with everything: knowledge, events, extension projects etc. Gradually, they start feeling *unmet* regarding their initial expectations and clearly become discouraged, so that, in the sixth semester, we can observe at least two distinct student groups: those who sought alternative paths to the curriculum offered, opting for a kind of musical life parallel to the course, dragging out the disciplines and extend the length of university attendance to the limit; and those who, on the contrary, want to leave university as quickly as possible and return to their pre-course music world, a world that somehow made them bond to music in such strong way that lead them to the decision to risk themselves in a far more uncertain profession compared to so many others.

An initial question that arises in this direction is what happens in this relatively short period of time that leads most students to this state of disbelief about the course? What do we offer them in the proposed curriculum that absolutely does not satisfy the wishes of the majority? Or, if the problem is not primarily or exclusively curricular, where would it be?

The studies presented here make it possible to raise several issues from different angles and have effectively subsidized curriculum reforms in Brazilian universities. However, it seems to me that something still escapes our understanding of these and other investigations on the subject. It seems to me that, perhaps, the difficulties faced by students in relation to their course curriculum lie, less in *what* is offered (although this cannot be neglected), but in *the way* it is offered, taking primarily into account the living experiences, according to the meaning of Vygotsky (2010b), the students have had previously and also those formed in the university educational context. This perception led me to elaborate a research project, which is in its initial phase, about the relationship between the students' musical experiences and the curricular proposal being made available. In this work, I highlighted some theoretical concepts that underlie this research articulated with some initial reflections, giving special emphasis on the relationships of affection.

**The theoretical perspective and some initial reflections**

According to Vygotsky (2010b), human development is largely determined by the different relationships that individuals establish with the environment at different stages of life. It is not, therefore, the characteristics of the environment itself, but rather the meaning attributed to it. In this sense, the same objectively taken environment can mean differently to different people and enable or hinder the development of certain knowledge
or skills, for example. What determines how the environment will be perceived by each individual is the *perezhivanie*, a concept that integrates a given personality to a given environment. A point to notice here is that the experience always presupposes an emotional dimension, since the meaning that the individual gives to the events experienced is always loaded with affection. It is a concept that integrates, therefore, not only environment and personality, but also thought and emotion, emphasizing the integrative and non-dualistic characteristic of the Vigotskian line of thought (Costa & Pascual, 2012, p.633).

This monistic approach to the psyche is also reflected in what Vigotski (2009) calls inter-functional relationships. For the author, the higher psychological functions, or specifically human, do not develop in isolation, but always in an integrated manner, so that emotion is not separate from thought (or cognition), but has an interdependent relationship with it:

Those who have separated thought from affection since the beginning have definitively closed the path for explaining the causes of thought itself, because the deterministic analysis of thought necessarily presupposes the revelation of the motives, needs, interests, motivations, and driving tendencies of thought that they guide their movement in this or that aspect (Vigotski, 2009, p. 16).

Based on this theory, it is not difficult to realize the importance of affective issues in any pedagogical process. However, this relationship between pedagogy and emotion, even though now-a-days it is the subject of studies in education, it still suffers prejudice and unknowns. Vigotski, in his days, pointed out the educators' misconceptions about this, emphasizing that “the emotional aspect of the individual has no less importance than other aspects and is the object of concern in education in the same proportions as intelligence and will” (Vigotski, 2010a, p.146). According to the author:

it is precisely the emotional reactions that must form the basis of the educational process. Before communicating this or that sense, the teacher should arouse the student's respective emotion and be concerned that this emotion is linked to new knowledge. Everything else is dead knowledge, which exterminates any living relationship with the world (Vigotski, 2010a, p.144).

Despite the current awareness of the power of affection in education, several researchers have pointed out certain neglect in dealings with teacher training from a curricular standpoint, taking into account both, the pedagogical contents of teaching and the university lectures themselves. According to Lopes Ribeiro (2010, p. 405): “Much research shows that affectivity is mostly neglected by teachers at higher or advanced levels, who are imbued with power-related emotions and consider cognitive content more important”.

This leads us to another fundamental concept that supports the reflections I propose in the research, which is the Vygotskian concept of *mediation*. According to this theoretical perspective, the whole process of human development happens through a gradual appropriation of the universe of culture, that is, the “set of human productions, which, by definition, carry meaning” (Pino, 2005, p.59). In this process, the relationship that a human being establishes with the world, although being direct at birth, gradually

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1 Russian word with no accurate English translation, according to Veresov, 2017.
becomes mediated, that is, a third element (an instrument, a sign or a person) is interposed between the individual and any element of the world. The formal or informal learning processes of any kind of knowledge, thus, are always mediated processes. In more formal educational systems, this mediation is exercised primarily (but not exclusively) by the figure of the teacher. It is he who holds the meanings and values of the knowledge in question and it is in his figure that students will grasp these meanings and values. Regardless of the content being addressed, the position taken by the teacher in relation to the student and their own knowledge will have a direct influence on the relationship (positive, negative, indifferent) that the student will establish with such knowledge and on their ability or learning inability. For Vigotski, therefore, the teacher, for good and for evil, is a central and powerful figure in any teaching and learning process.

If we think of music as an object of knowledge, we can see that all these theoretical-conceptual aspects listed here from Vygotsky’s cultural-historical theory are highly potentiated. Music, perhaps more than any other form of language, is an essentially emotive activity whose process of appropriation involves building strong emotional bonds. Several thinkers from different fields of knowledge have emphasized this emotive aspect of music and musical learning. And this dimension is not just about building positive or negative musical bonds, for example, but it can be thought of in a much more complex way. All experiences permeated by music throughout the life of an individual (then considered the contextual aspects - situations, people, places, facts etc. - and the meanings attributed by the subjects to these aspects) will compose a web of musical meanings and affections that never fail to be triggered in the face of a situation that somehow involves music.

However, despite some consensus on the emotional bond of music, this aspect, as attested directly or indirectly by several researches, has been little considered in music education, notably at the higher levels of education, as is the case with music degrees. When I talk about affections and music, it is always important to make clear, I am not referring only to an inaccessible individual sensitive sphere, but to interests, passions, motivations, tastes, relations established between the subjects and the music that permeates at distinct instances, including the cognitive ones (such as the different mental processing modes of music generated in the various musical experiences). Students who come to university for music courses carry with them their entire history of musical experiences, which have such a force that led them to pursue this professional path. As they begin their curricular path in the course, however, as noted by many students, all this energy quickly declines.

This research, in this sense, has been moving towards seeking answers to the conflicts that arise between the musical world experienced by the students inside and outside university, and took as a starting point the following questions: Where does it come from and how can we have access to this force generated by the students' musical experiences that led them to choose music as a profession and maintained alive in some non-curricular activities? Is it possible to think of a curriculum that can somehow incorporate these life values and not let that energy go? What is the responsibility of teachers in relation to this issue?

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Although curricular reform proposals are in constant motion in many higher education institutions, they often have a superficial character that, despite reconfigurations of existing disciplines and eventual proposition of others, these efforts are not capable of profoundly changing most underlying teaching concepts. There is no point in opening the university's doors to other types of music (such as popular or ethnic music) or to the people to which it was vetoed (as in the case of quota policies, for example), if other important structuring reforms are not made. Given this, I understand that only a profound epistemological revision can lead us to more significant advances. And, according to this research, this revision must necessarily go through a shift from excessive focus on curricular content derived from knowledge itself to the relationship of the subjects with the knowledge. It is common speech in the music education field that students' prior musical experiences should be taken into account, but in reality, if music students do not experience, in their own education, a consideration for their own personal processes with music, they are unlikely to be able to do so in the future on with their own students. It is not, as I said, just incorporating familiar repertoires into them, but somehow considering the relationships of affection and meaning constructed with music, and this involves considering the whole context that evolves the musical acts. My initial remarks at the research institution, however, show that, unfortunately, we are still a long way from this possibility, and to further complicate matters, this profound transformation, embracing such diverse musical experiences, would need to involve not only added flexibility to curricular programs, opening them to include repertoires and projects of real interest to the students, but above all, foster the active participation of the entire faculty.

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Using assessment to enable young musicians' musical growth—An issue of equity
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Abstract
All children have the capability to grow and become musical. In the United States today, however, an issue of equal access to music-making and learning opportunities in schools exists. The purpose of this paper is to suggest that assessment can take on an enabling function if it loses some of its negative connotations rooted in the nature-nurture/aptitude-achievement conceptualizations of the past and moves toward a more diagnostic-enabling conceptualization that will promote musical growth in all students. Research grounded in this conceptualization could form a powerful policy framework that could lead to the enactment of real changes in access to music instruction.

Keywords: Assessment, Equity, Aptitude, Enabling Factors, Policy

Introduction
On the surface, the terms assessment and enable would appear to be unlikely candidates to appear in the same title. Enable seems to bring forward positive connotations of approval, facilitation, and empowerment. Unfortunately, assessment, on the other hand, seems to have negative connotations that may include feelings of anxiety, the possibility of failure, and a sense that fundamental skills and abilities might be found wanting. For music educators, the reasons for negative attitudes toward assessment come from a variety of sources, some of which are based in actual limitations imposed by the teaching environment. Music educators may feel that they lack certain resources needed to implement meaningful music assessments. It could easily be argued that there aren’t many standardized music assessment tools available or even the time necessary for teachers to craft their own assessment tools. Others’ opposition to assessment may come from negative attitudes about high stakes assessments. Some of these negative attitudes are rooted in deep-seated beliefs reinforced by negative assessment experiences; others are simply rooted in tradition.

With all of this negativity surrounding assessment, how then can assessment be seen as an enabling tool? The answer lies in the fact that music for all students is an equity issue. Music and the arts have something very important to offer all young people of our society; and without it, there is a danger that these young people may not be prepared to live a quality personal life. They may not have important skills necessary for the twenty-first century workplace.

The purpose of this paper is to suggest that assessment can take on an enabling function if it loses some of its negative connotations rooted in the nature-nurture/aptitude-achievement conceptualizations of the past and moves toward a more diagnostic-enabling conceptualization that will promote musical growth in all students. After making the case that music is important for all students and that currently all students in the United States (U.S.) do not have access to music education, the paper will trace the history of music
assessment in the U.S. and outline a series of enabling conditions that, if measured, might lead to the ability of music educators to promote musical growth for all students.

Access to Music Education—A Matter of Equity

Whose Interests Should be Served in the Music Education Enterprise?

Professional music educators in the United States have a long history of being committed to music education for all students. This idea of music education for all emerged early in the history of music education in the United States, when in 1923, a former President of the Music Supervisors National Conference (now called the National Association for Music Education [NAfME]), Karl Gehrkens, coined the phrase "Music for every child, every child for music" (Abeles, Hoffer, & Klotman, p. 30). Ever since that time, these words of universality have echoed through the decades in NAfME’s goals, objectives and mission statements. Currently, the mission of the NAfME is: “To advance music education by promoting the understanding and making of music by all [emphasis added]” (National Association for Music Education, 2015a, p.1).

To date, however, U.S. music educators are far from achieving their mission of music education for all. Elpus and Abril (2011), for example, reported that only 21 percent of high school students were enrolled in high school music programs in the U.S. at the time of their study. Comparisons of various demographic subgroups using the NAEP Data Explorer (National Assessment Governing Board, N.D.) and data from the National Assessment for Educational Progress (NAEP) 2008 and 2016 music assessments show that music access and music achievement differ significantly by region of the country, race/ethnicity, and socioeconomic status. Clearly, there are a number of young people in America’s schools who are not receiving continuous instruction that might support meaningful encounters with music for a lifetime. These inequities impact children who do not have access to music and the arts, and consequentially, their ability as adults to lead quality personal and professional lives.

The key word here is all. Music education must be not only for the gifted few, but also for the “not-so-gifted” many. If the premise that music is for all students is accepted, then it stands to reason that music educators should embrace instructional strategies that could promote musical benefits for all.

What Benefits of Music Education for All Could Be Accrued?

It is acknowledged that music educators have a number of negative beliefs about assessment and that they do teach a large number of students within a very limited time frame with neither extant assessment tools nor the time or expertise to develop relevant assessments. Music educators, however, must look beyond the negative connotations of the term and support assessment because it is a tool that could unlock the door to meaningful encounters with music and the arts. Music and the arts have something very important to offer the young people of our society (Green, 2005); and without it, there is a danger that these young people may not be prepared to live a quality personal life. They may not have important skills necessary for the twenty-first century workplace.

What are some of these skills/understandings nurtured and awakened by studying music and the arts that are so important to the society and to the individual? Perhaps three such skills/understandings are: self-expression, interpersonal/social skills, and understanding yourself. It is beyond the scope of this paper to make the argument that
each of these skills/understandings are basic, core skills for life and without them, one might be just as disadvantaged as not being able to read. That case would not be difficult to make, however. Eisner (1999) argues that at the core of arts education is the ability to express oneself, to “. . . create art, or as some might say, produce art-like creations.” “Students should acquire a feel for what it means to transform their ideas, images, and feelings into an art form” (p. 155), he continues. Acquiring interpersonal/social skills, while not the sole province of arts education goals, is certainly viewed by parents and other stakeholders, as an important function of music education (Sharer, 1994). Socrates, perhaps the greatest teacher of ancient Greece, taught his students to “Know Thyself.” Reimer (2003) wrote eloquently about the importance of the arts helping us to understand those feelings that are the core of our innermost being (pp. 72-102). Understanding feelings are key to understanding emotional response. Emotional well-being and stability are the foundation of a purposeful personal and professional life.

The importance of self-expression, interpersonal/social skills, and understanding one’s self is echoed in the thinking of a major organization in the United States receiving a lot of attention in terms of establishing twenty-first century student outcomes. The Partnership for 21st Century Skills is a national organization that advocates for 21st century readiness for every student. Their Framework for 21st Century Living (Partnership for 21st Century Skills, 2004, para. 5-7) describes the skills, knowledge and expertise students should master to succeed in work and life in the 21st century. The learning and innovation skills are:

- Creativity and Innovation
- Critical Thinking and Problem Solving
- Communication and Collaboration (Partnership for 21st Century Skills, 2004, par. 7)

Creativity (self-expression), Communication, Collaboration--could we music educators ourselves have authored a more amiable list of skills/understandings to which we are prepared to contribute? I think not. In American music education, the 2014 National Music Standards (NAfME, 2014) call for all students to develop their creative potential through composing and improvising. Images and sounds carry powerful messages in our life space; we seek to help students understand this communication and to make value judgments about them. The performing groups so prevalent in American secondary music curricula are fertile soil for the development of collaborative skills and attitudes.

Yes, assessment in these areas of creativity and communication is subjective, but there are skills and understandings that are prerequisite to these higher order processes that can be objectively assessed. Further, progress is being made on developing measurement tools to assess not just the products, but also the processes of creating, performing, and responding through NAfME’s Model Cornerstone Assessments (NAfME, 2015b). Further, these assessments are designed to be embedded in the curriculum so that students experience assessment as a part of the learning process (McTighe & Wiggins, 2012).
Assessment—A Tool for Overcoming the Challenges and Impact of Inequity

Having established that having music in children’s lives can unlock important skills and understandings that prepare them to lead a quality personal life and to be prepared for the twenty-first century workplace, it now remains to explain how assessment can further musical learning and favorable dispositions toward music. This supposition begins with a tracing of assessment practice in the U.S.

A History of Assessment in the United States

From the early years of the preceding century, music educators have felt that it is important to be able to diagnose the potential of a learner’s ability to successfully master a musical skill or concept. At about the same time as the Stanford-Binet Intelligence Scale (Terman, Lyman, & Ordahl, 1917) was being developed in the United States, Carl Seashore published his The Seashore Measures of Musical Talents (1919). Seashore believed that musical talent (aptitude) was a series of unrelated aptitudes—pitch distinction, duration discrimination, timbre distinction, tonal memory—that were inherited, rather than learned. Then a decade later, along came James Mursell (1938) who insisted that Seashore had it all wrong. Music aptitude was a product of learning and the environment, he argued. Thus, the nature-nurture controversy found its way into music psychological studies.

Before proceeding, it is important to distinguish between two music psychological constructs that will appear frequently in this paper—music aptitude and music achievement. While music achievement reflects what has been learned, music aptitude indicates potential for learning music, particularly for developing musical skills. Music aptitude might be explained in terms of the potentials measured by musical aptitude tests. Reviews of the content of music aptitude tests (Lehman, 1968, pp 37-56; Colwell, 1970, pp. 143-168; Gordon, 1970, pp. 12-36; Boyle, 1982, pp. 14-21; Webster, 1988, pp. 177-182) disclose unique differences, however, in the characteristics and qualities of the musical measurement exercises from which musical potential is predicted. Some musical aptitude tests include “atomistic” discrimination tasks relative to the dimensions of a musical tone—pitch, duration, loudness, timbre—that are encountered in a non-musical context. Some aptitude tests ask the responder to make rhythmic, melodic, and harmonic distinctions in terms of recognizing differences in patterns in the context of a short musical phrase. Several tests require preference responses in terms of an excerpt’s phrasing, balance, or style (Gordon, 1965). Virtually all of the exercises involve audiation or tonal memory. With such diversity, it seems that defining music aptitude in terms of test content lacks a cohesive philosophical and psychological basis.

Early scholarship (Seashore, 1938; Wing, 1954) contended that music aptitude was largely innate, a product of genetic endowment; and it is true that when music aptitude is viewed as a characteristic that students possess in different degrees, it has connotations of being a product of nature and “genetically oriented” (as opposed to being nurtured in a particular environmental context). More recent scholarship, however, recognizes music aptitude as the “result of genetic endowment and maturation plus whatever musical skills [and sensitivities] may develop without formal music education” (Boyle and Radocy, 1987, p. 139), i.e., through informal encounters with music in the environment—music on television, singing on the playground, etc. Indeed, Ridley (2003) contends that it is
foolhardy to suggest the nature-nurture continuum is a relevant concept for classifying psychological constructs. He contends that genes “. . . are not puppet masters or blueprints. Nor or they just the carriers of heredity. They are active during life; they switch each other on and off; they respond to the environment” (p. 6). Therefore, in responding to modern scholarship, *music aptitude* is viewed in this paper as a product of both nature and nurture. It follows, then, from embracing the above characteristics of the construct of *music aptitude*, that because music aptitude is responsive to the environment, it can be enhanced through learning—what Gordon (2003, pp. 43-44) terms “developmental music aptitude.”

**Replacing Aptitude with Music Enabling Factors**

So, if music aptitude indicates potential for music learning, and if music potential can be improved by learning, then it stands to reason that using assessment to diagnose musical learning strengths and weaknesses could assist music educators in helping to grow the skills, confidence and music abilities of learners. After all, the diagnostic function of tests and measurements to improve the health of individuals is a well-established practice in the medical profession. Why couldn’t we measure/assess learner’s music aptitude to improve their ability to encounter music?

The problem might be with the connotations of the term *aptitude*. Aptitude testing was connected from its earliest days with *intelligence quotient* (IQ). IQ initially was associated with the “nature-side” of the nature-nurture controversy. IQ was something that was inherited, not learned. Thus, by association, music aptitude was conceptualized as inherited; one either had musical talent or not. Despite the research of Gordon and others who purport that music aptitude is a product of both nature and nurture, the negative connotation of “music for the talented few”—not for ALL—persists.

**The Assessment of Music Enabling Factors**

Brophy (2000) has postulated a new way to think about the potential for music learning that avoids the negative associations of the term *aptitude*. He believes that it is important to assess the “enabling competencies and fundamental aural discriminations” (pp. 88–92) necessary for the child to continue musical growth and learning. Let’s embrace the label *music enabling factors* and promote the idea that musical growth can occur in all children. Enabling factors can be assessed to diagnosis the child’s musical strengths and weaknesses—to measure the individual’s current music ability. This is important because it offers an objective basis for programmatic, curricular, and instructional changes that can be based on learners’ individual differences.

What are some of the measurable factors that would enable music educators to promote musical growth and understanding? Brophy (2000, pp. 88-92) identified four enabling competencies or factors that are necessary to promote learning in music: Beat Competency (the ability to keep a steady beat); Imitation/Echo Competency; Following/Mirroring Competency (the ability to follow teacher’s motions or actions when listening to music); and Kinesthetic Musical Response (the ability to express aesthetic qualities with movement, as per Dalcroze eurhythmics). He further identified four fundamental aural discriminations (high/low; long/short; loud/soft; and fast/slow) that could also function as enabling factors. Nierman, Nierman, & Pearson (2010) also
postulated that eye/hand coordination could be an important enabling factor for instrumental music encounters.

How Could Enabling Factors Research Address Music Education Inequities?
The implications of unequal music education opportunities that currently exist both nationally in the U.S. (and globally) are staggering. The benefits of music in the lives of people—children who then become adults—discussed earlier in the paper should be available to all. Perhaps one way to address the existing inequities is through enacting policies that are supported by research that suggests that all children can grow and prosper musically if the enabling factors that guide their musical growth can be measured/diagnosed and used to facilitate musical learning.

The process of enacting policies could be conceptualized as aligning constituencies and evidence into what Hope (2002) called a *policy framework*. Hope defines a *policy framework* as “a constellation of such forces and resources moving together or in parallel to fulfill a common purpose” (p. 5). A *policy framework* might be conceptualized as the “lay of the land,” the political environment, in which a policy is conceived.

The *policy framework* surrounding the issue of equal access to music education might be conceptualized as having four sides: (1) special interest groups (the Music Education Policy Roundtable [N.D.], the National Association for the Advancement of Colored People [NAACP], Partnership for 21st Century Skills [business interests], etc.); (2) politicians who are concerned about equal access to education; (3) parents who want a quality life for their children and (4) music teacher educators/researchers, who could bring systematic research about the effects of music enabling factor measurement to the coalition. This “policy framework” united behind a common cause—Bring Music Education to All Children—might have enough influence to enact change. Policy frameworks can be powerful and persuasive in terms of decision-making.

Epilogue
In the U.S., a new piece of policy legislation, the *Every Student Succeeds Act* (ESSA), was passed and signed into law by President Obama in the fall of 2015. In addition to a provision that names music specifically as a subject needed for a well-rounded education (Public Law 114-95 [S.1177], 2015, December, Sec 8002, p. 2980), there are several policies in ESSA that pertain to teacher evaluation and assessing student achievement. Further, as ESSA regulatory policies are now being developed, the possibility of funding for professional development that could include the development of new music assessment processes now exist because music is designated in the ESSA policies as necessary for a well-rounded education. Change and equality are indeed within our grasp!

References


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The role of reflective practice of music educators in Brazilian public selections: A national sample.

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Abstract
This paper discusses the relationship between the concept of reflective practice of the music educator and its space in the Brazilian public selections. For, it is clear that newly graduated teachers reach the highest scores in these contests. So, is reflective practice being discarded or poorly evaluated? Methodologically, we present a comparison and synthesis of two preceding works that investigated the available score for this professional's previous experience in public selections in the two largest Brazilian education networks: municipal and state. Given that the previous practice score is 1% to 2% on the average of these selections, it is argued that public competition acts under a Technical-Rational logic that, according to Schön (1982), values more general concepts (in this case represented by the objective stage), than solving concrete problems (represented by the teaching experience in the classroom) not valuing the Reflective Practice. Also, according to the theory of Tardif (2014), these decrees are based on disciplinary rather than professional logic, thus discrediting experimental knowledge. It is understood that teaching practice/experience is not the only and exclusive means of improving public education, however, in this work, we defend the greater equity and diversity of professional evaluation, valuing the teachers who daily reinterpret the reality in the classrooms.

Keywords: Musical education; Brazil Public Selection; Reflective Practice.

Introduction
Although it has global relevance, regional leadership in South America and the continental territory, Brazil still presents challenging problems to be solved. Despite being the 9th largest economy in the world (economic focus), Brazil appears stagnant at 79th position in the 2018 Human Development Index ranking (Human Development Reports): quite vulnerable position when compared to countries like USA (13th) and Finland (15th). Similarly, the gigantic GDP is not equitably divided with its population: Brazil is the 10th most unequal country in the world (references).

The result of such inequality can also be seen in the social characteristics present in Brazilian education. According to The Learning Curve project, which crosses the results of indexes such as Pisa, Timms and Pirls, Brazil ranks second to last compared to the 40 countries analyzed, while Finland ranks first (Azaredo & Salda, 2014). These bad indicators help in the lack of teaching prestige in Brazilian society. Only 1 in 5 Brazilians would recommend a teacher's career to a child, and only 9% think students respect their teachers in the classroom (Eler, 2018). Our country ranked last in a ranking that assesses
the status of education professionals (Palhares, 2018). Brazilian teachers' salaries come last when compared to the 48 OECD countries (Borges, 2019).

Structurally, the educational system presents a similar image. The average student per class in elementary school exceeds 30 students and it is easy to find classes with over 50 students in major cities. Specifically, in music education classes, few schools have specific rooms for teaching music and provide instruments to aid learning. In general, the professor/teacher teaches notions of musical education with chalk and blackboard and without instruments, unless they buy or use their own.

In the political field, teachers are also in a very delicate situation. In 2018, a far-right candidate was elected: Jair Bolsonaro, known worldwide as the “Trump of the Tropics” (BBC, 2018). This one assumed the position based on a campaign of criticism to the Brazilian Education and its teachers, classifying them like: “communist indoctrinators”. Proof of this is one of his military school implementation policies in Brazil, since the current president is former military and defends the Brazilian dictatorial period that lasted more than twenty years (1964-1988) and contributes to the underdevelopment presented today. Given this scenario, issues such as professional development, sites of practice and reflective practice have unique conditions of analysis.

Given these issues and the complex reality, this paper aims to present a comparison and synthesis of two previous works that investigated what is the available score for this professional's previous experience in public selections in the two largest Brazilian education networks: municipal and state.

Structural Data of Brazilian Education Networks and Teacher Selection
According to government data (INEP, 2017), Brazilian educational networks are divided into 4 major groups: Municipal, State, Federal and Private; representing, respectively: 61.7%, 16.5%, 0.4% and 21% of the number of schools. Of these, we highlight the municipal and states networks that represent, practically, all public education networks; serving mainly the poorest part of the Brazilian population.

Regarding professional selection, according to Brazilian law, all public-school teachers must be selected through a set of written tests and title analysis. Practical tests are optional. If selected, the teacher will stay for 3 years under a supervised internship regime where his performance will be evaluated. If he scores the minimum scores in this assessment, the professional will be part of the public service for life.

Methodology
We selected, through digital research (2016 and 2018), the latest selection processes of the state secretariats of each state and the municipal secretariats of the Brazilian capitals (since Brazil has more than 8,000 municipalities). Where, we analyzed the score related to previous practice/experience of the Music educators in these selections.

We highlight the choice of Brazilian capitals, as they emerge as standard institutions for the other municipalities, achieving even better quality scores/indexes, compared to the state network and suffering to a lesser extent with the temporary hiring of lay teachers: this problem is still pertinent in our country.
**Data analysis**

Four different tests were identified in the overall analysis of the selections: Objective (multiple choice), Dissertation, Didactic Performance and Titles (where the score in the previous experience). Quantitatively, it is observed that the objective stage represents from 63% (municipalities) to 75% (states) of the overall scores (table1). Hence, the objective test represents the selection itself, with the other assessments as supporting items in teacher selection.

This is an alarming fact, since the Brazilian bibliography on public expenditure assessment condemns this type of evaluation. Although specific national research in the field of music education does not emerge, similar study classifications stand out: “limiting” (Descardec, 1992, p. 48); evaluator only of the “knowledge of the teacher in relation to the contents of his subject and leaving aside aspects related to pedagogical competence” (Teixeira, 1998, *apud* Ferreira, 2006, p. 30); “Specific reading and memorization only” (Santos, 2009, p. 58); “Without articulation between knowledge of the area and teaching practice” (Gatti & Nunes, 2009, p. 90); based on the verification of elements and formal statements in a “fragmented and insufficient form, making the activity of analysis, reflection and conceptual elaboration unfeasible” (Grendel, 2000, *apud* Mendes & Horn, 2011, p. 114).

There is an important devaluation of practice sites when analyzing the title stage: which provides insights into past experiences. This stage represents, on average, from 12% to 13% of the public exam (Table 1) and is also responsible for providing points for Master’s and PHD/doctoral degrees. The wide preference for the academic title is indicated over the teaching experience. The score on prior teaching practice ranges from 5% (municipalities) to 10% (states) of the title stage score, while the doctorate score is around 40% on average. Thus, indicating, the lack of equity in the comparison between academic titles and practice/experience.

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<tr>
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<td>0</td>
<td>0</td>
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<tr>
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<td>0,6</td>
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<td></td>
<td>Average (%)</td>
<td>0,63</td>
<td>0,19</td>
<td>0,05</td>
<td>0,13</td>
</tr>
</tbody>
</table>

Table 1: Average composition of public selections.

Another devaluing feature of teaching practice addresses the impossibility of concurrent scoring. In other words, if a teacher teaches one or twenty classes, the score
will be the same as it will only analyze the period and not the workday. This is a factor that penalizes the poorest professionals, who require a quick insertion in the labor market, leaving a postgraduate degree after a greater stability, not considering issues such as equity and diversity.

Also, there is a low limit on teaching practice time to be evaluated: 1 year (municipalities) and 5 years (states), taking into account research on teaching working time (Huberman, 2013; Tardif, 2014). As a final data, it is indicated that the score on teaching practice represents only 2% (states) and 1% (municipalities) of the general score of the selections (Table 2), indicating that for Brazilian basic and public education, the teaching experience time is of little importance in the selection of these professionals emerging only as an accessory item in the public selection.

<table>
<thead>
<tr>
<th>State</th>
<th>Overall Score</th>
<th>Teaching Experience</th>
<th>Others</th>
<th>Teaching Experience</th>
<th>Others</th>
</tr>
</thead>
<tbody>
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<td>100</td>
<td>4,8</td>
<td>95,2</td>
<td>0,05</td>
<td>0,95</td>
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<tr>
<td>2 SC</td>
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<td>0</td>
<td>40</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
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<td>100</td>
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<td>86</td>
<td>0,14</td>
<td>0,86</td>
</tr>
<tr>
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<td>110</td>
<td>0</td>
<td>110</td>
<td>0</td>
<td>1</td>
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<tr>
<td>5 MG</td>
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<td>4</td>
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<td>0,06</td>
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<tr>
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<td>166</td>
<td>0</td>
<td>1</td>
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<tr>
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<td>150</td>
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<td>150</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>8 MS</td>
<td>100</td>
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<td>100</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>9 GO</td>
<td>100</td>
<td>5</td>
<td>95</td>
<td>0,05</td>
<td>0,95</td>
</tr>
<tr>
<td>10 AL</td>
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<td>4</td>
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<tr>
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<td>1</td>
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<tr>
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<td>110</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>13 MA</td>
<td>110</td>
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<td>0,09</td>
<td>0,91</td>
</tr>
<tr>
<td>14 PB</td>
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<td>1</td>
<td>104</td>
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<td>0,99</td>
</tr>
<tr>
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<tr>
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<tr>
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<tr>
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<td>0,99</td>
</tr>
<tr>
<td>20 RO</td>
<td>110</td>
<td>0</td>
<td>110</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>21 TO</td>
<td>108</td>
<td>2</td>
<td>106</td>
<td>0,02</td>
<td>0,98</td>
</tr>
</tbody>
</table>
Table 2: Comparative Teaching Experience x Others

Thus, by drawing a profile of standard candidates from these selections, it was concluded based on the data presented that the intended candidate profile by these municipalities is:

a) professional presenting updated knowledge on topics not always linked to practical and / or professional knowledge
b) professional who mastered spelling skills for essay writing
c) professional with good academic qualification

In some cases, we could indicate the teaching experience as one of the items in this profile. However, it was concluded that, overall, it is considered negligible and practically null, based on the following characteristics:

I. Need to be approved at all previous steps in order to count the time of your experience.
II. Impossible to score concurrently
III. Appearance in only three low or medium capital edicts nationally and all located in the northeast region.
IV. Low relative average score
V. Disparity between Experience and Academic Degree
VI. Only one year of evaluated experience (absolute average) being discarded after working hours.
VII. It represents only 1% of the average event score.

Theoretical Discussion
From the statistical data, it is concluded that these events are based on a Technical-Rational conception. According to Schön (1982), this conception is based on a model of professional activity that consists in solving instrumental problems by rigorously applying scientific theory and technique. Where the intrinsic relationship between the professional knowledge base and practice is sustained, in which a concept of applying many general principles, standardized knowledge to concrete problems, is defended. This leads us to a hierarchical view of professional knowledge in which “general principles” occupy a higher level, while “concrete problem solving” plays a lower role.

From the perspective of technical rationality, professional practice is a problem-solving process. The choice of problems or decisions is resolved by the selection of means that best fit the stated purposes. Thus, it is mostly advocated empirical knowledge, disabling privileged teaching experience (Tardif, 2014).

According to Gauthier (1998), the tardifian conception of experiential knowledge is characterized by a series of private judgments, elaborated over time in which a kind of jurisprudence composed of tricks, stratagems and ways of acting is created. It is noteworthy that, in the teaching career, teachers' relations with knowledge are never cognitive or intellectual: rather, they are interconnected by work where principles are found to deal with everyday situations (Tardif, 2014). “The teacher cannot rely solely on formalized knowledge to guide his action. The practice of pedagogy is too complex for science to grasp” (Gauthier, 1998, p. 352). In the Brazilian reality, these characteristics present greater complexity, even more in the “conditions of social inequality that professionals face in relation to their students and the different schooling conditions in which they have to deal with the system” (Gatti, 2000, p. 41). Thus, we endorse the conclusion of devaluation of teaching practice in our sample.

Conclusion
Given the quantitative data from our sample and our theoretical discussion about the concepts of teaching experience/practice, it is argued that the public selections act on a Technical-Rational logic that, according to Schön (1982), values more general concepts (in this case objective test represented), than solving concrete problems (represented by the teaching experience in the classroom) not valuing Reflective Practice. Moreover, according to the theory of Tardif (2014), these publics selections are based more on a disciplinary logic than professional one, thus discrediting the experiential knowledge, which represents only 1% of the contests raised.

It is noteworthy that we understand that teaching practice/experience is not the only and exclusive means of improving public education. What is defended in this work is the greater equity and diversity of professional evaluation, valuing teachers who daily reinterpret the reality in the classrooms.
We believe that education will only come to fruition when we begin to value these professionals who daily do their work and create new strategies and theories with students. We continue to believe that recognition of teaching practice/experience is one of the ways of this transformation.

References


Reading the score: Critical, desirable, incidental?
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Marino Institute of Education, Dublin (Ireland)

Abstract
This paper is based on findings from a study which focuses on the learning and performance practices of seven young “bi-musical” Irish musicians who play both classical and Irish traditional music. Part of a larger study, this paper focuses on the notational /literate components of learning which these musicians negotiate as they cross between the different learning modes associated with these music traditions. Also examined are their beliefs and understandings regarding the importance, desirability, and place of notation in each of these genres. The author acknowledges her insider status, in having grown up immersed in both musics and having had experience as performer and teacher educator across both genres. A qualitative hermeneutic research framework (Crotty, 1998) underpins this collective case study which features seven musicians (aged 16-20 years), who were purposively chosen from various formal and informal learning contexts within the greater Dublin area. Three of these musicians learn both musics on the same instrument, while the others utilise different musical instruments in each genre. Their classical /Irish traditional instruments comprise violin /fiddle, saxophone /Irish uilleann pipes, cello /pipes/tin whistle, harp /concertina, piano /button accordion and piano /traditional flute. Some of these musicians also play other musics informally. Data collected include videotaped lessons, recorded practice/playing sessions, observations, and interviews. The study presents individual and cross-case narratives. While literacy and notational practices have been extensively considered in each of these genres, considering notation through the holistic lens of the bimusical learner reveals how these students code-switch between very different and at times opposing notational practices. Extending Mainwaring’s (1951) model of cognitive processes, the study illustrates, from a cognitive perspective, how these young Irish students negotiate different routes when learning in these two differently framed musical idioms. The research findings show how such differing processes impact on student engagement and participation in each tradition and, in the context of this presentation, how reading the score is differentially considered as “critical… desirable… [or] only incidental” (Timillos 1989, p. 33).

Keywords: Notation, cognitive processes, bimusicality, aural learning.

Introduction
This paper, Reading the Score, is part of a larger collective case study which examines the learning processes and practices of seven young Irish multi-instrumentalists who simultaneously learn classical and Irish traditional musics. This phenomenon is generically described in the literature as “bimusicality” (Haddon, 2016; Tokita, 2014; Cottrell, 2007, Nettl, 2005; Titon, 1995; Hood, 1960), and is not uncommon among younger Irish music learners (Vallelly, 2011). Míchéal Ó Súilleabháin described such a musician as:
Someone who could be a good concert pianist but also a good traditional fiddle player. By being a good concert pianist their sense of notation would be very well developed; however, on taking up the fiddle this repertoire in music notation is no longer relevant, but neither it should be said, would it interfere with their performance of traditional Irish music (2004, p. 1).

This collective case study interrogates and examines the scholarship on bimusicality and synthesising literature regarding classical and Irish traditional music learning, raises many questions, issues and challenges concerning learning processes and socio-cultural aspects of learning (participating in musics with differing grammar & social structure). Research questions address learning processes of students in cross-genre music learning, how multimusic learning practices and contexts influence learning in classical and Irish traditional music genres, and beliefs and meanings participants construct as a result of simultaneous learning in the two different musics. This paper examines the notational /literate components of learning which these young musicians negotiate as they cross between the different learning modes associated with these music traditions. In analysing and interpreting the data, Mainwaring’s model of cognitive processes is adapted to provide a holistic framework within which to consider these musicians process music learning.

**Research framework**

A qualitative hermeneutic research framework (Crotty, 1998) underpins the collective case study which focused on gaining meaning and understanding of the lived experience of multiple music learning (Crotty, 1998). This approach involved a number of processes, including recollective processes where experiences are recalled verbally and /or aurally, self-reflective processes by both the researcher and participants, collective processes to integrate meanings from the data collected (Hiller, 2016). Data, collected over a three month period, consisted of videotaped lessons, self-directed learning videos (self-taught participants), audio tapes, concert programmes notes, website data and other artefacts, observational field notes of lessons and other music activities, and transcribed interviews with student participants, teachers and parents (see Figure 1). Emergent themes from coding of data (Creswell, 2008) were analysed and presented giving voice to both individual and cross-case narratives within a “holistic model of bimusical learning” (Nugent, 2018).

**The Participants**

Seven participants were purposively chosen from varied formal and informal learning contexts, and had studied with teachers, who themselves reflected differing teaching /learning practices. Figure 1 shows the range of instruments played by these multi-instrumentalists (pseudonyms are used to preserve anonymity). Where possible, three classical and three traditional lessons were observed for each participant. Not all participants attended formal traditional music lessons at the time of data collection (which is typical of this age group in a traditional music context), indeed one never had.
Notation in Classical and Irish traditional music learning

In much of the literature, classical music learning is referred to as “literacy based” while learning in Irish traditional music is referred to as “aurally transmitted.” The score is often called “the music” by classical performers (Hill 2002, p. 129), and while this may be a misnomer, it highlights its importance and centrality in classical matters. In this genre musicians interpret the score “within the allowable limits” of the style period (Neuhaus 1973, pp. 148), but the score has its limits. There are many aspects of musical sound it does not capture (Lennon, 2000; Keegan, 1996). Music is much more expansive, involving both literate and aural dimensions.

In Irish traditional music the literature suggests that one is dealing with “music as sound” (Smith 1996, p. 209), with a music that exists in and is learned through performance (O’Connor, 2001; Ó hAllmhuráin, 1998), involving “concepts of variation
and improvisation” (Smith 1996, p. 209). Central to this way of learning is an emphasis on “memory development and ear training” (Veblen 1994, p. 26). However, as Bohlman (1988) notes, few oral traditions in the twentieth century are purely oral, and in the case of Irish traditional music printed editions, manuscripts, a variety of notational systems, tutors and websites (utilising various aural and notational devices) also feature in various guises in its transmission.

A range of notation systems have evolved in Irish traditional music as mnemonic devices, as teaching aids (Cotter, 2009; McCarthy, 1999; Keegan, 1996), and indeed sometimes, as Grey Larsen summarises, as a supplement, “a convenience, and a shorthand guide” (2003, p. 19). While it is generally held that the transmission of Irish traditional music “is originally and essentially independent of writing and print” (ITMA 1991, p. 1), a mixture of aural/literate approaches prevail in Irish traditional music learning. There are those for whom the tune is acquired aurally with no reference to notation, where the tune is learned from the playing of others, for example, from a teacher, a musician at a session, or from various audio sources (O’Connor, 1991; Veblen, 1991; Ó hAllmhuráin, 1982). However, notation can feature in various guises in formal group and individual lessons, such as when tunes are taught aurally and notation handed out afterwards for mnemonic/practice purposes (Ward, 2008; Breathnach, 1996; Veblen, 1991, 1994). A variety of notational forms, graphic, alphabetic, staff, solfa, are sometimes used when learning tunes (Cotter, 2009; Waldron & Veblen, 2008; Breathnach, 1996; Keegan, 1996; Veblen, 1991) (see Figure 2).

![Figure 2. Notational forms in Irish traditional music](image)

**Findings: Notation and learning**

In this study, several issues relating to the role of notation within both genres emerged from the analysis of data. The issues highlighted relate to: notation as used to enable and support learning; the role of notation in practice and group rehearsals, and notation and its impact on performance. It is important to note that in the experience of these young musicians, different notation formats, including staff notation, ABCs, and various combined formats, are used as they cross genres.
How did you learn that piece?

Each participant drew attention to aspects of learning through notation, such as: the need for careful and accurate reading of the score, or how all teachers scaffold the students learning to greater or lesser extents through annotating the score by writing in technical and performance directions. Participants’ comments also draw attention to learning processes, and at times challenges of sight-reading: “figuring out the notes” knowing or not knowing “what it was supposed to sound like,” reading the notes “exactly” or visual-kinaesthetic approaches such as Brid’s “looking and the music and transferring it” to her hands (see Figure 3).

I probably [...] look though it first and play it in my head if I haven’t heard the piece, and try and get some sense of how it’s supposed to be. Maebh

I started it in class with Eleanor [...] we went through it and she did the fingering and like she writes down all the things in it. Aine

The sheet music is usually there first, and then I listen to recordings while reading that and then the whole slow practice to make sure all the notes are there and then [...] practice on shifts and everything Conal

Always [start] with the music [...] you look over the piece, then you listen to what the teacher is explaining about it and then just play it, yeah [...] reading exactly what is written Seán

[Initially] I’m looking at the music, and transferring it from the music to my hands on the piano, [...] I start to look for intervals and scale passages and you know... Brid

I wouldn’t know what it was supposed to sound like. [...] then once I looked at the notes, I suppose I was quick enough to read them, and then I know how it should sound when I played them. Ellen

It takes me a while to get a picture of what I am actually doing. I’m there trying to figure out the notes for a while [...] its like different stages of me learning something Nora

I listen with my fingers... play along quietly so I can hear if I’m wrong [...] then I’d try and play [...] the first half a couple of times... Aine

First time I learn a new tune... I’d break it up very kind of similar to the way I’d learn it in the class, just break it up and listen to a little bit a few times and just try and play it and piece it all together... Nora

[-listens to the whole tune] to have a general sense of like where the different bits fall in the tune... See how much I can do without going through it [phrase-by-phrase]. [Then I] listen to it a few times [...] and then try and play it. Maebh

I would listen to it, that would be the main thing. [...] I would listen to it once, well maybe twice ... and I might finger along to it on the whistle or something... Conal

[Having listened to the whole tune on her ipod] then I’ll start with the first part and I would like be playing along with it until I kind of get it’ Brid

I’d heard it a few times and then I kind of had the tune of it so then I wasn’t just reading notes... I’d know how it sounded. I did it really slow... a good few times, till the notes were in my head really. So just to remember them, cause even if I was looking at the page it was still too slow. Once I knew it by heart it was easier. Ellen

Figure 3. Approaches to learning
Further aspects of the role of the score are also reflected: Conal describes it as essential to developing a “technical structure” for a piece of music; Maebh comments on learning more than the basics from the score, for example the importance of “performance directions the composer has written” in interpretation. Conal reminds us that classical pieces are learned exactly as written, but “all the important things aren’t written on the score” such as phrasing, sound, and dynamic nuance. To a greater or lesser extent, these young musicians convey a sense of the aural elements which supports reading the score whether in learning, rehearsing, or performing. Their descriptions reference elements such as following the teacher’s guide, internalising sound while watching, or combining listening and reading strategies (Figure 3). Maebh sums up the classical way of learning as focusing “on notes… I suppose to know from the notes.”

The role notation plays in Irish traditional music learning is nuanced. For six of the students “picking up” a tune aurally is the primary mode of learning. They believe that more experienced traditional musicians learn by ear, advocating the perceived advantages of hearing and learning the detail of a tune from other players. In contrast, Ellen, the seventh student, chooses to learn through notation (Figure 3). She believes that notation should be used more in learning traditional music. In answering the question “do you /or did you always learn in this way?” participants drew attention to other aspects of notational use further highlighting the different approaches to notation in the two genres. Maebh describes sometimes writing out a difficult tune (in ABC notation) after learning it, two of the more advanced players referred to occasionally accessing manuscript collections to expand their knowledge of less well-known repertoire. Interestingly, all participants have experienced varying degrees of notational use in early years traditional music learning, such as following ABC notation while listening to their teacher playing a simple tune or learning aurally and using notation as a reminder when practicing. For five of the seven participants, large group learning and/or rehearsal contexts had an optional literacy dimension: ABC notation to scaffold learning in large groups preparing for performance (Ellen, Seán, Conal, Áine). Ellen, for example, differentiates between “reading” something that is new in classical music, in contrast with “hearing /remembering” a tune already “in [her] head,” when reading an Irish traditional tune. Some of these approaches parallel with notational use among popular musicians (Green, 2002).

**Cognitive processes in using notation**

One of the most striking aspects of the students’ learning is how they switch between different ways of learning in these genres. Testament perhaps, to immersive practices and the strength of each tradition, these young musicians naturally engage in the different “modes” despite having the skills to do otherwise. During data collection, students reviewed and described how they approach learning, with recourse to video footage of observed lessons. Drawing on and extending Mainwaring’s (1951) model of cognitive processes, which reflects on the relationship between inner hearing and reading, illustrates how these students negotiate the different routes to learning or “different kinds of thought processes” (Smith 2001, p. 28) when learning in each of these musics. Mainwaring identified two different ways in which notation is processed in classical learning. The young musicians’ descriptions of classical learning in this study correspond with Mainwaring’s model in that they either, (a) see the notation and respond
mechanically to produce the notated sound, thus working from symbol to action to sound (Figure 4, no. 1), or they “hear the notation inwardly before reproducing it on an instrument” (1951, p. 20), thus working from symbol to sound to action (Figure 4, no. 2).

Processes no. 3, 4, and 5 illustrate students’ traditional music learning. For six of the seven musicians, the fifth process (Figure 4, no. 5) best describes what they now do as older players: they listen, and they play (described by Priest (1989) as sound translated into kinaesthetic knowledge). When one considers the third and fourth processes (Figure 4, no. 3 and 4), it seems as Vallely says, that “listening remains the way to learning” how to play traditional music. The focus here is on playing not on reading (2011, p. 493).

The implications of this are that cognitive processes support musical activities in each genre very differently. In traditional music, when learning by ear, one listens and one plays whether learning, playing, practising, participating, or performing. There is a natural flow between these different activities. There is continuity of cognitive process which, in this researcher’s view, underpins the ease with which these students participate in their many formal and informal traditional music activities (simply put, they are “hard-wired” to play). Classical learning processes involve a very different transition from learning to performing, what Hallam (1997, p. 96) described as a “mismatch” of codes. Classical learning involves one way of thinking and working with the music. Performing without the score is a different cognitive process. One wonders if these different underlying cognitive processes, in some way, contributed to the very different patterns of student participation and performance in the two music genres observed in this research.
Discussion: critical, desirable, incidental?

Considering different music traditions in terms of the aspects of each music that “are critical, those that are desirable, and those that are only incidental” draws on the model developed by Richardo Trimillos (1989, p. 33), when investigating the ways in which societies pass on their own musics. In this paper, reflecting on what is critical, desirable, and incidental in how these young multi-instrumentalists “read the score,” reveals much about how they negotiate learning across classical and Irish traditional music genres.

In respect of the classical tradition student descriptions of learning focus on “looking at the music,” “reading the music,” “being quick enough to read,” or in other cases querying their reading skills. Several in the study acknowledge the value of having a good ear but as Áine’s violin teacher says “There are advantages to having a good ear […] but there’s a huge disadvantage in not being able to read, to not being able to sight read, more so than having a good ear.” One of the participants (the cellist) considers the idea of learning classical music by ear but dismisses it as an option. While opinions differ in the literature on this matter, in this study the data seem to suggest that notation and reading the score is fundamental or of critical importance in the classical music tradition.

In traditional music the picture is less clear. Based on initial responses of six of the seven students regarding their own individual practice, “learning by ear” is considered as the primary “way” of learning for older musicians. For these musicians, while use of notation may at times be desirable (writing out a difficult tune after learning), it is for the most part incidental. For Ellen, the seventh participant, notation plays an essential and critical role in her music learning. Use of notation becomes further nuanced when large group learning/rehearsal contexts are considered, particularly in grúpaí ceoil, competition and performance preparation. From the data, there appears to be a practice, for some, of using the score in ways that are more critical than incidental. Conal, one of the participants in the study describes the use of ABC notation as “a map” in which all manner of details of the performance are recorded (such as ornaments and variants in each repetition of a tune). Such a detailed graphic ABC score of an intended ensemble performance is very different to the mnemonic use of notation suggested earlier. However, while there are incidental and at times critical use of notation in certain group settings, in the case of Irish traditional music the primary or “critical” element is learning aurally or “by ear”.

Conclusion

This paper focuses on how young bimusical musicians “read the score” as they negotiate the ways of learning in classical and Irish traditional musics. The data show a nuanced narrative regarding notation’s critical, desirable, and incidental roles in both traditions. Curiously, focusing on notational elements points us to the inherent oral-literate dynamic in all music traditions, and in these data, especially, towards the aural dimension which is often overshadowed by the centrality of the score in classical learning. While a detailed examination of aural dimensions in learning is not possible here, these data evidence the aural-oral in both traditions, in

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1 See Professor Lucy Green’s Ear Playing Project. http://earplaying.ioe.ac.uk/
lesson transactions, in how hearing and learning from other players is encouraged. (One of the surprising elements in the larger study, was the greater use of the internet in classical music learning rather than in traditional music learning). Indeed, one might query whether the use of recordings in classical learning is desirable or has now become critical? While learning in these traditions has often been viewed through very different lens, findings in this study resonate with the words of Timothy Rice (1995, p. 275) when he said “all instrumental music traditions, while partaking variously of written and oral components, are visual, aural, tactile or kinaesthetic in nature […] and in that sense possess more in common than the dichotomy between oral and written suggests.”

References


IMPROJAZZ: A new resource for jazz improvisation

Luis Nuño

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Abstract
Improvisation exists since the beginning of Music history. Nevertheless, nowadays its use has been practically reduced to Jazz. Generally, it consists in creating a melody suitable for a given chord progression, which in turn is made with notes of specific scale types. Thus, for each chord or group of chords, the more suitable scales for improvising over them must be known. Actually, there are many texts in the bibliography which give such scales for many chord types, but only for the root C, leaving the reader their transposition for the other cases.

In the particular context of Jazz, the preferred scale types are those formed by a sequence of whole and half steps, without two half steps in a row, thus leading to the major, melodic minor, whole tone and diminished scales. As well, only chord types obtained from those scale types are normally used. A key point in creating the solo is a proper handling of the notes belonging to the scale but not to the chord, called tensions, which is necessary for achieving a good correspondence between melody and harmony. Tensions may be available or unavailable. The latter are also called avoid notes and must resolve stepwise to a chord tone or an available tension, as well as being of short duration. Other scale types widely used in Jazz are the pentatonic and Blues, which are characterized by being free of avoid notes.

In this paper, a new tool called IMPROJAZZ is presented, which gives the proper scales for improvising on each chord type for any root in an easy and friendly way. It consists of a rectangular board with printed notes and a pair of plastic sheets with lines and symbols. By moving each plastic sheet on the board, the given chord type is placed just below the desired root and then the corresponding scale is obtained, along with its notes. Moreover, notes being available tensions or avoid notes are also indicated. It has been designed in such a way that users do not necessarily need to know how to read music, thus allowing the inclusion of a wide range of musicians.

The use of these kind of tools, and other similar ones, are part of a subject of a Master on Music and Scenic Arts in a university programme. As well, they are presented in several Conservatories and musical societies, being greatly appreciated.

Keywords: Jazz, Improvisation, Scale, Mode, Available Tension, Avoid Note

Introduction
Improvisation is understood, in the art of Music, as the spontaneous creation of music, which is the opposite of executing a previously composed work. To use a linguistic comparison, we would say that improvisation is similar to “talk or converse” instead of “reading or reciting”.

Although improvisation is usually associated to Jazz or Modern Music, it is worthwhile to clarify that its origins are very ancient and is also part of Classical Music. Yet in the Middle Ages, counterpoints were improvised over a cantus firmus, which was
a previously composed melody. And later, from the Baroque period, the development of variations over a known theme was common practice. As a matter of fact, among its most renowned performers we find such great musicians as Bach, Händel, Mozart, Beethoven, Chopin or Liszt.

Even though the improvisation can be understood in its wide sense, it generally consists —mainly in the particular context of Jazz— in creating a melody suitable for a given chord progression. This means that a score containing only chords is given, and a melody must be composed in such a way that it “fits” or “sounds well” with those chords. In turn, in the context of tonal music, those melodies will be based on major or minor scales.

Therefore, the procedure can be divided into two different steps:

1) For each chord or group of chords, we must determine which scale or scales are suitable to improvise over them.

2) Once one of those scales is chosen, we will have to create a melody with its notes.

Regarding the first step, which is mainly technical, there are many texts in the bibliography giving the set of scales more suitable for improvising on each chord type. For example, Aebersold (2000), Crook (2002), Nettles (2002) and Shroedl (2003). These texts, however, only give those scales for the chord root C, leaving the reader their transposition for the other cases. In order to obtain such scales for any chord root, Nuño (2010) developed a tool for a general musical context. In contrast, this paper deals with the development of a new tool for the specific context of Jazz, called IMPROJAZZ.

The use of these kind of tools, and other similar ones, are part of a subject of a Master on Music and Scenic Arts in a university programme. As well, they are presented in several Conservatories and musical societies, being greatly appreciated.

In next section, the procedure for obtaining such scales will be explained by means of an example and then the list of most used scales for each chord type will be given.

With respect to the second step, although it is highly creative, there also exist different texts including suitable methodologies for it. Apart from Aebersold (2000), Crook (2002) and Nettles (2002), previously referenced, it is worth mention Bergonzi (1994a) and Levine (1995). A key point in creating the solo is a proper handling of the notes belonging to the scale but not to the chord, called tensions. This is necessary for achieving a good correspondence between melody and harmony, and is explained, apart from above-mentioned references, in Herrera (1995), Iturralde (1993), Pease (2003) and Willmott (1994).

A section below will be devoted to tensions and, after that, the new resource IMPROJAZZ will be described. This tool gives the most important scales for improvising on each chord type for any root, and also indicates the tensions introduced by each one.

On the other hand, let us remember that Music is an Art, so it is not constrained to strict rules. This means that, besides using the notes of the chosen scales, performers make use of other resources, such as passing tones, approach notes, anticipation, delayed attacks and all kinds of embellishments.

**How to Improvise on a Chord**

This question will be explained by means of an example. Suppose that we want to improvise over the E–7 chord (Figure 1). Firstly, we have to know the context in which this chord is located. For instance, if around this chord (that is, ahead or behind it) we
find such chords as C∆, F∆, D–7, G7, etc., we can use the C Major scale to improvise on all these chords, since all of them belong to the C Major scale.

On the other hand, if around E–7 chord we find such chords as D∆, G∆, A7, F♯–7, etc., we can use the D Major scale to improvise on all these chords, since all of them belong to this scale. But it can also occur that, around E–7 chord, we find such chords as D–∆, F+∆, G7, C#Ø, etc., in which case we would use the D melodic minor scale, since all these chords belong to this scale.

Note that, in all these examples and other similar ones than can be introduced, the chosen scale for improvising always contains all the notes in the E–7 chord, that is, E, G, B and D.

Nevertheless, determining the context in which a chord is located requires certain experience. Logically, the key signature itself will determine, in most cases, the scale we can use to improvise. However, we cannot fully trust it, since most pieces contain passing modulations or, simply, altered chords, where the key signature remains but the scale does not. Therefore, it is always better to analyze the existing chords in each part of the score.

And what about if around E–7 chord we find such chords as F–7, Eb, B♭∆, B♭–, etc.? That is, chords not related to E–7 through any major or minor scale. In this case, we will have to use an independent scale for improvising on this chord.

But additionally, there are special situations where, even if there is a scale for improvising on several chords, it is desirable to use different scales. Among these situations, we can point out the following:

1) When the same chord lasts several bars. In this case, using only one scale can be monotonous. And even more if several improvisations are going to be carried out on the same chord progression.

2) When we wish to introduce a different sound on certain chords. This is very common, for example, in dominant 7th chords, where it may be interesting to augment or reduce the “dissonance” or “tension” of this chord.

This way, we arrive to a very general question: Which are the available or most suitable scales for improvising on a given chord? Even though there are no strict rules in Music, as it has been previously stated, we can say that, from a purely logical point of view, they will be those containing the notes of the chord.

This means that, if we go back to the E–7 chord, which is composed by notes E, G, B and D, the available scales for improvising on it will be those containing these four notes. Thus, the C Major, G Major or D Major scales will be good candidates for the improvisation, as they contain these notes. On the contrary, the F Major or A Major scales, for example, will not be suitable for it, as they do not contain the notes of this chord. In fact, it can be proved that there are only 3 major scales containing the notes of E–7 chord; precisely, those above mentioned.
Besides the major scales, we can search for minor scales that fit to this chord. The E harmonic or melodic minor scales, however, would not be suitable since they contain D# instead of D (let us remember that, in this context, it is assumed that a melodic minor scale is that having the 6th and 7th degrees raised one half step, both ascending and descending). On the contrary, the B harmonic minor and D melodic minor scales are suitable for this improvisation. In fact, it can be proved that there are no other harmonic or melodic minor scales containing the notes of E–7 chord.

As we can notice, knowing the scales containing the notes of a given chord is not easy at all. And the difficulty increases when the chord is related to scales including several accidentals. As well, we must take into account that, besides the minor 7th chords, as that considered in the example, there are other types of chords, such as major 7th, dominant 7th, diminished, half-diminished, etc., just for citing some seventh chords. Moreover, there are extended chords, which include the 9th, the 11th and/or the 13th, which in turn may be altered a half step up or down. Therefore, there is a broad range of chord types, but all of them are widely used in Jazz compositions. And, for any of them, we need to know which scales are most suitable for improvising.

In order to complete this panoramic view of improvisation, we can add that the scale types used to improvise are not limited to the major, harmonic and melodic minor,
but some other types are used as well, such as diminished, whole tone, pentatonic, Blues, etc. All of this increases the improvisation complexity, as well as our interest in it.

Now, it is important to comment on some characteristics of Jazz:

- The preferred scales are those formed by a sequence of whole and half steps, without two half steps in a row (thus avoiding strong dissonances when improvising). These scales are, therefore: major, melodic minor, whole tone and diminished. The harmonic minor scale is not included here because it contains one interval greater than a whole step.

- Generally, Jazz chords are those obtained from the previous scales, the root being any note of a scale. A list of most used chord types is given in Sher (1988).

- Therefore, the scale giving rise to the chord is suitable for improvising on it. As the chord root may be any note of the scale (not necessarily the tonic), the resulting scale starting with that note is called a “mode”.

- In practice, each chord type has assigned some particular modes and not all possible ones. For example, the D melodic minor scale (starting with E) is not normally used on E–7 chord (although it could be), but on D–Δ.

Taking into account these characteristics and the previous references, Table 1 summarizes the modes that are normally used for improvising on each chord type in a Jazz context. For example, on a –7 (minor seventh chord) we can use the Dorian, Aeolian or Phrygian modes. The symbols “M/II:7” after Dorian mean that this mode corresponds to an M (major scale) starting on its II degree or whose tonic is the 7 (minor seventh) of the chord, and similarly for the other modes in the table (mm stands for melodic minor, Wd for whole-half diminished and W for whole tone). As well, Fig. 1, left side, shows the notes of these 3 modes as they appear on IMPROJAZZ (in reality, only one of them is obtained at a time). The chord root, which is also the first note of the mode, is marked with a rectangle, while the other notes of the mode are marked with a circle. The tonic of the corresponding scale is distinguished by a double line and the scale type is indicated next to it (M in this case).

**Tensions**

When a mode is used for improvising on a chord, we have to take into account that it will contain notes not belonging to the chord, which deserve special attention. In this respect, the notes of the mode can be classified into the following groups:

1) Chord Tones: Notes belonging to the chord.

2) Available Tensions: Notes not belonging to the chord, but which complement and enrich its sonority.

3) Unavailable Tensions or Avoid Notes: Notes not belonging to the chord, which produce strong dissonances and distorts its sonority.

Generally, the notes in group 1 are the 1st (root), 3rd, 5th and 7th of the chord, since Jazz chords are normally seventh chords. Among them, the 3rd and 7th are most harmonically important because they establish the quality of the chord and are called Guide Tones. And the notes in groups 2 and 3 (tensions of any kind) are the 9th, 11th and 13th. Avoid notes are those being a half step above a chord tone, for example, F and C on E–7 chord. In order to achieve a good correspondence between melody and harmony, they must “resolve” stepwise to a chord tone or an available tension, as well as being of short duration.
Table 1. Modes normally used for improvising on each chord type

Some authors, such as Nettles (2002), Herrera (1995) and Iturralde (1993), also consider as avoid notes those forming a tritone interval with the 3rd or 7th of the chord (the guide tones), as C# on E–7 chord (C# is a tritone apart from G, the 3rd of the chord). However, Nettles (2002) indicates that this criterion is changing. In fact, many other authors do not mention this case, as Crook (2002), Levine (1995), Aebersold (2000) or Pease (2003). On their behalf, Bergonzi (1994a) and Willmott (1994) make a distinction between the two cases: on the one hand, there are the notes a half step above a chord tone, which are very dissonant and need to resolve; and, on the other hand, those forming a tritone with any chord tone, not necessarily the 3rd or the 7th, which can be used more freely and do not need to resolve.

Regarding dominant chords, the situation is different because they already include a tritone between the 3rd and the 7th, which makes them quite dissonant. Therefore, notes a half step above the 1st or the 5th are considered available tensions, but not those a half step above the 3rd or the 7th, since they are the guide tones and must not be interfered. Auditory examples on different tensions are given in The Jazz Piano Site (2019).

It is worth pointing out that the term “avoid note” is a bit misleading, since it does not mean that those notes must be “avoided” or not used, but simply that they must “resolve”. In Fig. 1, left side, chord tones are marked with a thick line and tensions with a thin line. Furthermore, available tensions are marked with a solid line, while avoid notes with a dashed line. The tensions are indicated below the chord symbol and avoid notes have an asterisk (*).

IMPROJAZZ
As explained above, there are many texts in the bibliography which give the set of scales more suitable for improvising on each chord type, but only for the chord root C, leaving
the reader their transposition for the other cases. As it is easy to understand, all this amount of information is very difficult to memorize.

With the objective of obtaining those scales for any chord root in an easy and friendly way, a new tool called IMPROJAZZ has been developed. It consists of a rectangular board with many notes printed in black and red, and a plastic sheet with lines and symbols printed in dark blue. By moving the plastic on the board, the given chord type (for example, −7) must be placed just below the desired root (for example, E). This way, the corresponding mode with its notes is obtained. Moreover, notes being available tensions or avoid notes are also indicated. Fig. 1, left side, shows the 3 possible results for E−7 (only one of them is obtained at a time).

Additionally, there is a second plastic sheet with the pentatonic and Blues scales, as they are widely used in Jazz (for example, Bergonzi, 1994b, focuses exclusively on pentatonic scales). These scales are characterized by being free of avoid notes. Fig. 1, right side, shows the 3 possible results for E−7 with major and minor pentatonic scales (only one of them is obtained at a time), where the lines and symbols mean the same as in the case of modes (MP and mP stand for major and minor pentatonic scale, respectively; and Blu will stand for Blues, when applicable). The only difference is that now there may be some notes belonging to the chord but not to the scale, which are marked with a dotted line and crossed out by a solid thick line.

This way, a set of different scales is obtained for improvising on a chord, where the choice of a particular one depends on the musical context and the performer’s will. However, in the case of extended chords, some options can be eliminated. For example, E−9 eliminates the Phrygian mode (since it includes b9 instead of 9) and E−6/9 eliminates both the Phrygian and Aeolian modes (the 6th is equivalent to the 13th). In IMPROJAZZ, 12 chord types are considered, as well as 7 scale types with their corresponding modes. Moreover, to further facilitate the initiation to the improvisation, practical tables containing all those chords and scales in all keys are provided. Finally, this instrument together with the scale tables, are designed in such a way that users do not necessarily need to know how to read music.

Conclusions
Improvisation is generally understood as creating a melody suitable for a given chord progression. In a Jazz context, only some particular scale and chord types are considered. So, for each chord or group of chords, the more suitable scales for improvising over them must be known. There are many texts providing this information, but only for the chord root C, leaving the reader their transposition for the other cases. In this paper, a new tool called IMPROJAZZ is presented, which gives those scales for any chord root in an easy and friendly way. As well, notes being available tensions or avoid notes are also indicated. Moreover, it has been designed in such a way that users do not necessarily need to know how to read music, thus allowing the inclusion of a wide range of musicians.

References


Singing a new song: Perceptions of an Indian adolescents’ choral ensemble learning and performing Indian folk music

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Abstract
The purpose of this study was to understand the effect of teaching Indian folk music, arranged for choir, on an adolescent choral ensemble enrolled in an after school choral music program in Bangalore, India. Choral students between the ages of 11 - 17 years (N=32) participated in this study and their responses were obtained using a questionnaire and a semi-structured interview. The results indicated that after learning and performing the music at concerts, the singers were more willing to explore Indian culture and art forms, had a greater appreciation of the phenomenon of music helping them appreciate their first culture, and were eager to explore complex music styles from around the world. Since most Indian folk music is sung in unison (Ermey, 1977; Sharama, 2009), presenting Indian folk music in a choral setting i.e. in 3-part and 4-part arrangements brought relevance and familiarity of the Western choral music genre to Indian folk music. This implies that making folk music familiar and accessible to younger generations by arranging it in a style that they are familiar with will encourage them to explore and appreciate their culture and other cultures, possibly even supporting culturally responsive teaching (Gay, 2018).

Keywords: Indian folk music, adolescents, choral ensembles

Background:
India has vocal traditions dating back to thousands of years (Yang, et. al., 2015). There are 122 recorded languages in India including 22 official languages representing the 29 states and seven union territories (Indian languages, 2019), indicating that the cultural diversity in India is staggering in its reach amongst a multi-linguistic society complete with rich, complex, multilayered traditions (Sharma, 2007). A study of folk lore from around India reveals people’s ideas, their ideals, hopes, aspirations, superstitions and fears coupled with myths and traditions that has been handed down from generation to generation (Sharama, 2009, p. 16). Studying folk lore is a reliable and trustworthy index to understand the background of the people of a country as it fosters cultural unity and national integration despite its diverse languages, religions, regions and time giving room to explain people’s socio-cultural systems, beliefs, values and attitudes through folk songs, folk dance, folk talas, proverbs, riddles, legends, ballads, fables, charms, fairs, festivals, religions, superstitions (Sharama, 2009, p. 16-17; Mehta, 2013).

Indian folk music is generally sung in unison but presents a variety in the vocal timbre, distinct melodies, and style (Asch, 1956; Chaudhary, 1984; Manuel, 1998; Sharma, 2007; Sharama, 2009). It is not unusual for Indian choral directors and artistic directors to introduce their choirs to a culturally diverse program involving music from around the world, and Indian popular music like Bollywood. However, singing Indian folk songs with part divisions is uncommon (De Quadros, 2013; Ermey, 1977).
Colonization brought Western musical influences on India and many Indian composers and conductors embraced these Western music styles. Very few Indian composers have attempted to set Indian folk music in a choral style (Ermey, 1977).

Today, little is known about choral practices and its effect on children’s choirs and adolescent choirs in India. The choir involved in this study has members from nine Indian states, each with different traditions and interests. In light of this variety among the group and the dearth of choirs in India exploring Indian folk music, this study explored musical applications of culturally responsive pedagogy - teaching that uses “the cultural characteristics, experiences, and perspectives of ethnically diverse students as conduits for teaching them more effectively” (Gay, 2002, p. 106).

**Context**

This article presents the case of The Harmony Chorus from Bangalore, India. The total strength of the choir is close to 74 members who have been divided into three groups - junior choir, senior choir, concert choir. This study was done with the 'concert choir' consisting of 32 adolescents between the ages of 11 to 17 years old, some who have been singing with the group for the last nine years. For a period of about 13 months, the choir was introduced to Indian folk songs, from seven Indian states that I arranged in 3-part and 4-part harmony. The participants had never intentionally listened to or sung Indian folk songs prior to this experience. To obtain participants with the understanding and maturity of choral repertoire and styles, only members who have been singing with the group for at least three years were chosen to participate in this study, having performed a wide variety of repertoire with the group including Western Classical music, Pop, Jazz, World Music and Bollywood. The group learned the music, and subsequently performed in four public concerts, including an international concert tour. Participants completed a written questionnaire asking them to reflect on their experiences in choir and were invited to elucidate their thoughts in a semi-structured interview.

The purpose of this study was to understand what the participants felt singing Indian folk songs presented in a style that they usually would not hear. Two main questions guided this study:

1. What was the participant’s response to performing Indian folk music when it was presented to them in a choral style?
2. Were they interested to find out more about the cultural traditions, including the music traditions of India?

**Method**

Through purposeful sampling strategy in this case study, responses were noted from 32 members of The Harmony Chorus - an after-school choir. The participants answered a questionnaire and participated in a semi-structured interview.

**Data generation and Analysis**

Data generation occurred over a 6-month period from May to November 2019, with observational field notes also collected at concerts and rehearsals. A questionnaire was handed to the participants followed by semi-structured interviews (Fontana & Frey, 1994; Roulston, 2010). The field notes were used to describe rehearsal routines and techniques, responses to the repertoire, and performance practices at rehearsal and concerts.
**Questionnaire**

Choir members answered 30 questions that included details about their comfort level with the repertoire, their involvement in learning the music, what the music meant to them, what they found most difficult or easy, how the music was different from what they had previously done, what their peers and family thought about their involvement with this genre, did they make alterations in their schedule to learn this music, what learning/take away this music gave them. They also had to rate themselves on several parameters including how much they liked this music, how easy or difficult they found it, whether they would learn more music like this in the future.

**Semi-structured interviews**

A semi-structured approach to interviewing afforded the flexibility and ease necessary to interviewing younger participants in this study. A series of 30—minute interviews explored their perceptions based on the answers they provided in the questionnaire. Interviews took place mostly before or after rehearsal time or when they came in for separate lessons in music theory or voice during the week. Audio recordings were transcribed for subsequent analysis after obtaining permission from participants and parents.

The participants commented on the success they hoped to achieve though learning this music and performing it at concerts, the reactions of audiences, family members and peers, what they found most difficult, what they found interesting, how this music shaped their identity, practice routines they had to follow to learn this music, what videos they watched and articles/books they read to learn more in an attempt to be authentic.

**Clarifying researcher bias**

As the artistic director of The Harmony Chorus, I have always sought meaningful ways to help my students explore various genres of music and represent it as authentically as possible. Music from Indian folk lore has been a genre that remains largely unexplored because of its unfamiliarity. Thus, I decided to represent it in a way that was familiar to the choir and arranged it in 3-part and 4-part choral music since the choir really enjoys singing a cappella music and world music. The group is already familiar with my arrangements of Bollywood music. To make the study less biased, I invited two choral directors from Bangalore, who have never worked with my group before, to attend concerts and externally audit the answers provided in the questionnaire, semi-structured interviews, post-concert reflections and videos of the concerts. They also engaged me in debriefing conversations that prompted critical self-reflection of the analysis.

**Data and Interpretations**

Individual responses from some of the students are presented in the following section followed by my observations and implications for practice and for future research.

Meena: “I love this Music. Even though it’s really difficult, I find it very interesting.”

13-year old Meena described herself as ‘hard-working’, ‘diligent’, ‘inquisitive’, ‘determined’ and ‘loveable’. She has been singing in the group since she was 9 years old and has been very committed to learning, growing and exploring new music styles.
Dia, 15 years old, said, “I think this genre of music is quite contrasting to what we would usually sing, although at first it was very hard to adapt to the style.” She shared that one of her biggest challenges was learning to pronounce the words in the different languages but overcame it after consistent practice. From my observations, most participants were happy and interested to explore this genre collectively as a group as they found it easier to connect to the music when it was made familiar to them through 3-part and 4-part arrangements despite difficulty in learning multiple languages.

Tina, a 16 year-old singer said, “I love being a part of this enriching learning experience with the people in this group. It’s amazing to discover so much music and meaning together!”

She is one of the oldest and most dedicated members in the group, singing with The Harmony Chorus since its inception in 2011. She adds, “It’s wonderful and exciting when we are challenged to discover and sometimes come up with our own harmonies and dance moves for some of the Indian folk songs we sing, and to research about the places we are singing about.”

Having performed a variety of genres with the group at all concerts since the past nine years she notes. “For me, being able to finally connect with music from my culture is very rewarding and, in some ways, life changing”. (Reimer, 2003) points out that the “emotional dimension of music - it's power to make us feel, and to “know” through feeling - is probably its most important defining characteristic. One must understand that that people from different cultures share certain cultural offerings yet are biologically and experientially unique and within their own cultures. Honoring, cultivating and cherishing this perception moves us to be respectful of humans and the music of each culture and subculture (p.171). Tina also said that 'her friends were very proud of her although they didn’t attend many of the shows where they sang Indian music'.

Lena, 12 years old, shared that “some of her friends in school were doubtful about the music she was doing especially because they didn't understand what we were singing about.”

Another participant, 11 year-old Ramona shared with me that her friends in school initially had mixed opinions. She said, “some of my friends judged me and made fun of the lyrics when I tried to memorize them but some of my friends really appreciated the songs and that was encouraging. Some of them even tried to learn the songs too.” This possibly indicates that the unfamiliarity in this musical genre is one of the main reasons that the younger generations shy away. Moreover, one also doesn’t expect Indian folk music to be represented in a choral setting.

(Blacking, 1974) believed that all humans, both performers and listeners, were capable of engaging in music from their culture and across different cultures and situations and could have a fuller understanding of music when they studied an array of multicultural music. Blacking promoted the idea of looking for similarities in music rather than discussing the differences. The goal of music, according to Blacking, was to find a “personal syntax and a personal meaning, whether it matches that of the performers and creators or not” (p. 350). Some people are intrigued by music that’s unfamiliar to them and learn to value it over time, as observed in the case of 14-year old Tanya who said, “I think singing Indian folk music has really changed the way that I had previously viewed it - a boring genre that had no importance and was a waste of time and wasn’t cool. Looking back now, I realize just how much good music I had missed and feel
somewhat ashamed that I stayed away from it initially.” Tanya has also been singing with the group since its inception and has grown considerably in her maturity as a musician. She spoke about how she has changed her playlist on Spotify to include Indian music, especially from Punjab, as that really interests her.

14-year old Lisa said, “I’m so glad we do this as it’s a lot of fun and it is especially fascinating that I can learn more about my country and the world.” Introducing students and audiences to music and other art forms of various cultures is a wonderful way to broaden their understanding of the meaning of music (Gay, 2018). A student does not need to lose his own musical identity in order to study other music. On the contrary, in learning about music from one’s culture and other cultures, a student’s life is enriched (Greetz, 1973). Anita, a 13-year old singer who is one of the most dedicated members of the group, never skipping a rehearsal and always learning her music said, “Singing Indian music, both folk music and Bollywood, has most definitely changed me for the better.” In her questionnaire she wrote how ‘It has made her more efficient in terms of learning parts and lyrics quickly and broadened her mind to learn music from around the world too’. During her interview, she shared, “It’s truly an underrated style of music which, in my opinion, requires more attention. Singing Indian music has helped me grow as a musician and as a person. I am sure I will never stop doing so and will continue to find out more about India and it’s great music and music from other parts of the world.” Providing opportunities to understand cultural aspects of the music sometimes makes the whole process more meaningful (Gay, 2002). Aaryan, 13 years old said, “I think it is a great opportunity for me to sing Indian folk music. It helps me to explore various styles in singing.”

He is generally one of the more involved boys in the group and is committed to rehearsals and learning his music. He has been singing with the choir sing the past four years.

He added, “My peers at school and my family think that this opportunity is a very special one and they keep telling me that I am really privileged.”

**Implications and Conclusions**

Musical engagement can transform the human experience (Reimer, 2003), uniquely positioning music education, and in this case music education through choral music, from one’s own culture as a powerful avenue for culturally responsive teaching and practice (Shaw, 2016). For students to remain motivated in class the music needs to be relevant and meaningful (Campbell, 2002). She argues that music education that emphasizes music theory and musical skills without considering the role of music in its sociocultural context is inadequate. Making folk music familiar and accessible to younger generations by arranging it in a style that they are familiar with encourages them to embrace the music more willingly and to explore and appreciate their culture and other cultures, which supports culturally responsive teaching (Gay, 2018). They become inquisitive and, in many instances, look for more meaning and familiarity, going back to the original versions of the music with a deeper sense of respect for the genre.

I find my view on teaching this music is most aligned with that of Reimer’s, who believes the goal of studying unfamiliar music is to “help our students understand that the creation of musical meaning is a universal need of human beings; that such meaning is created within the culture from which it arises; and that each individual can both find soul
in the music of his or her culture and share soul to some extent with those of other cultures” (Reimer, 2003, p. 191). When students have limited knowledge about other cultures, it may lead to possible misconceptions about the music and people of other cultures. These misconceptions, however, may be erased through a greater exposure to the culture in the classroom. “Prejudice reduction” is a dimension of teaching that focuses on the ‘characteristics of students’ racial attitudes and how they can be modified by teaching methods and materials (Banks, 2005a). As students learn of other traditions, their current conceptions of the way music functions will be transformed. This transformational approach, noted by Banks in his article on multicultural curriculum reform (2005b), changes the structure of the curriculum to enable students to “view concepts, issues, events, and themes from the perspectives of diverse ethnic and culture groups” (p. 242). Students will understand that there is not one approach to learning music that is more acceptable than another.

Declaration
1. All personal names used in this study are pseudonyms.
2. Permissions to record questions, audio and concert videos were obtained from children and parents

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References:
Mental training in music: Comparative systematizing of methodic approaches under integration of sport psychology

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Abstract
Many musicians, amateur as well as professional, and music students, suffer from music performance anxiety. In spite of this, there are not as many studies about mental training in the field of music and systematized methods compared to the field of sports. Due to the lack of studies in this area, one option for musicians is to consult a sports psychologist. However, music has its specific characteristics that most types of sport do not have.

In order to fill this research gap about mental training between music and sports, it is necessary to systematize methods of mental training for music. The purpose of this research is to systematize methodic approaches for musicians and vocal and instrumental pedagogy, in order to enable musicians and instrumental teachers to use methods of mental training more easily. For that purpose, it is important to define mental training in vocal and instrumental pedagogy and distinguish it from the mental training in sports psychology. To address these questions, firstly a historical literature review was undertaken. The objects of this review were 23 relevant publications related to the theme of mental training in music. Secondly, procedures and methods of mental training in the field of sports were researched. After that, systematized components in the field of sports were used as reference to systemize procedure and methods of mental training in music. As a result of systematizing, procedures and methods of mental training in music were divided into following four components: Activation regulation, Motivation regulation, Regulation of emotion and Mental practicing. The procedures, methods of mental training and their purposes became clear through this systematization. In addition, a small study with nine participants was undertaken to test the effects of mental training. In this study, the positive effects of mental training were shown. Further research on this topic including studies with larger groups is necessary.

Keywords: mental training for musicians, mental practicing, psychology of musicians, sport psychology

Introduction
In the field of sports there are many studies which indicate the positive efficiency of mental training. While the field of sport psychology approaches and deals with praxis-oriented issues such as motivation and coping methods toward negative emotions, these topics are just one small part of music psychology. Research and articles about psychological skill or coping strategies with music performance anxiety are still seldom published. Due to the lack of research in this area, professional musicians suffering from music performance anxiety often reach out to sport psychologists for help. Admittedly, music and sports have some common points. First, their occupational fields are public. Second, the optimal peak performance under pressure is expected from both. Beyond these similarities, however, music has its specific characteristics that most types of sport
do not have. Therefore, instead of applying all methods of mental training that are used by athletes, it is necessary develop an overview of mental training for musicians. The purpose of this research was: 1) to systematize techniques of mental training for musicians, which exist in the fields of sports and music already, so that musicians can use them more easily; 2) to systematize methodic approaches for musicians; and 3) to confirm through a small-sized experiment if mental training helps musicians to deal with music performance anxiety better than before.

Definition
In sports psychology, there are roughly two definitions: narrow and broad. Narrow mental training is defined as regulating movements through imagining them. This is called also “movement regulation”, in which athletes improve their movements through visualizing optimal sports-movements or actions. Broad mental training entails this regulation of movements and other psychological techniques as well as attention- and concentration training, self-talk, tactic-training for matches (Stoll & Blazek 2013). These two different usages are also valid in the musical field. The first one is optimizing performance by visualizing notes and movements, which is often described as a “mental practice”. The other definition also includes other factors. Motivation, relaxation techniques and other peak-performance trainings are also parts of mental training in music in a broader sense. In this article, the term “mental training” is used with the second definition, in a broader sense of its term.

Methods in vocal and instrumental pedagogy
In order to research which literature already exists in relation to the theme of mental training in the field of music, a historical literature review of 23 books from the 19th to 21st century was undertaken. Descriptions about mental work for musicians are documented in old literature by composers and music pedagogues from the 19th century such as Carl Emanuel Bach. Forkel (1803) analyzed how Johann Sebastian Bach composed his works and how he used the memories and imagery in his composition process (cf.: pp. 37) Robert Schumann also saw the “balance of mind, heart and hands” as a condition for good pianists (Mantel, 2013). He advised young musicians to improve their imagination power, so that they can memorize compositions not only with melodies but also with harmonies. Furthermore, he wrote that the fingers should do what your mind wants to do and not the opposite (Schumann, 1854). German pianist Walter Gieseking and his teacher, Karl Leimer, tried to verbalize the mental process of learning musical pieces extensively. Their book became one standard work for piano students and piano teachers. They talked about “Reflection” through their book, which is meant for reflecting pieces and imprinting notes with mental work (cf. Gieseking & Leimer, 1931). Heinrich Neuhaus (1967), one of the historically most relevant piano pedagogues, wrote likewise that good pianists have a power, deepness and clearness of the musical imagination at first in order to develop adequate technique. He told his students to play with mental and inner ears at first and then with hands. In addition, he told his own story, how he learned the whole Beethoven piano sonata B-dur Op.106 through intensive work, including mental practice, within six days (cf. Neuhaus 1967: pp. 201).
In 1987 the German cello pedagogue Gerhard Mantel described a method of “rotating attention”. He recommended musicians to be conscious of their attention. This allows the musicians to give attention to a certain component of music and playing music, such as rhythm, melody, agogic, or tune quality (Mantel 1987: 28pp). In addition, he devoted one book for the theme about stage fright and analyzed procedures to go around with it (Mantel, 2013).

At the end of the 20th century the term “Mental training” showed up in German literature in the field of music. Orloff-Tschekorsky (1996) engaged in developing mental training in music pedagogy. She applied the technique of movement regulation of sports to music and described its approaches in the following three steps: relaxing, imaging of playing and playing instruments. She indicated some points which are specific in music e.g. that musicians need to imagine not only how they move but also how it sounds. She emphasized also the importance of choosing the right tempo, in which they are able to play and the right length of one section. This depends upon different factors such as their own skill, how difficult the piece is and how well they soak up information at the time.

Publications that deal with musician’s psychological issues were written by German authors in 21st century: The publication of Langeheine (2011) handles topics about not only mental practice, but also relaxation, visualization, self-realization and self-confidence. Klöppel (2013) expanded the methods of mental training from learning pieces with mental practicing to mental preparation for concerts. She wrote about mental training in music from different perspectives; e.g. attention, coordination and emotion. The mental practicing by Wieland and Uhde (2002) is a new term for the above-stated Orloff-Tschekorsky’s mental training. They described mental practicing with relaxation, and visualisation with cue-words. The book of Nicolai Petrat (2007), another German cello pedagogue, focuses on motivation in learning music instruments. He described methods of mental training relating motivation to playing music. There are fewer publications about mental training in the field of music in Japan than in western countries. The relative new publication by Oba (2017) is one of the few publications in Japan, which deals with the theme. She categorized mental training in music in the following five components: imagination, control of psychological energy, stress management, control of attention and goal-setting.

Body-learning methods such as Alexander technique and Feldenkrais methods are integrated in the systematizing of mental training in the field of music as well.

**Methods in sports psychology**

In the field of sports, athletes prepare for their tournaments not only physically, but also mentally. Mental training in the field of sports has been researched and used systematically. Sport psychologists help athletes to integrate mental training into their daily routine. Methods of mental training in sports are diverse: they often work with music especially with relaxation and activating techniques. Other training methods such as concentration and awareness training, movement regulation through imagining, regulation of emotions through positive self-talk are also one of daily routines of athletes.

Analysis by Stoll and Blazek (2013) summarized the overview of mental training in the field of sports psychology with the following eight components:
1. Activation regulation
2. Concentration training
3. Movement regulation
4. Cognitive accomplishments and tactic training
5. Regulation of emotions / confrontation
6. Motivation regulation
7. Team development
8. Preparing before matches and follow-up after matches (Stoll & Blazek 2013).

**Systematizing of mental training in the field of music**

Owing to similarities between both fields of sports and music, it should be possible to apply the following categories from the field of sports to music: activation regulation, concentration training, movement regulation, regulation of emotions / confrontation and motivation regulation. For the systematization process of mental training in music, concentration training was integrated into regulation of emotions and the term “movement regulation“ was changed into “mental practicing“, which is already often used in the existing literature about music. Consequently, the following four components were made by the author of this paper as components for mental training in the field of music:

1. Activation regulation
2. Motivation regulation
3. Regulation of emotion
4. Mental practicing

In the following figure, examples of procedure and methods of mental training in music and their purposes are listed.
Figure 1. Procedure, methods and purposes of mental training in music

It is shown in the followed figure, which method belongs to which component. For instance, visualization, which is also called imagery training, and affirmation, which is also called self-talk or self-instruction, are used in all regulation training and mental practicing.
The goal of activation regulation is to achieve an optimal activation level. Yerkes and Dodson (1908) found a relationship between arousal and performance that made a huge impact in psychological research. In their theory, a difficult task such as playing musical pieces with instruments needs a physiological and mental arousal up to a point. When the level of arousal is too high, however, performance decreases. The purposes of activation regulation are therefore: to achieve an optimal activation level that fits best to the player to be able to reach peak performance and to achieve a good, balanced condition between relaxation and activation. Through relaxation techniques such as meditation, breathing, autogenic training (which is a kind of self-hypnosis) or progressive muscle relaxation, concentration and comprehension can be increased, subjective appraisal to stressors can be changed and control can be improved. Relaxation techniques can be combined with visualization and affirmation.

Motivation regulation is used to increase the intrinsic motivation. It helps also to prevent burn-out. This entails: goal setting, visualization, affirmation and attribution training.

Goals of Regulation of emotions are to increase awareness and attention control, and to change negative thoughts to positive ones. Awareness training is often combined with meditation and helps to decrease stress. Attribution training changes perceptions of the past to create a more positive future by understanding why they failed and also why they succeeded. These strengths and weaknesses can help musicians to succeed in the
future by using positive self-talk and visualizations. Attention training means developing the ability to comfortably switch your attention between yourself and your environment. Sport psychologists found that good athletes are able to switch these modes quickly and comfortably (cf. Stoll and Zeimainz 2009). There are four different attention modes: internal, external, narrow and broad.

**Figure 3: Attention training**

Internal narrow is the focus on a single part of the body, for example contact between fingers and keys while playing the piano. Internal broad is being aware of your entire body. External narrow is the focus on a single point in your surroundings such as listening to a melody. External broad is being aware of your general surroundings and how this affects you.

Mental practicing means practicing without making sounds on the instrument. Like Leimer and Gieseking (1931/2013) described in their publication already, learning musical pieces with music, without playing the instrument, though description and verbalization of musical elements helps us to understand, reflect and internalize what actually happens in musical pieces. Based on their methods and some other methods such as Alexander technique, I made three steps of mental practicing:

1. Pause and relax
2. Visualize (sound / movements and sound)
3. Play

In the first phase, students should use relaxation techniques in order to achieve an optimal mental condition to work efficiently. After that, they visualize and listen to the music mentally. First, students imagine only the sound and how the phrase should sound optimally. Secondly, students add the image of required movements. In the last step, they should play their instruments and try to realize the imagined sounds and movements. Mental practicing reduces uncountable repeated actions, therefore mental practicing can also prevent typical musician problems like joint-pain.

According to the theory by Ziemainz and Stoll (1989), there are following three phases for the preparation of concerts or competitions: learn, practice, and use phases.

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activation regulation</td>
<td>Learn</td>
<td>Practice</td>
</tr>
<tr>
<td>Motivation regulation</td>
<td>Goal-setting</td>
<td>• Adjusting of goals</td>
</tr>
<tr>
<td>Regulation of emotion</td>
<td>Learn / Recognize</td>
<td>Practice</td>
</tr>
<tr>
<td>Mental practicing</td>
<td>Performance training</td>
<td></td>
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</tbody>
</table>

![Figure 4. Processes of mental training in vocal and instrumental pedagogy with three phases](image)

The first phase is the beginning of all mental work. In this phase, students learn a relaxation technique and set goals (long-, middle- and short-term). Teachers can help students to recognize their self-talk patterns and practice using positive self-talks instead. In the second phase, several weeks before the concerts, they adjust goals and they start the performance training. The third phase is directly before the concert starts. One of the goals of this phase is that the student feels appropriate self-esteem and self-confidence for the concert. Relaxation techniques have to be practiced enough by that phase so that the student can use the techniques efficiently before the concert.

In order to address the main focus of each literature that are integrated in the historical literature review, mental-training-related contents of each literature are divided into these four categories in the following table.
<table>
<thead>
<tr>
<th>Author (year*)</th>
<th>Activation**</th>
<th>Motivation**</th>
<th>Emotion**</th>
<th>MP**</th>
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<tbody>
<tr>
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<td>Czerny (1829)</td>
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<td>F. Wieck (1853)</td>
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<td>R. Schumann (1854)</td>
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<td>Ziegler (1929)</td>
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<tr>
<td>Leimer / Gieseking (1931)</td>
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<tr>
<td>Dichler (1947)</td>
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<td>Martienssen (1953)</td>
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<td>Whiteside (1955)</td>
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<td>Neuhaus (1967)</td>
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<td>Wieland / Uhde (2002)</td>
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<td>Wessel (2012)</td>
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<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Oba (2017)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
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</table>

*The given year in the table is for the first edition of the book. **“Activation” stands for Activation regulation, “Motivation” for Motivational regulation, “Emotion” for Regulation of emotion and “MP” for Mental practicing.

Table 1. Overview of the historical literature review with four categories
The Table clearly shows that statements about mental practicing (imaging and visualizing music and movements) can be often found. On the contrary, musician’s psychological aspects such as various coping strategies for music performance anxiety or burn-out are described in more recent literature in 20th to 21st centuries than before. One of the possible reasons is the change of the concert forms in 20th century from salon style to today’s concert style. Playing from memory at concerts is also a relatively new custom, which can cause music performance anxiety. Music performance anxiety is a complex and multi-factorial phenomena, which has a strong interrelationship with social anxiety and perfectionism as well as pressure form self (cf. Kenny, 2011 / Dobos et al., 2018).

**Small-sized study**
To test the effects of mental training, a study with nine participants was undertaken. For this small-sized experiment, two concerts were held six months apart. The first concert was held in December 2017 and was the control to see the difference between before and after. Before the second concert in June 2018, students received mental training sessions during piano lessons for six weeks. A German questionnaire WAI-S (Ehrlenspiel, Brand & Graf, 2009) from sports psychology was used to measure their somatic and cognitive anxiety levels and self-confidence before concerts pre and post mental training. This questionnaire was developed by Ehrlenspiel et al. (2009) from an English questionnaire Competitive Anxiety Inventory (CSAI-2) by Martens et al. (1990) and has 12 items.

The results showed that somatic and cognitive anxieties decreased significantly. Self-confidence increased clearly but it wasn’t statistically significant. In this small experiment, positive effects of mental training were shown.

### Results of Study

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<tbody>
<tr>
<td>Somatic Anxiety t1-t2</td>
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<td>.033</td>
</tr>
<tr>
<td>Cognitive Anxiety t1-t2</td>
<td>2.600</td>
<td>.032</td>
</tr>
<tr>
<td>Self-Confidence t1-t2</td>
<td>-2.121</td>
<td>.067</td>
</tr>
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</table>

*(p < .05)*

Figure 5. Results of study
Conclusion
As a result of systematizing, the methods of mental training and their purposes became clear. The literature review made it possible to define four components that play important roles in mental training in musical instrumental pedagogy and could be essential for the future development of music students. Moreover, the systematized procedures and methods can be helpful to integrate mental training into music instrumental and vocal lessons. However, the music instrumental pedagogues need in-depth knowledge in the area of psychology of musicians including motivational psychology and positive psychology. Therefore, based on the latest research, regular teacher training is required. For the worldwide development of this field in the future, an extra field of study on the theme of the psychology of musicians in universities, music colleges and institutes is necessary. In order to measure the effectiveness of systematized mental training in the vocal and instrumental pedagogy, a qualitative as well as a quantitative study is required.

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References
Music education in cultural-historical theory: Diversity and equity as a principle of educational practice

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Secretaria de Educação do Distrito Federal

Abstract
This article aims to point out: What would be the ways for a music education based on Vygotski's cultural-historical theory? Which principles guide its essence? To this end, it elucidates some of the main concepts of this theory and dialogues with authors who have sought to understand a music education rooted in these bases. It is understood that this path is already a reality, highlighting researches and practices conducted in this perspective.

The methodology used in the research brought here is that of the unit of perejivanie, in Russian. In conclusion, the research adds to the field, and answers the question of this research, indicating that Vygotski's cultural-historical theory can help underpin and strengthen more humanizing practices in music education.

Keywords: cultural-historical theory, music education, diversity, equity, educational practice.

Vygotsky’s cultural-historical theory
This article is grounded in the cultural-historical theory, which was created by Soviet author Lev Semionovich Vygotsky at the beginning of the last century, in the midst of a revolutionary historical period in the former Soviet Union. Based on the principles of diversity and equity, its creator believed in a "new human being" for a new society and, therefore, a diverse and equitable "new education".

Historical-dialectical materialism underlies the whole work of Vigotski, who created this psychological theory from the understanding that the phenomena of life have a material, historical and cultural basis, dialectically lived. That is, the author emphasized that social relations and culture play an ontological role in human development.

Spinozist philosophy is also the basis of cultural-historical theory, since from Spinoza (2017), Vygotsky (2018) constituted his monistic view, understanding that people are integral beings. This means that we are one in our development. We are affect-intellect, person-environment, people constituted by relations.

Vygotsky (2018) states that both heredity and environment have distinct functions in the development of human beings. Neither one nor the other, alone, determine how a person will develop. In addition to development happening differently in each human being in relation to the environment, the author considers that each person has unique experiences of a unique character. “…the essential moments for defining the influence of the environment on psychological development, on the development of conscious personality, are the experience” (Vygotsky, 2018, p. 75).

This also means that diversity is the essence of human development, because in our own experience we have something that is unique to each person, but not completely
individual, given that human relations in the midst of culture engender the development of our specifically human characteristics (Vygotsky, 1995). This demonstrates the principle of diversity and equity in cultural-historical theory, and reinforces the need for pathways in education that enable the sharing of different perejívânie – the smallest person-middle unit, which involves the senses and meanings attributed by the person as they experience something (Vygotsky, 2018) – in order to enable the expansion of experiences and to guide the emergence of new ways of thinking, acting, creating, imagining, feeling, i.e., of being and being in the world. The emergence of the new, to Vygotsky (2018), is development itself.

All the theory with which we talk in this article invites us to a deeper understanding of human development, pointing ways to the organization of educational processes in music on different bases, through organization of educational environments, having as its centrality the experiences and perejívânie, which are diverse, for the constitution of more equitable relations.

Some Brazilian researchers have focused on this understanding, dialoguing between the foundations of the cultural-historical theory and its implications in music education, with which we discuss below.

**Cultural-historical music education**

The field of music education needs to gain strength, as an educational process, through studies and practices that think the organization of its activities for the development of musicality in its full character, not restricting the musical making to sing or playing instruments, or just to a conventional and unique system. For this, music educators need to broaden the spectrum of their activity, by diversity of creations and musical expressions existing in varied cultures.

We are going to use, in this text, the word teacher or educator based on the definition of Vygotsky (2001), who postulates that “the teacher has a new and important role. He has to become the organizer of the social environment, which is the only educational factor” (Vygotsky, 2001, p. 296), thus, the teacher assumes the role of organizer of the educative social environment and, from the moment there is awareness of this, it is possible to guide the development of the beings involved in this process.

Pedagogical practices in music education, based on the cultural-historical theory, can provide the development of human beings’ musicality in a more equitable way. We understand that “musicality is all the possibility that human beings have to express, explore and organize sounds produced through their own bodies or by sound manipulation of objects” (Gonçalves, 2017, p. 50).

The conventional conception of music and music education ignores essentially human characteristics, which guide the development of people's musicality and their sound experiences in assorted spaces, for the sound experiences that occur in the relation child-acoustic environment begin in the mother's womb.

Amorim (2017) clarifies that even in the mother's belly, at the outset of its development, the baby is already beginning to have sensory experiences as well. After birth, it has several sounds in its midst and is integrally related to them. (Martinez, 2017). Thus, it is possible to realize that the genesis of the development of human musicality occurs in early childhood, when we are still babies.
All these experiences are a constitutive part of the development of the musicality of babies and children, assuming that it occurs in the cultural environment, because the genesis of musicality is present even in other animals, such as birds, for example, but the development of human musicality has a cultural character and only occurs in the midst of human relations (Pedérvia, 2009).

Hence, children, as the cultural-historical beings that they are, constitute themselves as human beings through relationships with others, amid various human activities (Vygotsky, 1995). They are inserted in a sound universe, not only as mere spectators, but as creators of sounds, relating to their living environment at all times. Their relations with sounds constitute a background of experience, as well as their relationships with other children, which allows, through coexistence, sharing in educational environments, the expansion of them, enabling the development of their musicality.

Vygotsky (2009, p. 25) asserts that “One is not restricted to the circle and narrow limits of one's own experience, but can venture beyond them, internalizing, with the help of imagination, foreign historical or social experience”. Therefore, it is through individual, historical and others’ experiences that we can develop musically, thus the importance of organizing educational environments based on sharing of experiences, as diverse as possible, since, from their expansion, the possibilities of development are also enlarged, including in music. That is, diversity is one of the principles that engender a cultural-historical musical education, as well as the development of musicality of the people involved in these processes.

Sharing experiences in educational environments guides the development of musicality. So, in cultural-historical terms, music education needs to be grounded in this type of organization, consequently enabling the expression of human imagination and creation, essential for its development.

Experiences, for Vygotsky (2009), are the basis for imagination and, from them, all creative activity takes place. In other words, from experience, based on elements of reality, it is possible to imagine and, from that, boost the creative act. Creation, for the Soviet thinker, is what enables development and life, from small creations, including feelings, to the great inventions in human history (Vygotsky, 2009).

Rezende (2018), in his thesis, entitled “The Palmital Folia: experiences that weave musicalities, sought to understand how the experiences of people involved in Folia de Reis (Brazilian cultural and religious manifestation) weaved their musicality. The researcher was able to demonstrate how daily experiences, in the most diverse contexts, guided the development of these people’s musicality. He elucidates that

It is necessary to understand that to teach or learn music is not enough to “understand music”, but to understand that the development of musicality depends on several other situations, experiences that are often not noticeable or within the reach of the teacher (REZENDE, 2018, p. 39).

Starting from this principle, from experience, everyone is able to create musically, for music making is not restricted to great geniuses who possess a “gift”, so music education is for all people, because everyone has musical experience and, from this, they can imagine and create.

The research entitled “The Deaf person's ways of experiencing musicality” (Paula, 2017) also presents the need for equity in musical educational practices. Likewise, it demonstrates that many and varied are the ways in which Deaf people experience their
musicality, highlighting the urgency of a music education that understands the diversity in their work.

Therefore, to think of equity and diversity in educational practices, within the scope of musical education, through cultural-historical theory is to realize that this universe of developing musicality is also possible, even among Deaf people.

This theory provides us with the understanding of a human being full of possibilities. As a result, a new look to music education with Deaf, or other disabled people, is brought by this comprehension, because they are often made invisible in their potential. Vygotsky (2012) demonstrates that the biological defect a person has, in the case of deafness, a defect in the hearing system, is not a deterrent to the person’s full development. The convention that musicality’s development is only possible if one hears through the auditory organ is a mistake, in view of the richness of our organism’s complex functioning, as there are countless kinds of relation to sound.

It is noteworthy that this movement is only possible because we also understand that the biological defect in the Deaf person exists, but its limitation is a social consequence (Vygotsky, 2012). To the Deaf, they lack nothing, this is their condition of being and existing in the world, so it is up to the educators, realizing the integrality of the human being, to offer every possibility of developing the deaf person's musicality, based on their potentialities, from the understanding of how these people experience their musicality, whether through vibration, body movement, their own vision, etc.

If experiences, in their diversity, are left aside, educational work in music is actually denying humanity itself, which is intrinsically diverse. In this way, it is necessary to act through a music education based on the education-music unit (Gonçalves, 2017), that is, the musical activity thought as an educational system, in an unitary way and, with this, create conditions so that children can, through educational processes, develop musically in the midst of social relations, in activities intentionally organized for such.

The path we want to point out as a possibility for music-educational practices is based on the human essence, because, as cultural beings, we are capable of musically developing ourselves (Pederiva, 2009), and the activities performed in music must start from this principle, respecting the diverse perеживание and organizing environments for sharing varied experiences. Therefore, this musical education of historical-cultural nature, is:

A music education that, among other things, is not restricted to music educators and music students, which translates into a socially and politically liberating and emancipating practice that provides everyone with democratic access to musical experiences, regardless of social class, ethnicity, belief, age group, gender and physical-mental state, that can happen in practical life in a dialogic and horizontal way (Gonçalves, 2017, p. 24).

Activities organized with the educational intent of developing people's musicality need to have a collective and collaborative character. Vygotsky (2018) states that the specific characteristics of human beings arise first as collective behavior and only then becomes individual.

Oliveira and Pederiva (2017, p. 120) affirm that “The development of musicality is not just an individual process. It can be developed co-livingly, through collaboration, expression, understanding, dialogue, imagination, creation.
Organizing these social environments is important because of the existence, in the cultural environment, of certain particularities called ideal forms for development, the existing forms of musicality already found in culture, which, when a child is born, already finds it in the environment. In them and “... in the child's development, what must be obtained at the end, as its result, is given from the beginning by the environment” (Vygotsky, 2018, p.85). The ideal mentioned here, therefore, refers to the end result of development as the goal of the historically and culturally constituted human, not as a measurement of a good or bad pattern for this to occur. These final forms must be regarded as possibilities for expression and creation, not as a single goal in educational terms.

So we defend, from the cultural-historical theory, the possibility of other ways of organizing music education (Amorim, 2017; Gonçalves, 2017; Martinez, 2017; Oliveira, 2020; Paula, 2017; Pederiva, 2009; Rezende, 2018), rooted in people's experiences, bringing them as a centrality to educational processes. Martinez (2017), in her research on the development babies’ musicality, under the lens of Vygotsky's cultural-historical theory, starting from observation and attentive-sensitive listening to babies, asserts that they cannot be perceived as defenseless beings, incapable and inert to the existing reality, since they already maintain a frenetic relation with the cultural environment from the first moments of their existence. It is necessary to look at babies as beings of possibilities, who constitute in unity and develop amid social relations.

Human beings’ cubbies are, therefore, constituted as social individuals by experiencing and internalizing cultural activities and performing new elaborations of their human behavior. Regarding the development of their musicality, babies are able to capture and perceive the many sounds in the environment, experiencing sounds with their mouths and other parts of the body, producing sounds with the most varied objects that permeate their reality, among other possibilities that add new experiences and become available material, for babies, to work with sounds, imagining and creating new sounds.

Thusly, babies’ musical development constitutes the totality that involves the multiple determinations, comprising a dialectical process in which qualitative changes operate in human behavior. In this sense, it is necessary to think about a music education that considers human diversity, with equity, from an early childhood.

Oliveira (2020), based on Vygotskian theory, investigated the musicality of children, having as centrality the educational activities, their experiences, which, to Vygotsky (2018), is the smallest person-environment unit (perejivânie, in Russian). The author organized music activities with children, using, as main tool, recordings of sounds and images of their daily lives, performed by them on their electronic devices.

From the recorded sonorities, taken to school and shared with all children involved in the educational process, Oliveira (2020), organized the educational environment, aiming to broaden their possibilities to relate to the various sounds they experience, as well as perceive the sounds experienced by others.

The author realized that children’s relation to sound was changing throughout the activities, because, initially, some did not even realize their relation with the sound world, and it was from the activities that they could develop in this sense, with more awareness of the dialectical relationship between themselves and their environments, that is, they came to notice they affect and are affected by sounds.
At first, they showed that they did not know how to express the sounds they experienced, but later they internalized this behavior and began to relate differently to the various ways of expressing a sound, no longer naming the sound sources (foot sound), to create this sound sonically (pa, pa).

Children began to relate differently to each other as well, as they were able to know one another in their diversities, from the lived and shared sounds. During a conversation organized by Oliveira (2020), in which the children shared their feelings about the sound of a washing machine, for example, some said they were afraid of that sound, others, however, expressed their will of dancing.

From this educational process, the children realized that each human being is unique and has its own characteristics. These and other proposed activities have highlighted the need for a cultural-historical music education that guides the development of children in their entirety, to the awareness of their relations with their own sound environment, as well as the endless possibilities of relations experienced by others.

**Conclusion**

Lev Semionovich Vygotsky’s cultural-historical theory creates conditions for thinking and organizing more humane, diverse, respectful and equitable practices in music education. This is because it considers that all musical expressions and creations are valid to be experienced and shared by all people in their educational processes in musical activities.

To those who read this article, we invite you to study this author and this theory, which, despite having lived in the early twentieth century, still has much to contribute to ways of music education of a fairer society with all forms of musicality and music education that diversity can engender.

Translation: Marta Martins Pederiva

**References**


Examining aspects of musicians’ experiences with Dyslexia within the context of school and music education.

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Abstract
Numerous references to Dyslexia-related challenges are encountered in literature, with similar difficulties identified in the field of Music, related to reading musical notation, sight-reading, memorisation, motor skills development and rhythm processing. Proposed compensatory strategies emphasise multisensory activities and systematic teaching, while the impact of such difficulties on music learning is acknowledged, particularly in terms of reading music notation, rhythm realisation, memorisation and confidence. This research investigates musicians’ experiences with Dyslexia in the setting of school and music tuition, aiming to a more holistic understanding of Dyslexia-related difficulties and potential effects on the learning process. Research questions examine challenges encountered at school and during participants’ music learning years, from childhood to adulthood, identifying compensatory strategies employed within each context. For participants who teach music, research questions were extended to their teaching experience. Interview data was analysed through thematic interpretative analysis. Various challenges were identified, while recommended and self-discovered compensatory strategies were mentioned, with extensions to music tuition. Implications of the formal assessment and of participants’ dyslexic experiences were also discussed. This study has provided insight into additional challenges which musicians with Dyslexia may face during teaching, while further research could lead to deeper understanding of relevant implications within the context of practical music tuition.

Keywords: Music and Dyslexia, dyslexic musicians, learning difficulties, strategies

Introduction
In the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV, 1994), Reading Disorder-Dyslexia is under the category of Learning Disorders. Since 2013 (DSM-5) the term “Learning Disorders” has been changed into “Specific Learning Disorders”, with terms such as “Dyslexia” or “Dyscalculia” being used to describe specific learning difficulties. According to British Dyslexia Association, the percentage of people with Dyslexia is estimated around 10%, while, on European level, it is estimated that Dyslexia and specific learning difficulties affect 5-12% of the population (British Dyslexia Association [BDA], 2016; European Dyslexia Association [EDA], 2014).

The term “Specific Learning Difficulties” (SpLDs) refers to a range of difficulties, with Dyslexia being the most common type among other specific learning difficulties including Dyscalculia, Dyspraxia, and Attention Deficit (Hyperactivity) Disorder (ADHD) (EDA, 2014; BDA, 2016). SpLDs share some common characteristics and may occur simultaneously (co-morbidity). Regarding Dyslexia, co-occurrence of Visual Stress is also frequent. Visual Stress, also known as Meares-Irlen Syndrome,
related to difficulties with visual processing of information, manifesting itself through a variety of symptoms, ranging from slow reading, losing track of lines and letters which seem to move, to fatigue and headaches (BDA, 2016; Irlen, 2015).

Various theories have been developed regarding the neurological basis of Dyslexia (Shaywitz & Shaywitz, 2005), such as the phonological deficit, the double deficit and the temporal processing hypotheses. The phonological deficit hypothesis relates Dyslexia with problems in the sound/phonemes discrimination and manipulation (phonological awareness), resulting in reading and writing difficulties (Bryant & Bradley 1985; Snowling, 2006). The double deficit hypothesis attributes Dyslexia to slow processing speed (phonological processing deficit) and/or to Rapid Automated Naming (RAN), which causes difficulties in reading and other tasks that demand rapid phonological processing (Wolf & Bowers, 1999). The temporal processing deficit hypothesis relates dyslexic problems with difficulties in rapid sound perception (Tallal, 1980; Tallal, Miller, & Fitch, 1993). None of these theories identifies a relationship between Dyslexia and low level of intelligence, as it is evident in people “with average or above-average intelligence” (O’Brien Vance, 2004, p. 28).

Dyslexia-related challenges are discussed in literature, including difficulties with reading, writing and spelling, problems with memory, processing speed, concentration, organisation, co-ordination, motor skills and following instructions (Beaton, 2004; Swanson, 1993). Similar difficulties have been identified in the field of Music, in terms of reading musical notation, sight-reading, memorisation, motor skills development and rhythm processing (Ogletorre, 2002; Ganschow, Lloyd-Jones, & Miles, 1994; Jaarsma, Ruijsseenaars, & Van den Broeck, 1998; Atterbury, 1983; Overy, 2000, 2003; Thomson & Goswami, 2008). Various compensatory strategies have been proposed, placing emphasis on multisensory activities and systematic teaching (Ogletorre, 2002; Miles & Westcombe, 2004; Miles et al., 2008; Ganschow, et al., 1994; Heikkila & Knight, 2012; Hubicki, 1991; Nelson & Hourigan, 2016).

The relationship between Music and Dyslexia-related difficulties has also been investigated. Potential positive effects of musical interventions and training on the development of literacy skills have been identified in terms of phonological and spelling ability (Overy, 2000, 2003), temporal processing and language development (Tallal & Gaab, 2006), auditory and motor rhythmic processing (Thomson & Goswami, 2008) and auditory perception (Bishop-Liebler, Welch, Huss, Thomson, & Goswami, 2014). Music is also recommended as a complementary remedial tool to enhance the effectiveness of teaching interventions targeted towards learners with Dyslexia (Overy, 2000, p.222; O’Brien Vanse, 2004; Tallal & Gaab, 2006; Heikkila & Knight, 2012).

Research on Music and Dyslexia has provided a wide variety of information through narrations of dyslexics’ experiences with music learning, especially regarding difficulties and relevant strategies. Nelson and Hourigan (2016) examined difficulties, abilities, strategies and recommendations for music teaching reflected through the experiences of five professional dyslexic musicians. However, in existing literature there seems to be relatively limited evidence of a more holistic approach to music learners’ experiences with Dyslexia, examining attitudes and teaching practices, as well as implications of those experiences for dyslexic musicians.
**Purpose and Research Questions**

The purpose of this study was to investigate Dyslexia in the context of music learning and teaching from a holistic perspective. The aim was to focus on dyslexic musicians’ experiences with Dyslexia at school, as well as in the music setting, to acquire a more in-depth understanding of Dyslexia-related difficulties and their potential effects on the learning process. The research questions sought to examine difficulties encountered at school and during participants’ music learning from childhood to adulthood, and relevant compensatory strategies, recommended or self-discovered, employed in each context. For participants who also teach music, questions were further extended to their teaching experience.

**Methodology**

Having obtained ethical approval from the University of York, informed consent was elicited, while voluntary participation and anonymity was offered to the participants. Individual semi-structured interviews were conducted, reflecting upon musicians’ experiences with Dyslexia in the context of school and music learning, as well as of music teaching when applicable. Data was audio-recorded and has been analysed through the principles of interpretative thematic analysis.

**Participant description**

For the purposes of the present study, participants had to be adult musicians, professionals, or University music students—undergraduate or postgraduate—in order to reflect on their experiences with music learning from childhood to adulthood. Participants were expected to have a formal assessment document confirming their Dyslexia diagnosis. Teaching experience was an appreciated trait, without being an exclusion criterion.

In total, four participants were involved in the study. All participants had studied or were currently studying music as undergraduates or postgraduate students.

- Participant 1 (P1): music student, vocal teacher; first formal Dyslexia assessment at the age of 15, after observations of her mother; has some teaching experience with music and dancing, which she has also taught to dyslexic pupils.
- Participant 2 (P2): was diagnosed with Dyslexia at the age of 16; is a music student, with research interest in Dyslexia and Music; has some teaching experience (not further specified).
- Participant 3 (P3): mature musician and researcher, interested in special education needs and Music; was diagnosed with Dyslexia later in life; also has a diagnosis of Dyscalculia; no teaching experience.
- Participant 4 (P4): music student and teacher; formal Dyslexia assessment at the age of seven; has relevant teaching experience with non-dyslexic and dyslexic pupils.

**Results**

With a view to acquire a more comprehensive understanding of participants’ experience with Dyslexia in the different settings—at school, in music learning from childhood to adulthood and, if applicable, in music teaching—the following thematic categories were
identified from the processing of data: challenges and difficulties, strategies and tools, impact of the experience with Dyslexia and of the formal assessment. Due to the qualitative nature of the research, it is acknowledged that the sample size could not suffice for quantification of results; therefore, personal experiences and perceptions should not be generalised.

Challenges and difficulties
Participants were asked to recall difficulties encountered during their learning process at school and with music, which they felt that were related to their Dyslexia. General literacy and music-related difficulties in various areas were included, along with challenges and problems encountered by the participants in other fields, such as the social field. It is not certain if all presented difficulties are due to Dyslexia; however, all of the challenges mentioned have been included in the following table (Table 1), since they have been viewed by the participants as an inextricable part of their learning experiences.
## Difficulties with... Specific difficulties As mentioned in interviews

### General Literacy (GL)

- **...writing**
  - P1, P3 - speed ‘struggling to write it down quick enough’, ‘about 10 words a minute by hand’
  - P3 - illegibility ‘My writing could be very difficult to read, because it’s tiny’, ‘it just became messy’
  - P4 - spelling/dictation ‘a lot of work on spelling’, ‘I do make spelling mistakes’, ‘difficulties with dictation’
  - P1, P2 - essay writing/structure ‘structuring essays was really hard’, ‘the timing scenario’
  - P3 - copying from the board ‘The teacher would be writing on the board and I would be struggling to write it down’

- **...reading** (incl. symptoms of Irlen’s syndrome)
  - P1, P3 - speed ‘I struggled with reading and I was slow’, ‘slower than average’, ‘speed was a big problem’
  - P1 - false word recognition ‘If I don’t recognise a word, my brain […] sees it as another word’
  - P3 - overwhelming by big blocks of text ‘massive block of text […] becomes quite overwhelming’

- **...learning languages**
  - P1, P2, P3 - general reading difficulties ‘learning any languages […] quite difficult’, (singing)’in another language’

- **...grammar & syntax**
  - P1, P3 - general numerical problems ‘sentences go all over the place all the time!’, ‘grammar can be (difficult), ‘getting my words in the wrong order’
  - P2 - mental Maths ‘I struggled a lot, especially mental Maths’
  - P3 - times table ‘times table, I found quite difficult to learn’
  - P1 - Dyscalculia ‘my Dyscalculia’, ‘my Dyscalculia and Dyslexia’

### In Music Learning (ML)

- **...musical notation**
  - P2 - mixing up notes ‘mixing up the notes’, ‘if there was a B, I might play a D instead, or vice versa’
  - P3, P4 - ledger lines ‘it would have to be ledger lines’, ‘difficulty reading ledger lines’
  - P3, P4 - grand staff/different clefs ‘very difficult to co-ordinate reading two hands’, ‘piano – I can’t play […] too many different notes’ (grand staff)
  - P3 - key identification ‘I do struggle with keys’, ‘what keys a piece was in […] I’d just been guessing’
  - P3 - time signature ‘always struggled with not understanding the time signatures’

- **...rhythm**
  - P1, P2, P3 - rhythm/co-ordination ‘rhythm was difficult’, ‘I couldn’t hear it in my head’, ‘just horrendous’, ‘I can’t clap in time’, ‘body movement… we struggle’, ‘one arm’s doing different to our legs […] quite problematic’, ‘very difficult to co-ordinate […] playing two hands’, ‘to make sure that the notes add up in a bar, well, that’s a dyscalculic’s nightmare’
<table>
<thead>
<tr>
<th>GL/ML</th>
<th>P3</th>
<th>- inconsistency in rhythmic performance</th>
<th>‘I can play a rhythm pattern correctly in one part of a piece of music and it can be exactly the same in another part and I won’t play it correctly’</th>
</tr>
</thead>
<tbody>
<tr>
<td>...aural skills</td>
<td>P2</td>
<td>- aural skills/listening</td>
<td>‘listening was difficult’</td>
</tr>
<tr>
<td>...pitch</td>
<td>P1, P3</td>
<td>- pitch</td>
<td>‘difficult to pitch intervals’, ‘ledger lines with pitch’</td>
</tr>
<tr>
<td>...music theory</td>
<td>P1</td>
<td>- music theory/harmony</td>
<td>‘I still really struggle with theory’, ‘Harmony […] I really struggled with’</td>
</tr>
<tr>
<td>...sight-reading</td>
<td>P1, P2, P3, P4</td>
<td>- general difficulties</td>
<td>‘difficulties with sight-reading’, ‘sight-reading is just horrendous’, ‘too slow’, ‘I would always panic ‘even with extra time, I don’t feel that I get much time really [in S-R exams]’</td>
</tr>
<tr>
<td></td>
<td>P2</td>
<td>- inner hearing</td>
<td>‘rhythm, I couldn’t hear it in my head’</td>
</tr>
<tr>
<td></td>
<td>P1</td>
<td>- sight-singing</td>
<td>‘church music, because they’ll just have the blocks of the words underneath’</td>
</tr>
<tr>
<td>...other areas (incl. Irlen’s syndrome)</td>
<td>P1</td>
<td>- slow learning</td>
<td>‘I learn music quite slowly’</td>
</tr>
<tr>
<td></td>
<td>P1, P2, P4</td>
<td>- visual stress</td>
<td>‘semi-quaver passages […] I would see like… just black on the page’, ‘reading ledger lines’</td>
</tr>
<tr>
<td>GL/ML</td>
<td>P4</td>
<td>- understanding instructions</td>
<td>‘understanding written and oral instructions’, ‘Dyslexia panicking and blanking’</td>
</tr>
<tr>
<td>...processing information/short-term memory</td>
<td>P1, P2, P4</td>
<td>- slow processing speed</td>
<td>‘being slow at things’, ‘I would take much longer to play the music and process things’, ‘taking more time’, ‘if I was given time to do stuff I could do it’, ‘processing speed is a big thing’, ‘one of my biggest weaknesses’, ‘takes me a little bit longer’</td>
</tr>
<tr>
<td></td>
<td>P1, P2, P4</td>
<td>- short-term memory</td>
<td>‘they found that I had poor short-term memory ’, ‘It’s a short-term memory [deficit?] which Dyslexia affects a lot with me’, ‘short-term memory is a big one’</td>
</tr>
<tr>
<td></td>
<td>P3</td>
<td>- not finding words</td>
<td>‘I can never think of words’</td>
</tr>
<tr>
<td></td>
<td>P2, P3, P4</td>
<td>- visual stress/processing</td>
<td>‘it’s more harsh black and white’, ‘things moving’, ‘black on white, I get very, very tired’</td>
</tr>
<tr>
<td></td>
<td>P2</td>
<td>- retrieving information</td>
<td>‘retrieving skills that you’d already learnt […] that was difficult for me’</td>
</tr>
<tr>
<td></td>
<td>P1</td>
<td>- recollection of information</td>
<td>‘the information, I couldn’t remember it’, ‘there’s one thing with the recollection’</td>
</tr>
<tr>
<td></td>
<td>P1, P2, P3, P4</td>
<td>- simultaneous processing of multiple elements</td>
<td>‘I can either get the notes or I can get the words’, ‘I will not be able to get the notes and the rhythms and the words, all at the same time’, ‘combining a lot of things at once’</td>
</tr>
<tr>
<td></td>
<td>P1</td>
<td>- information overload</td>
<td>‘I used to fall asleep a lot’, ‘I always found it was an information overload’, ‘if there was too much, my brain would just shut down’</td>
</tr>
<tr>
<td>...concentration</td>
<td>P1, P2, P3</td>
<td>- poor concentration</td>
<td>‘I’ve got to really, really concentrate to read anything’, ‘struggled with concentration, ‘I couldn’t concentrate a lot, my head was always in the clouds’, ‘I would always find my mind wandering elsewhere’, ‘I couldn’t really concentrate for that a long period of time’</td>
</tr>
<tr>
<td></td>
<td>P1, P2</td>
<td>- exhaustion when intense</td>
<td>‘if I really have to concentrate, I’ll fall asleep’, ‘I’d often get very exhausted’</td>
</tr>
<tr>
<td>...co-morbidity</td>
<td>P3</td>
<td>- Dyslexia and Dyscalculia</td>
<td>‘this would definitely be my Dyscalculia’, ‘support for my Dyscalculia and Dyslexia’</td>
</tr>
<tr>
<td>...memorisation &amp; revising</td>
<td>P1, P2</td>
<td>- memorisation in music</td>
<td>‘it’s horrendous’, ‘two bars and I couldn’t memorise it’</td>
</tr>
<tr>
<td></td>
<td>P1, P2</td>
<td>- revision for exams</td>
<td>‘revising was horrible’, ‘really struggled revising for exams’, ‘I found revising very difficult and […] quite frustrating’</td>
</tr>
<tr>
<td>Other</td>
<td>P4</td>
<td>- in other fields</td>
<td>‘difficulties with sport, so with co-ordination’, ‘catching balls’</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------</td>
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<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>...co-ordination</td>
<td>P1, P2, P3</td>
<td>- low confidence</td>
<td>‘really affected my confidence’, ‘quite embarrassing, because you need a bit of time’, ‘it is embarrassing when you can’t pick up what’s going on as quickly as everyone else’, ‘fear of looking silly’, ‘I shied away a lot’, ‘I don’t have pupils [...] because of my own confidence’, ‘low confidence in my ability’</td>
</tr>
<tr>
<td>...confidence</td>
<td>P4</td>
<td>- self-consciousness</td>
<td>‘I was self-conscious of that’ [wearing coloured glasses]</td>
</tr>
<tr>
<td>...stress</td>
<td>P1</td>
<td>- stress about learning</td>
<td>‘I got really, really stressed’, ‘stressed about learning, [...] I was at school’</td>
</tr>
<tr>
<td>...forgetfulness</td>
<td>P1</td>
<td>- forgetting things</td>
<td>‘I lose things all the time’, ‘I forget answers quite a lot’</td>
</tr>
<tr>
<td>...unpredictability</td>
<td>P1</td>
<td>–</td>
<td>‘I put things in really strange places’, ‘there is no predicting what could happen’</td>
</tr>
<tr>
<td>...time management</td>
<td>P1, P2, P3</td>
<td>- managing time</td>
<td>‘really struggled with time management’, ‘the whole timing scenario’, ‘planning time management’</td>
</tr>
<tr>
<td>...other Irlen’s syndrome symptoms</td>
<td>P1, P2</td>
<td>- drop of energy levels/fatigue</td>
<td>‘I’d get tired really, really quickly’, ‘I’d need a nap’, ‘I’d burn out really, really quickly’, ‘I’d often get very, very exhausted quite quickly’</td>
</tr>
<tr>
<td>...intensity of efforts</td>
<td>P1, P2, P3</td>
<td>- having to work hard</td>
<td>‘I’d always try really hard’, ‘work almost twice as hard as everyone else’, ‘I always found I had to work harder’</td>
</tr>
<tr>
<td>...teacher support</td>
<td>P1, P2</td>
<td>- teachers’ lack of/ insufficient adaptations</td>
<td>‘really struggled to adapt her way of teaching to what was Dyslexia-friendly’, ‘her approach isn’t always understanding’, ‘she is not lenient and flexible to explore other strategies’</td>
</tr>
</tbody>
</table>

**Table 1. Challenges and difficulties**
When asked about potential impact of Dyslexia on their music teaching, two participants with relevant experience mentioned additional Dyslexia-related challenges. These included losing the “train of thought” and “forgetting answers”, which could “become quite embarrassing” (P1). “Getting points across” to pupils and explaining the concepts being taught in a comprehensive manner, was another claimed challenge (P1), which could potentially be also attributed to lack of formal teaching training. Difficulties experienced when providing feedback were also mentioned, especially when “writing pupils’ notebooks”, where spelling mistakes might be evident. Although this was claimed to be avoided through synonyms or alternative words, it was also commented that this might have an impact on the clarity of meaning of the notes for the pupil. Finally, P3 mentioned that confidence is “where my own disabilities have a huge impact”, admitting that she has avoided music teaching due to low confidence in her abilities.

**Strategies and tools**
Participants were asked about ways of coping with challenges, reflecting on solutions and compensatory strategies, helpful resources and tools which had been employed during learning in the school and the music setting, either recommended by someone else—a teacher or a parent— or invented by the participants. The strategies mentioned were categorised into visual, auditory, kinaesthetic, multisensory, intense practice elements, memorisation, organisation, additional activities, technology and other tools or helpful elements, as illustrated in Table 2 below.
<table>
<thead>
<tr>
<th>Type of solution</th>
<th>Solutions, Strategies, Tools</th>
<th>Participants</th>
<th>School (S)/ University (U)/ Music Learning (ML)/ Music Teaching (MT)</th>
<th>Recommended by...</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
<td>Pictures, posters, diagrams, drawings, mind maps</td>
<td>P1</td>
<td>(S)/(U)/(ML)</td>
<td>Teacher</td>
<td>‘he’d draw everything on the board’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P1, P3, P4</td>
<td>(S)/(U)/(ML)</td>
<td>Self / Parents</td>
<td>‘I am a really visual learner’, ‘I’d decorate my bathroom with revision posters’, ‘I looked at mind maps and I just approached learning in a completely different way’, ‘coloured posters’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P1</td>
<td>(MT)</td>
<td>Self</td>
<td>‘I’m not a very big fun of mind mapping’</td>
</tr>
<tr>
<td></td>
<td>Use of colour &amp; colour-coding</td>
<td>P1</td>
<td>(S)</td>
<td>Teacher</td>
<td>‘blue writing on Power-Point’, ‘I could read it more’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P1, P3</td>
<td>(S)</td>
<td>Self</td>
<td>‘bright colours’, ‘highlight things’, ‘I would colour-code’, ‘(colour) really helps me to organise’, ‘I was able to colour my score’</td>
</tr>
<tr>
<td></td>
<td>Coloured glasses, paper &amp; overlays</td>
<td>P1, P3, P4</td>
<td>(S)/(U)/(ML)</td>
<td>Not stated</td>
<td>‘purple thing to put over reading’, ‘I do sometimes feel the need, especially with photocopies’, ‘coloured acetate [...] calms the pain down’, ‘I’ve used coloured glasses with things’, ‘stops things moving’, ‘reading rulers which are coloured’, ‘programmes on my computer, which make the screen go a particular colour [...] I’ve used that mostly in Music’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P4</td>
<td>(MT)</td>
<td>Self</td>
<td>‘(coloured glasses) I was self-conscious so I didn’t always use them where I could have used them’, ‘I don’t use coloured paper for learning music’ (P4), ‘not on Music’ (P3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P4</td>
<td>(MT)</td>
<td>Self</td>
<td>‘photocopying things onto coloured paper might help’, ‘that could be something that helps’</td>
</tr>
<tr>
<td></td>
<td>Patterns</td>
<td>P1</td>
<td>(S)/(U)</td>
<td>Self</td>
<td>‘revision posters’, ‘all patterns’, ‘quizzes’, ‘bubbles’, ‘shapes’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P1, P3</td>
<td>(S)/(U)</td>
<td>Self</td>
<td>‘make notes’, ‘I take notes constantly’</td>
</tr>
<tr>
<td></td>
<td>Notes &amp; writing down</td>
<td>P4</td>
<td>(MT)</td>
<td>Self</td>
<td>‘I write out a lot of tunes’, ‘using letter names instead of using the stave’, ‘finding an alternative word (for own spelling difficulties in pupils’ notebooks)’</td>
</tr>
<tr>
<td>Kinaesthetic</td>
<td>Tapping, clapping</td>
<td>P1</td>
<td>(ML)/(U)</td>
<td>Self</td>
<td>‘I’ll have to sit down and tap it (difficult rhythm) out’, ‘I learn practically’, dancing and tapping experience</td>
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<tr>
<td></td>
<td></td>
<td>P2</td>
<td>(ML)/(MT)</td>
<td>Teacher/Self</td>
<td>‘we’d have to clap beats in a bar, while clapping the rhythm’, ‘that was really helpful’, ‘activities like drumming’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Auditory</th>
<th>Listening (e.g. recordings, someone else)</th>
<th>P1, P2, P3</th>
<th>(ML)/(U)</th>
<th>Self</th>
<th>‘I learn the music by listening to it’, ‘my ear is quite good’, ‘I could follow it along if I could hear someone else doing it’, ‘I’ll find a version of someone else doing it and listen’, ‘I listened to recordings’, ‘I decided to try and record things’, the best way for me to learn a piece is to record it’</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>P1</td>
<td>(ML)</td>
<td>Teacher</td>
<td>‘singing music with me’, ‘she’ll play it, so I know what it sounds like’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Finger as a cursor when reading</th>
<th>P1, P3</th>
<th>(S)/(U)</th>
<th>Not stated</th>
<th>‘I use my finger quite a lot to simply remember where I am’, ‘I’d use my finger and I’d be able to read’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnifier</td>
<td>P3</td>
<td>(U)</td>
<td>Self</td>
<td>‘it magnifies the text to you, which is brilliant’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Knowing how it feels</th>
<th>P1</th>
<th>(ML)</th>
<th>Teacher</th>
<th>‘so that I knew how my body worked and what was happening’</th>
</tr>
</thead>
</table>

| Knowing how it feels | P1 | (MT) | Self | ‘things that would help them put their voice in the right place’ |

**Table 2. Compensatory strategies and tools**
Reflecting on the employability of the identified strategies to non-Dyslexic pupils, several were perceived as potentially beneficial. “Repetition” and “breaking things down” (P1, P2, P3) were viewed as appropriate strategies for both Dyslexic and non-Dyslexic pupils. Non-Dyslexic pupils were thought to benefit from such strategies, even though they do not necessarily “have to”, or “need to” apply them, as they might not struggle with specific elements (P2). Another appropriate strategy was believed to be the multisensory approach (P2, P3), although concerns about “whether it makes a difference to those that don’t have a learning difficulty” were also expressed (P3). Avid Sibelius software was also mentioned as a useful tool for both dyslexics’ and non-dyslexics (P3: “everybody used it”), while P4 suggested that any of the strategies mentioned could be applicable to non-Dyslexic pupils depending on their needs, without projecting any personal difficulties to their music learning process.

Impact of Dyslexia experience and of formal assessment
Participants highlighted aspects influenced by their experience and formal assessment, mentioning implications on self-understanding, on recognising individuality, and on teachers’ involvement and approach.

Self-understanding
Participants expressed that their Dyslexia assessment had a positive effect on their development of self-understanding. For many, it revealed the reason behind various behaviours and difficulties which had been experienced: “before I knew all the things with Dyslexia, I didn’t really know what was happening”; “there’s a reason for all the things that I do”; “it all kind of made sense from that point” (P1). It also led to a deeper comprehension of their personal learning characteristics, in terms of learning style (“I’m a really visual learner”, “I learn practically”, P1), learning needs (“it just takes a bit more time”, “I’ve got to really, really concentrate to read”, P1) and their overall identity as learners (“It made me realise that I’m not stupid”, “as good as everyone else”, P1; “I learn in a different way”, P2).

On individuality recognition
Participants have claimed that their experience with Dyslexia has enabled them to develop skills in recognising individuality and being adaptable to other people’s needs. These skills seem to be particularly empowering within the context of music teaching. Not only have elements of *empathy* been expressed (“because I’ve been through that”, P1; “because I’ve had to accommodate my learning to my needs and that’s been very difficult”, “because I have to adapt in so many different ways”, P2), but also *adaptability* to the needs of others, *flexibility* and *resourcefulness* were mentioned (“I can help other people adapt, explain it in a way that they understood”, P1; “I can offer them lots of different strategies”, “thinking more ways of getting round problems within music”, P2).

On teachers’ approach
In some cases, the approach of participants’ teachers was differentiated before and after the assessment. As reported, before the diagnoses some teachers used to approach dyslexic pupils “intuitively” without necessarily differentiating their approach and they would often get frustrated when the participants struggled to understand various elements
After being informed about their pupils’ Dyslexia, some approaches changed: “when my teachers were more aware of what my needs were, they incorporated that into the lessons” (P1). In addition to being more understanding, some—school and music teachers—would be supportive and willing to help, providing useful strategies, asking dyslexic pupils for advice and suggestions for helpful improvement, or tried to find additional elements that would work, such as reducing the duration of the lesson so that the learner would be able to remain concentrated longer (P1, P2, P3, P4). In one case, it was also mentioned that an instrumental teacher was upset because they had not been informed earlier about their pupil’s Dyslexia (P4).

On the other hand, some teachers did not differentiate their approach even after their pupil’s assessment. Some continued applying unsuitable practices, such as numerous black-and-white handouts and very long lessons (P1), while others struggled to adapt their approach and to provide appropriate strategies (P2). One participant’s (P2) response seems particularly illuminating, highlighting various traits in the approach of one specific instrumental teacher:

Although she knows I have Dyslexia, I don’t think she’s very experienced at all in teaching those with Dyslexia. And, although I think she’s a really good teacher […] her approach isn’t always understanding…and she finds it quite difficult to understand why I don’t understand… I think because she’s been taught in a very specific way, she’s not lenient and flexible to explore other strategies. […] she hasn’t got the experience of working with lots of different types of pupils.

**Discussion**

Dyslexia-related difficulties mentioned by the participants in this study are in agreement with findings of previous research. General learning difficulties and music-specific ones are supported by existing literature, both in the wider field of Education (Polychroni, 2011; Mouzaki & Sideridis, 2007; Polychroni, Chatzichristou, & Mpimpou, 2006) and in that of Music and Dyslexia (Miles et al., 2008; Ganschow et al. 1994; Thomson & Goswami, 2008; Jaarsma et al., 1998; Nelson & Hourigan, 2016). This study has also provided some insight into additional challenges which musicians with Dyslexia may face during teaching. This suggests that further research could possibly lead to a deeper understanding of relevant challenges in the context of music teaching.

In some cases, challenges related to Dyslexia were inhibitory for participation in other musical opportunities. Low confidence in abilities due to Dyslexia-related difficulties inhibited one participant from auditioning for ensembles, while for another participant it was impeding towards pursuing music teaching. Gordon (2000) claims that, due to the multiple difficulties that they encounter, music pupils might be likely to abandon their music studies (p. 214). Low self-esteem and anxiety are frequently addressed in literature, along with negative self-perception, which may also result in lack of motivation and fear for failure (Heikkila & Knight, 2012), leading pupils to avoid participation in cognitive tasks (Polychroni, 2011, p. 170), such as in the case of P2, who often “shied away” during lessons.

Participants also mentioned the employment of visual, auditory, kinaesthetic and other multisensory strategies. Although consideration of individual learning style preferences enhances efficiency in music teaching, further connections between the three
perceptual channels are considered essential for music learning, since musical experience involves aspects of all three perception modalities (Korenman & Peynircioğlu, 2007). The necessity for a “whole-brain approach” to music teaching through multisensory strategies which combine visual, auditory and kinaesthetic memory, is highlighted in general music education research (Chappell, 1999; Gault, 2005). Research in the field of music and Dyslexia supports the adaptation of multisensory approaches in music tuition, providing a big variety of strategies which can be utilised to enhance music learning of dyslexic pupils (Atterbury, 1983; Ganschow et al., 1994, Hubicki, 1991; Miles et al., 2008; Miles & Westcombe, 2001; Heikkila & Knight, 2012). Relevant strategies seem to have a positive effect on the development of skills in the respective areas of difficulty, such as body movement and co-ordination, while enhancing comprehension and memorisation, through the simultaneous engagement of visual, auditory and tactile memory.

Participants experienced contrasting teachers’ approaches after their Dyslexia assessment. Some teachers tried to adapt their approach to accommodate their pupil’s learning, while others did not differentiate their teaching. Despite awareness of the diagnosis, non-Dyslexia-friendly methods, such as long hand-outs on black-and-white paper, were not adapted. Lack of flexibility, adaptability and understanding towards the pupil’s difficulties and needs, as well as of appropriate strategies were also mentioned. In addition, P3 claimed that, before her Dyslexia diagnosis later in life, when she expressed concerns to her teacher about being dyslexic, she was told that they could not recognise any dyslexic symptoms. This raises concerns about the role and responsibility of the teacher, both in recognising dyslexic symptoms and providing appropriate support and teaching, with extensions to formal teacher training, underlining the necessity to increase music teachers’ awareness regarding pupils with special education needs and learning difficulties. This is also supported by research in the field of Education, as well as Music Education. The significance of teachers’ knowledge about Dyslexia and its implications on (music) learning is highlighted, with a view to enhancing teaching effectiveness, through differentiated instruction based on learners’ individuality (Oglethorpe, 2002; Miles et al., 2008; O’Brien Vance, 2004; Ganschow et al., 1994; Nelson & Hourigan, 2016).

**Conclusions**

Overall, reported difficulties and strategies are in agreement with those encountered in existing literature. Various effects of musicians’ experiences with Dyslexia have been identified. Notably, even after being informed about their pupil’s Dyslexia, some teachers seem to not have adapted their approach, which generates questions regarding qualification of professional music teachers in terms of teaching pupils with Dyslexia and/or other specific learning difficulties. Some participants mentioned applying strategies which are considered beneficial even for non-dyslexic musicians. Since this research was based on the recollection of strategies rather than on actual observation of practice sessions, a closer examination of dyslexic musicians’ practice could potentially reveal further, less consciously applied, strategies and habits of Dyslexic musicians, which might be effective for non-dyslexic musicians. Finally, further research on the findings of this study could provide additional insight into related challenges encountered by dyslexic music teachers in the context of music tuition.
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Reconciling music making to educate for life: Insights into adult music ensembles
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The University of Western Australia (Australia)

Abstract
Arising from research on the activity of adult music ensembles, this paper: frames active music making as an essential ingredient of community music making in the research field of Community Music (CM); explores music relationships as a way of sharing knowledge and developing music communities; recognises adult participation as a platform for music education in community life; and reconciles music making during schooling with music making in adult music ensembles, to continue as music education into adult life.

At the very beginning of my research, the relationships formed during music making, became my focal point particularly as I was intrigued by the existence and achievements of adult music ensembles in the community. More specifically, by reflecting on educational settings I could relate to as a music teacher, I started viewing the relationships between: teacher and learner; performer and listener; and director and participant from a CM perspective. These interconnections led me to consider active music making in community music settings more deeply, in search of a research gap in the literature.

I continued to argue that the operation of adult music ensembles is a catalyst for recognising music education as a vehicle of change, with implications for ongoing learning and wellbeing. I based my contribution on the need to better understand music relationships in the context of the musical, social and personal outcomes of adult music ensembles. My original knowledge is that because of the teaching roles of community musicians and music educators, music relationships occur on several other levels in the way members connect with each other, the way they function as a group, the way their performances reach out to audiences and in the way they view themselves in relation to their own music making and the music making of others.

On a broader scale, this opened up further conceptual relationships between: education and teaching, in the different educating settings; music literacy and teaching style, in the music expression and engagement of professional and amateur musicians as music educators and community musicians; CM practice and cultural congruence, in collaborative partnerships by examples of CM practice and the Performing Arts in communities; music making traditions and wellbeing, in the promotion of adult learning in music communities, as a platform of continuity and hope in adult life.

Keywords: Music relationships, Music education, Community Music, Adult music ensembles

Background
The purpose of this paper is to analyse the relationship between music education, the way adults learn and community life, and to inform the roles of community musicians and music educators as major contributors to the social and cultural life of communities.
Music making in the community stems from public music participation in traditional societies according to Blacking (1973). Western Australia boosts a plethora of groups operating across genres and styles as seen in a recently devised coordinated listing of adult music ensemble groups for this research. These incorporate: Orchestras and Bands; Choirs and Singing Groups; Percussion and Drum groups; and Pipe Bands and Ukulele groups. This paper argues that schooling for life goes beyond that of the classroom into the lives of adults as a world of the fourth age, when keeping relationships and building on life experience through music is an important avenue to stay current and live well.

Developing positive music relationships through collaborative learning improves music literacy, encourages lifelong learning and also fosters health and wellbeing. The impact of amateur and professional music relationships on musicianship, training and wellbeing hinges on whether musical experiences empower individuals. This highlights the connection between music, people, and education in both school and community settings with particular reference to CM, where the participant is central to the music making process.

The musical experiences of individuals, who actively participate in music making, extend across many different genres, styles, and traditions. A literature survey of CM shows that as a broad field, the many ways of music making are considered a continuation of forms of music making practices which existed in the past, when music making was publicly acknowledged as part of communal traditions and rituals.

Such music making is known to have been in existence informally in communities as a cultural pattern long before community music was even considered as an emerging field (Blacking, 1973). Since then the concept of community life evolved into different perspectives of place, identity and culture in communities (Small, 1998). Experiencing community is the same regardless of context (Atkinson, 1986) and the sense of belonging, the social mix and family values (Jorgensen, 1995) all form part of the human experience and music expression.

Small (1998) distinguishes between the human experience in musicking, and the aesthetic experience of music as an art form (Cohen, 2007). The human experience relates to active music making in CM and the aesthetic experience to that of music appreciation in music education. Small (1998) proceeds to change the aesthetic view of music as a noun, to that of musicking, as a verb, to incorporate active music making in the musical experience.

In this sense, when formal music making skills and techniques are continued informally in community life, such as in the many music traditions and musical worlds in Finnegan (1989), it serves as an extension of music education and musicking.

The expansive nature of CM as such, defines its many perspectives and practices. Veblen and Bengt (2002) provide a comprehensive historical survey of the development of CM as a movement, based on accounts of projects and organisations in different locations. This illustrates that for every social setting in CM, music making has developed an approach that is suited to a specific purpose, style and context.

A survey of historical literature dating from 1923 to 2009 in the context of this paper, traces the significance of music relationships in schools and in the community, by highlighting the contributions of music advocates, to develop research terms to further the study of music relationships and active music making. The survey of the literature, relate
to the origins of community music activity and is an indication of how the broad scope of CM, make defining it equally broad, as seen below.

The history of CM outlines a survey of the literature of school and community music from: 1923-1973; and 1982-2009; respectively, as these reveal connections between music education and leadership; music teaching and learning approaches; and musical skills and musical experiences as forms of ongoing learning and empowerment. The variants and perspectives of music education programs and community connections can be seen in the historical continua outlined below.

**Literature Survey One**
The first continuum from 1923-1973 reflects School Music Programs and Community connections with a shift from community service (Clark, 1923) to human relationships (Cahn, 1949) to the value of human experience (Blacking, 1969). The topics of interest and concern by the authors can be seen in the transition from:

School Music (i); to School Music and the community (ii); to music education as an outreach (iii); and to music as the human experience (iv).

(i) School Music:

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Clark</td>
<td>1923</td>
<td>Community Service and School Music</td>
</tr>
<tr>
<td>Erb</td>
<td>1926</td>
<td>Music for a better community</td>
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(ii) School Music and Community:

<table>
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<tbody>
<tr>
<td>Norton</td>
<td>1931</td>
<td>School Music and Community Culture</td>
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<tr>
<td>Dykema</td>
<td>1934</td>
<td>Community life</td>
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<tr>
<td>Norton</td>
<td>1935</td>
<td>School</td>
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(iii) Music Education:

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<th>Topic</th>
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<tr>
<td>Dennis</td>
<td>1949</td>
<td>Better music</td>
</tr>
<tr>
<td>Cahn</td>
<td>1949</td>
<td>Human</td>
</tr>
<tr>
<td>Haas</td>
<td>1954</td>
<td>Correlating Schools</td>
</tr>
<tr>
<td>Kaplan</td>
<td>1956</td>
<td>Social change</td>
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(iv) Musical Experience:

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<tr>
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<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blacking</td>
<td>1969</td>
<td>The value of music in human experience</td>
</tr>
<tr>
<td></td>
<td>1973</td>
<td>How musical is man</td>
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**Literature Survey Two**
The second continuum from 1982-2009, outlines the historical developments of CM (MCCarthy 2007) from inaugural conferences (Canwa, 1988) to an ethnography of an entire music making town (Finnegan, 1989) to that of Music education and the community (Jorgensen, 1995). The historical developments as set out below, is followed by significant works, on CM Programs and CM practice, including the changing role of music education.
A large body of research supports the broad definition of CM, in particular: the relationship between community and society (Tönnies, 1957); the need for diversity of musical activities to develop music as an outlet (Erb, 1926); and the extraordinarily wide roots of CM when considering the social impact of the arts (Matarasso, 1997).

In considering the issue of defining CM, Veblen (2005) notes that while community musicians have always been in existence, what is new is the growing awareness and recognition of the connections between community musicians, music making, and education. Higgins (2007) on the other hand warns against making the definition the defining factor. However, given that the concern is about human endeavor the concept of community music is rather “situated, contested, contingent, and hard to pin down” Elliot, Higgins and Veblen (2008, 3).

Higgins (2008) therefore continues to explain that the notion of CM can be broad and suggests three perspectives to be considered by way of orientating the newcomer to the otherwise “complex multidimensional human endeavor” (Elliot, Higgins and Veblen, 2008, 3).

These perspectives are: community music as the music of a community; community music as communal music making; and community music as an active intervention between a music leader or leaders and participants (Higgins, 2012, 3).

In this regard music of a community is considered as the type of music making, communal making is considered being part of the music making and the intervention between leaders or teachers and participants is the approach to the music making.
Aims
An interest in music relationships is embedded in experiential knowledge and the belief of music to suitably connect, empower, educate and improve lives through active music making.

This personal belief in music has sparked an interest to conduct research on adult music ensembles as examples of CM practice: to find evidence of links between school programs and community programs; to identify collaborative learning partnerships between school and community programs; to investigate approaches to active music making including the legitimacy of Music literacy as a tool to empower; to consider participating, performing, teaching, organising, arranging and directing music activities as a means of constructing musical identities; and to show that participation improves quality of life and drives adult education research in the field of gerontology (Lehmberg and Fung, 2010).

The literature survey on school and community programs in the continua above, reveal: relationships between leadership roles and philosophical perspectives; musicianship and teaching approaches; music education and teaching philosophies; and musical experiences impact on social empowerment and personal development.

This research seeks to define the parameters of music making types and establish common grounds across music education to build life skills, continue amateur musicking and form positive relationships. The research questions the connection between music education and adult life and in particular, how music connections and relationships impact on everyday people through music teaching and learning.

It seeks to find what holds groups together and why the need to be part of a music group in the community is so important to some and if this is as a result of formed relationships in school, the need to form relationships after school or simply sharing the enjoyment of musical expression with others.

Method
This research aims to trace if the activities of adult music ensemble groups correspond with the principles of CM and if their community-based practice is significant enough to generate an interest in extending music more broadly into community life.

This topic is significant for it shows a gap in the recognition of music relationships as the basis of musical experiences and how the development of the person in the context of active music making, impacts on the quality of later life (Creech, 2014).

The research method chosen to form the design of the research is mixed and requires the use of both qualitative and quantitative research methods. The methodological issues to be addressed by the research are twofold hence the use of quantitative and qualitative methods. The first issue is whether music group activities in adult music ensembles operate according to the aspects of CM. The extent of the activities was determined by generating a coordinated listing of music groups by quantitative measures. The second issue is whether evaluating of the principles of CM as the basis of an ethnographic analysis, identify adult music ensembles as a phenomenon of CM practice.

The principles of CM will form the basis for the investigation of an ethnographic analysis of adult music ensembles as a phenomenon of CM practice.

The research proposes to answer that knowledge of notes and notation is not a
significant part of global music practice however, that the roles of community musicians and music educators as trained professionals, are crucial in the teaching and learning across music traditions and environments.

**Conclusion**

When adults participate in music making, it is as a result of music teaching, learning and directing. It is also a reflection of the way adults learn. In contrast, pedagogy as music education is delivered during schooling.

An account of adult music ensemble groups sheds light on forms of music relationships among participants and the need to better understand the connections between the musical identities of adults, the culture of the music groups they join and adult learning as andragogy as opposed to pedagogy (Knowles, 2012).

By reporting on the nature of adult music ensemble groups, the account is an analysis of: the support for members; the socio economic background of members, connections with the neighbourhood; the history of the group, connections with institutions; and lastly, an ethnographic analysis of their operation carried out through participant observation, semi-structured interviews and document analyses.

The account forms a critique of the intersection between music relationships, ongoing learning and wellbeing.

**Implications**

This paper is the basis of a proposed comparative analysis of formal and informal and non-formal learning environments with implications for adult life. The argument is to find ways to reconcile music making during schooling with that of the music making of adults in communities.

The analysis highlights key aspects of music teaching and learning in the approaches of philosophical and school music traditions across genres. The focus is on the teacher, learner, director and participant.

If properly recognised for its value, the force of the large-scale participation of adults, could change music making from a formal commodity enjoyed by some in school ensembles, to something that becomes accessible to everyone given the ongoing activity of adult music ensembles in the roles of music educators and community musicians.

This is grounded in the realisation that formal music traditions can serve as an extension of community life, outside the classroom when adults use their music making skills as a service to reach out to others as members of adult music ensemble groups and as adult learners.

Investigating historical writings, and linking schooling into adult life, would raise the profile of music education to serve as a platform for adult learning to show how music making can impact on the lives of others.

**References**


Rescuing a third-age music program: Understanding the value of music participation to students and teachers
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Abstract
As the percentage and number of older adults increases in the developed world, more third-age adults are seeking opportunities to learn to play an instrument and make music with peers. Participating in musical experiences can improve third-aged adults’ psychosocial wellbeing, cognitive function and musical skills. Those who engage in group music-making activities, such as choirs or bands, report social belonging and shared group experiences as powerful motivators for continued music study. This research reports on a nine-month case study of a third-age group-piano program, that had been operating within a university music department for 16 years when it was unexpectedly terminated by upper-level administrators. Data were gathered and triangulated through focus groups, interviews, surveys and discussions with the students and instructors.

During the study, over 60 students, their instructors and the music department chair sought creative ways to keep the program operating so that the diverse group of students had access to high-quality music instruction. As a result of their advocacy and persistence, the students still meet, learn and rehearse in the same physical classroom space but now, the program is housed under the university’s extension services program. The students have experienced little change in their educational and musical experience. However, the instructional staff has decreased, and the remaining instructors suffered severe pay cuts which depleted morale for a time. Factors such as lack of a separate operating budget for the program may have hindered the department chair’s ability to advocate for the program, though it is not clear that a separate budget would have made a difference under these specific circumstances. The high level of trust between the third-age students, the instructors and the music department administrators helped the constituents find a reasonable solution and the instructors’ flexibility and persistence to preserve the program played a key role in finding ways to keep it operating. While this case study is phenomenological, and thus not generalizable, the narrative might serve to guide those who will set up future third-age music programs and assist those who suffer funding difficulties within established programs. Ultimately, this case study highlights the hallmarks of healthy third-age students and third-age music programs—resilience, flexibility and longevity.

Keywords: accessibility, advocacy, third age programs, wellbeing

Context and review of literature
In recent years, researchers and educators have explored the role of music education and music making in the lives of older adults and retirees. The term third age is frequently used to categorize older adults who are retired or semi-retired, but still actively engaged in their communities, volunteerism and leisure learning that promotes self-actualization (Laslett, 1987, 1991). As demographers show that the proportion of the older population
of many developed countries is increasing (He, Goodkind, & Kowal, 2016), musicians recognize the need for music-making opportunities for retirees (Coffmann, 1999; Creech, et al., 2013a).

Researchers have highlighted the role that music can play in a retirees’ overall well-being. Psycho-social wellbeing, including emotional, social and spiritual improvements, are commonly cited benefits of engaging in music learning activities (Creech, et al., 2013b; Fung & Lehmberg, 2016; Perkins & Williamson, 2014; Southcott, 2009; Southcott & Li, 2018; Wise, Hartmann, & Fisher, 1992). Older participants in music ensembles and other music-making activities have reported improvements in overall wellbeing, particularly linked to participating in a meaningful activity (Coffmann, 1999; Hays & Minichiello, 2005) and to learning new things (Cohen, et al., 2006; Gembris, 2012). For those involved in formal musical ensembles, including choirs, orchestras, bands and non-traditional instrumental groups, social belonging, group contributions and the musical experience have surfaced as benefits reported by older learners (Fung & Lehmberg, 2016; Pike, 2011). Emotional well-being and spiritual wellbeing, which are specific components of overall wellbeing, are important factors in motivation to continue with music participation of older learners (Redman & Bugos, 2019).

Studies with animals reveal that brain plasticity, including the generation of new neurons and development of new neural pathways, is possible in old age (Fillit, et al., 2002). Indeed, researchers suggest that specific lifestyle practices can be employed to build so-called “cognitive reserve”, to counteract typical cognitive decline and that cognitive vitality is possible as adults age (Fillit, et al., 2002). These include engaging in lifelong learning activities and regular mental activity, maintaining social networks and volunteer activity. Increased cognitive ability has been reported as a result of piano study (Bugos & Kochar, 2017). Increasing technical skill, learning music and intellectual stimulation are referenced as motivators for older adults to persist with music study in formal settings (Helton, 2020; Pike, 2011). Sustained participation in formal adult music ensembles is linked to group dynamics, which may include a sense of ownership, belonging and commitment to the group (Kruse, 2009).

Method
Talmage, et al., (2015), who explored a third-age program within a university setting, recommended that future research on third-age programs include qualitative data, such as focus groups and interviews with the learners. This paper reports on a small portion of a larger, longitudinal case study of a North American third-age piano program that has been ongoing since 2002. This paper describes the findings of a phenomenological case study of the piano program during a nine-month period, when funding for the program was terminated. During that time, the teachers, students and administrators sought ways to keep the program operating.

Data were gathered and triangulated from in-person observations, field notes and focus-group discussions with the participants, written surveys and statements by the participants, interviews with the instructors and ongoing phone and email communication with the program coordinator, who taught many of the classes. The researcher made transcriptions of interviews and themes were discovered using the constant-comparison method (Creswell, 1998). Because the study is phenomenological, the findings may not be replicable elsewhere. However, several of the emergent themes, discussed below,
highlight the role that the music program played in the lives of the participants and how they sought to keep their program operating when it was in jeopardy. The strategies employed and findings reported here may serve as a starting point for third-age programs that experience funding cuts or for educators who have limited budgets to initiate much-needed programs.

**Findings: The piano program**

In January of 2002, the third-age piano program began as a single class for retired adults in a mid-sized state capital city in the United States. From its inception, the program was designed to get students onto a centrally-located university campus and to involve music students in supervised pedagogical instruction with the retirees. Instruction takes place in the on-campus digital piano lab, with the full support of the chair of the music department. Throughout much of the program’s existence, the state government had an unfunded mandate requiring state universities to provide access to courses for any state resident over the age of 62, for a nominal fee. In setting up the class, the university dean and department chair budgeted for a full-time faculty member to teach one section of the course and insured that the digital piano lab was available for the class.

Within eight years, the program had grown from one class with eight students, to four classes with 35 students. In addition to the program coordinator and primary instructor, several graduate students had been trained to teach in the program. The program founder taught the majority of the classes, as part of a teaching overload for which there was no additional compensation or leave provided. When the program founder resigned from the university in 2008, one of the former graduate students was hired as an adjunct instructor to coordinate and teach students in the program. Several years later, as the number of participants in the program grew, the chair of the music department hired two additional qualified part-time instructors from the community. Since the popular program began, there have been two deans and four department chairs who each supported the program. By the spring of 2018, the program had 64 students enrolled in six classes. Enrollment peaked at 75 students in September 2018. However, unbeknownst to any of the participants or instructors, changes were coming. At the time of this writing (October 2019) the program still has six classes and two instructors who educate 61 students.

In November of 2018, due to declining student enrollment across campus, the university’s upper administration announced that all adjunct and part-time faculty would be terminated immediately following end-of-semester exams (in December 2018). Administrators in the music department notified students in the third-age piano classes that they could no longer provide an instructor, essentially terminating the program. This is when the students, instructors and music administrators began advocating for the program. The following sections explore how these stakeholders came together, at the end of 2018 and into 2019, to find a creative solution allowing the program to continue.

**The participants during 2018 and 2019**

The mean enrollment numbers in the third-age piano program were 69 students for the spring and fall semesters in 2018. The program enrollment had been steady for several semesters, with an average of 64 students during the fall and spring semesters. A smaller subgroup, of about 14 more advanced students (this number was chosen because of the
number of pianos available in the piano lab), met each year during June and July for an abbreviated summer semester.

By 2018, the cultural diversity and musical background of the students had increased from the first decade of the program. The program was situated within a city in the middle of the country that lacked cultural diversity. Yet, by 2018, four different ethnic groups were represented among the students and English was not the first language of several of the participants. However, as with many adults who engage in formal learning (Merriam & Bierema, 2014), the majority of the students had completed formal tertiary education. Because this was a third-age class, most of the students were semi-retired or had retired, fully, from professional fields. The students were former teachers, medical doctors, nurses, chemists, microbiologists, lawyers, stockbrokers, inventors and business owners, to name but a few of the professions represented. A small number of students were living on limited fixed incomes and would not have been able to participate if the class had not been subsidized by the music department. Those students could not afford to continue studying piano through private lessons, which would have been more expensive, so the group-piano program was their only option for music study and participation. Another sub-group of students were aging and experienced mobility problems thus, having easy access to a first-floor classroom that was close to parking was essential.

**Benefits for the participants**
The relative diversity of the group was cited as a positive benefit by individuals in the program. Jill (a pseudonym is used to protect the anonymity of the participant) said, “I’ve gotten to know people that I never would have met otherwise”. Peer support among the group members was an important theme. Members often met thirty minutes before class to share stories about their weekly practice and several went for coffee after class to debrief. Indeed, earlier findings from the larger research project (Pike, 2019) found psycho-social support to be a common theme among members of this group. Specifically, social support provided by peers (both in and out of class), the sense of common purpose and gratitude for the opportunity to learn piano and make music were important subthemes. The friendships that were formed during and through music making and learning, along with the shared sense of common purpose and recognition of how important the piano class was in their lives helped the students join together to solve the problem of the termination of their class at the end of 2018.

**Discussion: How the class cancellation was resolved**
As noted above, the third-age piano program had been ongoing for 16 years, when its termination was announced abruptly, surprising the students and the instructors. Although the department chair delivered the news, she was not supportive of the class cancellation. Yet, there was little she could do to change the outcome as it was an upper-level administrative mandate. Initially, the students engaged in a letter-writing campaign to the college dean, where they described how long they had participated in the program and the educational and personal value of the class. This campaign took place within hours and days of the announcement. The letters did attract the attention of the dean, but he was not in a position to defy university policy and could not hire instructors for the class. Instead, (perhaps, in part, due to the negative attention from the third-age students) he pressured
the music department chair to tell the students and the instructors that nothing would be
done to save the program and to ask them to stop pursuing the matter.

The program coordinator looked into alternate locations for the program, but there
were few spaces that could meet the basic needs of the program: a private class space,
足够的数字钢琴供每节课使用，容易进出教室，从可接近的停车场和教学工具，如白板，一个视觉器和一个控制来连接
钢琴的耳机。一个空间符合物理标准被确认，但它没有必要的教育工具进行有效的教学。由于
教育和音乐经验的学生产生了痛苦，它被拒绝。此外，学生们将不得不支付更多的学费
to cover the cost of classroom rental and teacher salaries, which had been underwritten by the music
department in the old paradigm.

Meanwhile, the students met with the program coordinator to brainstorm about
ways to continue the program, while still making it physically and financially accessible
for all members of the group. Instead of searching for individual options to continue
piano study, everyone banded together to ensure that everybody could continue to study
in the group setting. The instructors reached out to the program creator, who was no
longer living in the state, to get ideas about how the group might keep going despite the
obvious set back. Once they had strategized about “talking points”, a couple of student
spokespeople and the program coordinator met with the music department chairperson to
explore options. During the meeting, the department chair suggested that if the program
could be adopted by the university extension program, which did not fall under the
broader academic jurisdiction of the university (thus, they could hire part-time
instructors), the music department would provide the classroom space for the program.

After expedited negotiations with the extension program coordinator, a shorter
schedule of classes was set up for the spring 2019 semester. There were changes,
including a higher (but still reasonable) fee for the students, a 50% pay decrease for the
program coordinator/primary instructor and an even bigger pay cut for the additional
instructor who was kept on to teach. The accessible parking and classroom location
remained unchanged. In the end, almost all of the students and the two instructors signed
on to the reimagined program. By the end of the semester, the students experienced
negligible change in the educational experience and reported the same intellectual, social,
emotional and musical benefits as in previous semesters. However, the instructors felt
demoralized since they were teaching almost as much as they had previously, for much
less compensation. They lost, also, their sense of community with other adjunct and part-
time instructor colleagues who were no longer teaching in the department and communal
space for planning instructional activities. And, although they still created the curriculum
for the program, the director of the extension program was not a musician so they lost a
valuable music educator ally in the music department chair.

Yet, by the end of the semester, because the student response was positive they
agreed to continue the program into the following academic year. They streamlined times
of class offerings and combined two smaller classes, so that the schedule would become
more manageable. By the fall 2019 semester, enrollment was expected to remain stable
for the spring 2020 semester and the instructors reported being in a better “frame of
mind” about the reimagined program. While they don’t anticipate any changes for 2020,
they are open to exploring partnerships with better funded organizations in the city that
provide programs for third-age individuals. It remains to be seen whether a keyboard lab could be set up in a new location that would offer as many benefits to the students. But, for the moment, all stakeholders are adamant about the value that the program brings to the lives of over 60 individuals within the community and thus, the program will continue for the foreseeable future.

Conclusions and implications for other third-age music programs
The preceding narrative highlights how dependent many of the most popular and beneficial music programs are upon external funding. The program was established in a prominent and successful university where the leaders of the department in which it was housed were committed to the program. For more than 16 years, program participants who had the means, made monetary donations to the music department and supported student scholarships and performances through their donations and attendance. In hindsight, the fact that there was never a separate operating budget for the third-age piano program was an unfortunate circumstance. It is unlikely that the funds, gathered from the minimal student tuition and numerous donations, would have been available to pay instructors once the upper administration decreed that all non-tenured or non-tenure-track faculty were terminated. However, had such money been available, perhaps it could have supplemented the instructor salaries once they began offering the program through the extension program. On the other hand, with the program effectively terminated as a music department offering, those funds may have reverted back to the department general coffers.

Because so much good will had been amassed between the music department leaders, the program coordinator and the third-age students, all parties were able to brainstorm and negotiate a reasonable outcome for the spring 2019 semester onward. Had there not been trust established between the stakeholders, and if the administration had not witnessed the value of the program, it is unlikely that the eventual accommodation would have been reached. Thus, the program and the participants would have disbanded. Creators of future third-age music programs should establish and maintain a good rapport between the entity in which it is housed (both owners of the physical space and of the program/department through which it operates), the instructors, the students and the larger community which it serves. The more that people see and experience the value in a music program, the more likely they will be to fight for it when funding gets tight (as it inevitably does in arts-related programs).

Finally, the instructors and the program coordinator demonstrated a high level of flexibility and sacrifice for their students. A larger philosophical discussion about the true value of excellent teaching and pay equity needs to occur within academia, where adjunct and non-tenure-track instructors earn far less than their peers (for doing the same job). If these instructors were younger or supporting themselves and their families on their teaching income, they would likely not have continued to teach in the program. Most people do not go into teaching to become rich, but music instructors in tertiary institutions deserve to be compensated fairly for their work and teaching expertise.

Ultimately, this is a positive story. It exemplifies how important music making and learning is to these third-age students and their teachers. It shows how students will fight to save a music program that they love and they will rally around their peers to ensure that everyone has equal access to music making opportunities. It also demonstrates how
far music educators and some administrators will go to provide excellent learning environments for older students. It is a study in resilience, flexibility and longevity—hallmarks of a healthy third-age population and a third-age music program.

References


Living a legacy: Case study of an Australian secondary school super veteran music teacher
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Abstract
Veteran music teachers are often categorised in the literature as those with more than 15 years teaching experience. This paper will examine the factors influencing the working life of an Australian secondary school music teacher who has had more than 30 years’ teaching experience, labelled in this research as a ‘super veteran’. This teacher shares her passion for her work and discusses leadership, growth mindset and legacy that support this work now and into the future.

This case study was a part of larger qualitative research by the author. The research included a national survey (n=263) and interviews (n=41) of secondary school music teachers from all states and territories of Australia. The survey, disseminated through the Australian Society for Music Education membership, and referred on through social media platforms, captured responses of 32 super veteran secondary school music teachers. Subsequently, eight super veteran music teachers from five states of Australia were interviewed.

The super veteran in this case study highlighted motivation, challenge, value, loyalty, mentoring and legacy as significant aspects and influences on her work. She presented a positive approach to working in her school environment, highlighted the rewarding aspects of mentoring and gave insight into her career forecast at this point in her working life.

This research adds to the literature on Australian secondary school music teachers who continue to enjoy long and productive careers in the music classroom. It also adds to the international music education literature on classroom music teachers nearing career end through an Australian case study. This paper gives advice to education authorities and school leadership on how to utilise the rich expertise of these music educators for the future of the profession.

Keywords: secondary school music teacher, super veteran, growth mindset, value, loyalty, legacy, mentoring.

Background and Context
This case study comes from larger research by the author that included a national survey and interviews. The research explored factors that affect the working lives of Australian music teachers in secondary schools across career stages. With the veteran career stage (15 years plus) and a new career stage introduced by the author, labelled ‘super veteran’ (music teachers of 30 plus years’ experience) this wider research explored their motivation, sense of value, experience of professional learning, implementation of new curriculum, stress, work/life balance and career forecast.
The case study in this paper focuses on one super veteran secondary school music teacher who completed the survey and elected to be interviewed. The interview took place in February 2019.

**Literature Review**

Research into the working lives of music teachers is often framed in career stages. These career stages have been given different labels across various studies and include pre-service, induction, competency building, enthusiastic and growing, career frustration, career stability, career wind down and exit (Christensen & Fessler, 1992). Labels such as pre-service, early career (1-5 years), mid-career (6-15 years) and veteran (15 plus years) are found in research from the United States of America (Dabback, 2018; Bernard, 2015; Bley, 2015; Brown, 2015).

Veteran music teachers in the research of Bley (2015) sought administrative support and appreciation and recognition, without being involved in decision making. Brown (2015) found that veteran music teacher job satisfaction came from working with students. Being valued and supported was also important to these teachers. Research in Italy by Guglielmi et al., (2016) found that senior teachers (aged 50 years plus) enjoyed the acknowledgement of their skills.

Collie and Martin (2017) found five motivational profiles for teachers in an Australian study of 519 teachers from primary, secondary and K-12 schools. The study explored self-efficacy, value and mastery, anxiety control and performance avoidance. The five profiles they named were: success approach, success seeking, amotivation, failure fearing, and failure accepting. These form an important lens in understanding the motivation of teachers.

School goal structure (the goals and values of the school), explored in the research of Skaalvik and Skaalvik (2017), was found to impact teacher self-efficacy, job satisfaction, emotional exhaustion and time pressure. When school goal structures are not well communicated, this misalignment was noted as a motivating factor for teachers leaving the workplace. The research showed that school culture (goals, value) can impact a teacher’s sense of belonging.

Research by McAtee (2015) found that when teacher commitment to their schools is high, veteran teachers are able to provide better mentoring for newer teachers. This provides an avenue of support for early career teachers and keeps veteran teachers feeling valued in the workplace, increasing staffing stability across the school. Conway (2015) explored the impact of mentoring on novice music teachers by experienced music teachers. She found that being a mentor was valuable, not just for the developing teacher but also for the mentor. “Teachers also commented that being a mentor felt like a professional development activity and that they learned from the process” (p.93).

The number of music teachers within the veteran career stage (15 plus years) is growing, as these professionals continue to work longer. To have a career stage that is longer in years than any other is an interesting factor in this research. The issues that affect a teacher at 15 years are potentially vastly different to a teacher of 30 plus years’ experience. This study aims to explore the factors at work for super veteran secondary school music teachers in the Australian context.

The research questions for the larger study were:
1. What factors enable secondary music teachers to remain motivated in their workplace?
2. What are the negative factors that affect secondary music teachers in each stage of their career?
3. How can secondary music teachers be better equipped and supported in their school environments?

Methodology
This research was a part of a larger qualitative study that aimed to explore the factors affecting career longevity of secondary school music teachers. The study utilised a survey (n=263) and 41 case studies. The case studies allowed for greater depth in questioning and gave the researcher increased opportunity to analyse understanding of participants’ perspectives and activities (Hammersley & Atkinson, 2007).

This paper focuses on one case study of the super veterans (n=8) from the larger research. The participant completed the national survey and elected to be interviewed. The survey contained 45 questions and covered areas relating to career length, age, gender, qualifications, school type, job satisfaction, work challenges, professional development, the implementation of the Australian curriculum and future career forecast. The survey themes were framed by the themes of the literature review. Likert-type items and open-ended questions were included. The eleven interview questions focussed on motivation, value, challenge, stress, curriculum implementation, professional development and career forecast.

The case study in this paper features a super veteran music teacher from a government secondary school in a capital city of Australia.

The interview data, including field notes, video and audio recordings was transcribed using open, axial and selective coding. The principles of grounded theory were applied (Creswell, 2014) with themes examined and compared to those in the literature review, allowing new themes to emerge from the data.

Findings
Five themes were revealed through the responses of this super veteran secondary school music teacher. These were: mentoring, growth mindset, value, loyalty and legacy.

Mentoring and Growth Mindset
The super veteran expressed many areas of her working life that motivate her. These ranged from student specific goals, connection through programs and team building:

Coaching and mentoring my team. Developing our extensive band program.
Being able to teach in a practical subject area. Conducting large ensembles.
Student holistic and musical growth. Engaging students and connecting them to school and community through music.

Research by Angeline (2014) found that the focus of ‘late stage’ teachers can be to share their experience and knowledge with those starting in the profession. The super veteran in this study was keen to give back to her staff:

As an executive teacher I see a huge part of my role skilling new and young staff to work in this environment. It is a unique environment and giving them
the skills, knowledge and the understanding that ‘the sky is the limit’ regardless of what the medium is at our school (which happens to be band and instrumental stuff).

The recognition of how teacher skills are developed in the workplace was highlighted in her approach to early career music teachers:

It is important because we come out of university with a certain skill set and a certain amount of training – we all know that so much of teaching is on the job training so if people have a mentor to back them, support them and upskill them it is so important. It is so important to have someone who has their back as well to give them that confidence – ‘yeah I can do this’. It takes time and it is really important to mentor people to give them confidence and skill.

The development of a growth mindset for music teachers, enabling them to make decisions on the potential for growth (Books, 2015), is an interesting approach of this super veteran:

I think a lot of it is about growth mindset, but I hear from other music teachers outside of my school ‘Oh we are just a dumping ground. When all the electives are full, they are just dumped in music – they don’t want to be there’ and they see it as a real negative whereas in my situation I go ‘Yay – more people to work with, this will be cool fun, we’ll turn them around’. So I think a mindset is important and a challenge because if music teachers see themselves as being put upon or everyone is against them, they don’t get support – that is how it is going to be.

The motivation of this super veteran music teacher would equate to Collie and Martin’s (2017) profile of the ‘success approach’. The approach of a growth mindset to situations that are often negatives in a school extends this model of motivation further.

Value and Loyalty
The research of Brown (2015) highlighted that veteran music teachers like to be valued and supported. Guglielmi et al., (2016) found middle aged teachers sought role clarity, while seniors liked to be seen as the expert.

The super veteran interviewed felt the valuing of her work was important, increasing her motivation:

When I really felt I had the backing (while still a Level 1 classroom teacher) and suddenly they started to back the concept of growing the program and really valued it as a part of our school - that started to get really exciting. We started to see these record numbers.

Being valued as a part of the school community had further benefits:

I have had strong loyalty to all of the schools I have been in to do the very best I can for the school. Loyalty to my children and their parents to provide the best music education I possibly can, but still have fun. There is that personal thing where it is not a chore.
The importance of being valued by the school community had a positive effect on this teacher’s self-efficacy, commitment to the work and loyalty to the school as a whole.

Legacy
A legacy is defined as “something that is a part of your history or that remains from an earlier time” (Cambridge University Press, 2008). Angeline (2014) explored the concept of a legacy where a “desire to leave one’s program, department, school, district, and profession in a more secure state can be a potent stimulus in the mind of the late-stage teacher and might serve as a driving force behind the actions of those in the final years of active teaching” (p. 54).

This super veteran music teacher felt the need to leave something behind that enriches the lives of music students of the future:

I would like to leave a legacy that is more than just this building. This building is a legacy and this band program is a legacy, but I want to leave a sustainable legacy which means I need to have teachers with the same passion and knowledge and the will to work long hours (tours, night performances).

It was also essential to forecast how her teaching career should end:

I want to finish on a high note – not plateau or decline into retirement; I want to keep going at full steam ahead – sustain the energy and mentoring of staff.

New staff within that five years to train up before I go.

A plan for the future of the faculty was also important:

It is really, really important to succession plan to help and empower our young teachers, or any teachers. I say young teachers because most of the ones in my staff room are young and I have had a lot of them straight out of Uni which is special – so that is part of it.

The importance of what is left behind was paramount for this super veteran. Leaving the school in a way that enables music education to continue to develop into the future, was also essential to the self-efficacy of this super veteran.

Conclusion and Implications
This research is a significant and encouraging investigation into the working life of a super veteran secondary school music teacher who, as a part of a growing cohort of teachers, is often overlooked in the literature. The voice of super veteran teachers is often unheard with attention given to earlier career stages. The literature also highlights that this career stage is often a period of wind down and exit (Christensen & Fessler, 1992) or reassessment/definition and proximate retirement (Baker, 2005a). This was not the case for the super veteran in this study.

This research revealed, through extensive exploration of the literature and analysis of the key results from the case study, the important role of this super veteran music teacher in providing motivation, challenge and mentoring to her staff. The case study also highlighted how being valued by the school leadership enhanced the development of programs and increased staff loyalty. This super veteran is an example of a teacher focussed on the importance of leaving a legacy for the music education of future students.

The case study of this super veteran music teacher highlighted her ability to approach opportunities with a growth mindset – to see the possibilities in any situation.
Music teachers could learn from this approach to navigate ways forward that in the end benefit their programs and staff. Growing programs by involving students of all abilities, for example, can bring the benefits of publicity, profile, inclusivity and financial support.

This research challenges school leadership and education authorities about the importance of mentoring staff (especially early career teachers) utilising the expertise of these experienced teachers. Recognition by the school executive of the value and contribution of this super veteran clearly increased stability through the wider staff, knowing they were supported. Loyalty to the workplace also increased, creating a more settled work environment.

To conclude, this super veteran secondary school music teacher summed up her teaching career in this way:

I have had the most amazing career. I feel proud of my career – really, really proud. I feel that the work I do is valued by the school, valued by students and their parents.

References


Music workshop in a public school: Pedagogic possibilities in a Brazilian context
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Abstract
This text is a summary of the doctoral research in which non-formal learning processes and informal music learning practices were discussed at the music workshop of the Brazilian federal project PIBID of The Minas Gerais State University/Brazil in a public school of Belo Horizonte city, in 2014. The applicability and adaptation of these approaches in the Brazilian public school context was investigated, besides the possibility of being used as instruments to stimulate the processes of music practice, teaching and learning. Using the qualitative research methodology and data collection from observations, questionnaires, interviews and videos recorded, it was possible to raise the opinions and conceptions of the participants, five project scholars and twenty students of the school, about the activities. The workshop provided an interaction between the students which facilitated a sharing of strategies, information and music learning. As a result, we can highlight that the project offered opportunities for peer learning and the research proved the feasibility and applicability of non-formal and informal learning approaches as pedagogical possibilities for music learning.

Keywords: Informal learning, Non-formal learning, Public School, Music workshop.

Introduction
This text is a summary of the PhD research1 (Rodrigues, 2018) in which non-formal learning processes and informal music learning practices were discussed in the music workshop of the Brazilian Federal project PIBID (Institutional Scholarship Program to Teaching Initiation) of UEMG (The Minas Gerais State University/Brazil) in a public high school in Belo Horizonte city, in 2014. The applicability and adaptation of these approaches in a Brazilian school context was investigated, besides the possibility of them being used as instruments to stimulate the processes of practice, teaching and learning music.

The foremost objective was to investigate the students' interactions, motivations, stimuli, interpersonal relationships and learning processes, which involved both non-formal teaching and informal practices. Such practices, previously identified in a prior bibliographic study2, were studied, discussed, planned and adapted in the music workshop by the PIBID project fellows, under the supervision of this researcher. To what extent can these two approaches work concurrently to provide a stimulus for music practice and learning in a public high school context?

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1 This research was funded by Research Support Foundation of the State of Minas Gerais (FAPEMIG) through the PCRH/UEMG program.
2 (Green, 2001, 2008, 2014); (Corrêa, 2000, 2008); (Rabaïoli, 2002); (Gohn, 2003); (Wille, 2003); (Rodrigues, 2004, 2007, 2014); (Souza et al., 2003); (Lacorte & Galvão, 2007); (Karlsen, 2010); (Feichas, 2010); (Narita, 2014); (Wright & Kanellopoulos, 2010); (Wright, 2008b, 2008a, 2016).
Folkestad (2006, p.141) delimits the meanings of formal learning as that in which the activity is planned, organized and sequenced in advance, as well as conducted by a teacher or someone who assumes this role. We can add the presence of a curriculum previously elaborated with content distributed across topics and disciplines. For Mak (2007) formal education is related to systematized teaching in educational institutions, from elementary schools to undergraduate and postgraduate courses.

For D'Amore et al. (2012, p.9) the non-formal music learning process is one characterized by adult leadership in community contexts. Mak (2007) reports that non-formal learning relates to private schools, community groups and other non-governmental organizations (NGOs), encompassing highly contextualized, participatory educational activities directed to an audience with a specific purpose. At school, it would be after-school activities and extension projects that require complementary knowledge.

Informal learning covers the part that was not considered in the two previous categories, for example: learning from interaction with friends, family and colleagues (Rogers apud Mak, 2007, p.12). Green (2008) characterizes this learning from five fundamental principles, namely:

- It usually starts with music which the learners choose for themselves;
- The main method of skill-acquisition involves copying recordings by ear from an audio reference;
- Learning happens alone as well as alongside friends, through self-directed learning, peer-directed learning and group learning;
- Skills and knowledge tend to be assimilated in a haphazard, idiosyncratic and holistic way - starting with ‘whole’, ‘real-world’ pieces of music;
- Usually involves a deep integration of listening, performance, improvisation and composition throughout the learning process (Green, 2008, p.10).

This article reports the context of the research mentioned and, more specifically, the description of the musical activities developed in the PIBID project music workshop.

The research context

The doctoral research sought to observe and understand the processes used to adapt non-formal learning (D’Amore et al., 2012; Price, 2012) and informal music learning practices at school (Green, 2001, 2008; Green & D’Amore, 2012) and for that, it was necessary to get closer with the students of the chosen public school for this research. This procedure led the investigation process to a qualitative or naturalistic study (Merriam, 2014, p.14). Some techniques were used for data collection, such as participant observation (Mason, 2002), questionnaires (Laville & Dionne, 1999), field notes and document analysis, interviews (Merriam, 2014; Stake, 2011) and life story reports (Silva, 1995). Part of the activities was recorded in audio and video for further data analysis (Gaskell, 2003; Jovchelovitch & Bauer, 2003).

One of the main objectives of the project according to Coordination of Higher Education Personnel Improvement (CAPES), a department of the Ministry of Education of the Brazilian Federal Government is “to promote the insertion of students in the public schools context since the beginning of their academic education so that they develop didactic-pedagogical activities under the guidance of a University Professor and a Professor from the Public School” (CAPES, 2019).
The project team had the following composition: a coordinating teacher from the UEMG School of Music (ESMU), a supervisor of the public school, a collaborating teacher (the researcher) and scholarship holders, students of the licentiate music degree with qualification in instrument or singing (LIM), which had the following profile: two were more experienced with the classical repertoire and three of them with the popular music repertoire; two played only guitar; another one played guitar and electric guitar, one played recorder, transverse flute and piano, and another sang, played guitar, percussion, and small acoustic guitar (cavaquinho). All the scholarship holders have already worked as music teachers, mainly instrument teachers, in individual classes or in private music schools and some of them had already been playing at concerts and musical performances. This experience was fundamental for the structuring of the workshop, because part of the activities, such as the instrument and group practice classes, were planned based on the skills and knowledge of these people.

The group of fellows organized and directed the execution of the activities in the workshop format, which was chosen because it is flexible and allows changes in previously planned activities, if necessary (Fernandes, 2000). Due to the extension of the time available, three hours on Fridays afternoon, it was necessary to divide it into three stages, with the average duration between 45min to 60min each, distributed as follows:

First part – group dynamics with activities that could encourage interaction between participants (Barba, 2015; Ciavatta, 2016). In the second part, the instrument classes in the following groups: guitar, percussion, recorder and keyboard. In the case of the guitar, due to the larger number of students, there was a class of beginners and another one whose students have already played. The repertoire was basically composed of Brazilian popular songs and the scholarship holders brought some suggestions of songs from a repertoire known by the students. Both activities can be associated with non-formal learning (Green, 2001; Price, 2012).

The third part, the group practice, was the moment when informal learning music practices were performed according to the seven stages proposed by Green (2008). Students chose the songs they would like to play, gathered in free-choice groups, took these songs by ear or sought information about them from the Internet, then rehearsed and played for their classmates. After the performances, a new stage began and the whole process was repeated with a different song. In this part, the goal was to apply, in the school context, the informal practices of musical learning as closely as possible to how they happen in a real musical situation.

The State Public School chosen for the research is located in the northern region of Belo Horizonte, known for its high levels of violence and low levels of economic activity. The school provided a large physical space for the activities and no aptitude test was required as a prerequisite. All 482 students in the morning shift were invited to attend the workshop, of these, 89 students showed interest, and at the beginning of the activities 28 students attended. The main reasons given by students for dropout were: change of school; personal reasons; need to work and attend another course during workshop hours. During the course of the activities, the number of participants dropped from 28 to 20 students on average, and this frequency varied throughout whole 2014 year. The average age of the workshop’s most frequent students was around sixteen.

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3 For ethical reasons the name of the State School will not be mentioned and the original names of all survey participants were changed to fictitious names.
By distributing a questionnaire to the twenty most frequent students, we collected data regarding the musical profile of these participants. Some students have already demonstrated some musical knowledge, singing and/or playing. Regarding the instrumental practice, in addition to students who reported playing an instrument, there were a small number who reported having practical experience on more than one instrument. The instruments they claimed to be able to play were: drums, bass guitar, guitar, keyboard, piano, flute and percussion. Concerning pre-workshop musical learning, seventeen students mentioned that they never had regular music lessons, two of them had about two months of classes, and one student said that he had taken regular flute lessons in a City music project. Most learned by watching, listening, talking, and/or playing with family, friends, and colleagues, listening to music, searching for music, or any information on the Internet that helped them to play the desired song.

Regarding your musical preferences, a wide variety of styles have been mentioned. They cited blues, rock, jazz, hip hop, classical, popular Brazilian music, Brazilian country music, pop music, Brazilian rock, funk (Brazil), among others. Students reported that they obtained their music primarily by downloading it from the Internet or sharing it with colleagues via Bluetooth, and most of them listened to their favourite music on their mobile phones. Music practice was not regular for them and only three stated that they participated in a music activity weekly.

**Workshop Activities**

The activities in the first two stages of the music workshop presented the characteristics of non-formal learning, in the third moment the practices were related to informal music learning practices.

The activities at the first moment had as main references: 1) The teaching approach “O Passo”, elaborated by Ciavatta (2016), which basically consists of the incorporation of body movement as a facilitating agent in the understanding of different rhythms; 2) the activities developed by the Barbatuques group (Barba, 2015) which consists in the use of body percussion such as various palms, finger snapping, chest beats, sounds extracted from the tongue and lips, etc., in musical practices. Both approaches provided to participants the opportunity to learn sounds, rhythms, develop their rhythmic skills, creativity, psychomotor coordination, listening skills and group interaction.

Below, a student’s account of the activities performed at the first moment of the workshop.

- Robson (student): Look, I really enjoyed the first part, the dynamics were lots of fun, you can improvise, sing and it also helps you to get to know a little about music, besides facilitating my research on the Internet and learning as well. (Interview on 11/14/2014).

The second moment of the workshop was intended for the instrument class from the request of the students of the school. There was a consensus from the PIBID team about the importance of this step for those students who wanted to start learning an instrument or for those who already knew how to play and would like to broaden their knowledge. Lessons were planned from a well-known and recognized repertoire by the scholars, and the fellows showed previously planned technical issues on the instrument, such as performing a rhythm, a chord, a solo sequence, from materials they deemed appropriate.
for the students’ level. This configuration was associated to non-formal education, according to D’Amore et al. (2012).

The access to the instruments was a delicate issue, as some students would like to learn to play a specific instrument that was not offered. In addition, there were students who chose to learn flute, guitar, keyboard and double bass and brought their own instruments and those who would like to learn how to play the flute, the guitar and the keyboard but did not own the instrument.

The choice of instruments in the workshop to be made available for teaching was subject to six main factors: 1) The instruments that fellows could play; 2) The physical space offered by the school; 3) The instruments provided for the activities. The school had only a few percussion instruments that were readily offered to the music workshop; 4) The instruments that the students have already played and would like to broaden their knowledge; 5) Instruments that students had access to and could bring from home. This way, the number of present instruments has always been variable; 6) The possibility of a colleague lending the instrument in the workshop for practice, depending on their friendship level and goodwill.

Below, some students’ statements about this workshop moment:
- Carlos (student): It was very cool. I learned a lot, learned notes (chords), guitar parts, right hand technique, left hand technique. It helped me a lot because I couldn’t even do a small guitar solo, it helped me a lot. (Interview on 11/28/2014).
- Cléber (student): I really enjoyed and started to play new instruments. Before, I only knew how to play the guitar and the little guitar. I’ve started playing percussion and I’ve learned new rhythms, learned many things, and all of that interacting with others. (Interview on 11/14/2014).

It was observed that musical learning was significantly highlighted by the students in this part. In addition to learning more about the instrument they wanted, they had the opportunity to exchange ideas with their peers and started learning about a new instrument provided by the school or borrowed from a peer.

The third moment of the workshop, the group practice, was based on the project developed by Green (2008) in which the author discussed the adaptation and application of informal music learning practices at schools in England. The author sought to evaluate the extent and possible benefit of this approach (p.23) in the project using the characteristics of informal learning identified, the conclusions about learning and the possibilities that this approach may offer. According to the author each stage had two or more characteristics of informal learning music practices already mentioned in this text.

In the music workshop, the first activity proposed an immersion in informal practice encouraging students to exercise as close as possible to the characteristics of informal learning (Green, 2008, p.25). In the second activity, it was requested to students to choose a known song that contained one or more “riffs”, which, according to the author, may help the music learning. We can understand the term “riff” as “a striking motif that usually appears in the introduction and repeats itself throughout the song, giving it identity” (França, 2012, p.74). The third activity was simply a repetition of the first, as suggested by Green (2008), in order to give students a chance to develop the skills acquired in the previous activities. The fourth stage, called informal composition,
students were invited to compose a song or a piece of music based on what they had learned in the previous stages (Green, 2008, p.26).

The process was the same in all stages, the students chose the songs they would like to play, and then were separated into groups. Everyone was free to choose in which group they would participate in. Then they were requested activities such as trying to learn how to play their song by ear; adapt this music to the instrumental formation of the group; rehearse and play the final version for colleagues. Each stage lasted four meetings on average and the main goal was to apply informal practices in the school context, according to Green (2008), as closely as possible to how they happen in a real musical situation.

Green (2008) proposes in the fifth stage, to offer the students a closer contact with more experienced musicians, through workshops or some specific activity. The goal is to learn about the workings of a group of popular musicians, how they compose, how they rehearse and how they relate to music in their daily lives, as well as hearing about the perspectives on music making (Green, 2008, p. 27). This stage was partially performed, as two fellows performed regularly in various shows and presentations and they always talked with students about how to prepare to play in public. Stages 6 and 7 (Green, 2008) were not offered in the music workshop due the lack of time to perform them.

Conclusion
The music workshop was successful as an appropriate environment for the application of non-formal and informal learning practices, and the PIBID Project afforded an approximation between the university and the reality of the public schools, proving to be effective in providing a space for undergraduate students for the practical exercise of teaching. In addition, the peer learning exercise was identified during all stages of the workshop, both among fellows and among students. This process was extremely important because it provided learning through observation and information exchange among colleagues.

The state school offered an adequate physical structure, with several spaces available for the development of the activities, which facilitated its elaboration and motivated the students to participate in the musical practice and to be interested in musical subjects. However, there was a need to supply public schools with better sound structure and instruments, so that students and teachers can choose, enabling the development of practices and research in the musical area within the school itself.

We can emphasize that despite the large amount of information available on the Internet, the presence and contact with a more experienced person such as the teacher is important for observations and suggestions of the best procedures for the student to play what he wants, in the best possible way.

It was found that activities based on non-formal learning, along with the application of informal practices, acted as a stimulus to practice and musical teaching, as they sought: 1) To use a popular repertoire known and recognized by students, bringing the fellows closer of the musical universe of these learners; 2) To use the teaching of instruments as musical improvement of students and as a tool for other workshop activities; 3) To use, whenever possible, music from the Internet, such as videos, games, movies, etc., recognizing students’ familiarity with these technological resources; 4) To propose
activities that provide interaction between students, encouraging dialogue and group work.

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The access to Cifraclub.com.br as a tool for music learning

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Abstract
This paper is a section from a PhD research and reports the use of the Cifraclub website in the musical learning of the participants of the music workshop of the Brazilian Federal project PIBID of The Minas Gerais State University (Brazil), in a public high school in Belo Horizonte city. The research discussed the non-formal music learning processes and the informal music learning practices in the music workshop. The applicability and adaptation of these approaches was investigated in a Brazilian school context, besides the possibility of them be used as instruments to stimulate processes of practices, teaching and musical learning. Using the qualitative research methodology and data collection from observations, questionnaires, interviews, and videos recorded during the activities, it was possible to raise the opinions and conceptions of the workshop participants, five project fellows and twenty school students, about the activities developed during the 2014 school year. We note that the Internet has expanded the possibilities for sharing and exchanging music information and the website mentioned was an important reference for workshop participants during music learning.

Keywords: Cifraclub.com.br, Informal learning, Non-formal learning, Public School, Music Workshop

Introduction
This paper is a section from a PhD research (Rodrigues, 2018) in which non-formal learning processes and informal music learning practices were discussed in the music workshop of the Brazilian Federal project PIBID (Institutional Scholarship Program to Teaching Initiation) of UEMG (The Minas Gerais State University – Brazil) in a public high school in Belo Horizonte city, in 2014. The applicability and adaptation of these approaches in a Brazilian school context was investigated, besides the possibility of them be used as instruments to stimulate processes of practices, teaching and musical learning.

The foremost objective was to investigate the subjects’ interactions, motivations, interpersonal relationships and learning processes, which involved both non-formal teaching and informal learning through informal music learning practices. To what extent can these two approaches work concurrently to provide a stimulus for music practice and learning in a public high school context?

Mak (2007) highlights some basic characteristics that may delimit, albeit generically, the differences between these approaches. Formal education is related to educational institutions, systematization and the presence of a curriculum and can be exemplified from elementary school, high school and even undergraduate and postgraduate courses. Non-formal learning presents a certain kind of systematization encompassing highly contextualized and participatory educational activities. It relates to private music schools, community groups and other non-governmental organizations (NGOs). Informal learning covers the part that was not considered in the two previous
categories, for example: learning from interaction with friends, family and colleagues (Rogers apud Mak, 2007, p.12). Green (2008) characterizes this learning from five fundamental principles, namely:

- It usually starts with music which the learners choose for themselves;
- The main method of skill-acquisition involves copying recordings by ear from an audio reference;
- Learning happens alone as well as alongside friends, through self-directed learning, peer-directed learning and group learning;
- Skills and knowledge tend to be assimilated in a haphazard, idiosyncratic and holistic way – starting with ‘whole’, ‘real-world’ pieces of music;
- Usually involves a deep integration of listening, performance, improvisation and composition throughout the learning process (Green, 2008, p.10).

This article reports the context of the research mentioned and, more specifically, the use of the Cifraclub website in searching for information on how to play favourite songs in the musical practices performed in the instrument class, as well as in the group practice, in the referred workshop. For a better understanding of the text, we should clarify that the term “Cifra” in Brazil means letters and numbers that represent a chord that usually appears above the lyrics of popular songs indicating the chord to be played, commonly used by popular musicians.

The research context
The doctoral research sought to observe and understand the processes used to adapt non-formal learning (D’Amore, Gower, Burton, & Price, 2012; Price, 2012) and informal music learning practices in school (D’Amore, 2012; Green, 2001, 2008) and for that, an approach was needed with students from a chosen public school. This procedure led the investigation process to a qualitative or naturalistic study (Merriam, 2014, p.14). Some techniques were used for data collection, such as participant observation (Mason, 2002), questionnaires (Laville & Dionne, 1999), field notes and document analysis, interviews (Merriam, 2014; Stake, 2011) and life story reports (Silva, 1995). Part of the activities was recorded in audio and video for further data analysis (Gaskell, 2003; Jovchelovitch & Bauer, 2003).

One of the main objectives of the project according to CAPES¹ is “to promote the insertion of students in the public schools context since the beginning of their academic education so that they develop didactic-pedagogical activities under the guidance of a professor and a teacher from a public school” (CAPES, 2019).

The project team had the following composition: a coordinating teacher from the School of Music (ESMU - UEMG), a supervisor of a public school, a collaborating teacher (this researcher) and five scholarship holders, students of Licentiate Music Degree with Qualification in an Instrument or Singing (LIM - ESMU), who had the following profile: two were more experienced with the classical repertoire and three of them with the popular music repertoire; two played only guitar; another one played guitar and electric guitar, one played recorder and transverse flute and piano, another one sang, played guitar, percussion and a small acoustic guitar (cavaquinho). All the fellows have already worked as music teachers, mainly instrument teachers, in individual classes or in

¹ CAPES - Coordination of Higher Education Personnel Improvement, a foundation of the Ministry of Education of the Brazilian Federal Government.
private music schools and some of them had already been playing at concerts and musical performances. This experience was fundamental for the structuring of the workshop, because part of the activities, such as the instrument and group practice classes, were planned based on the skills and knowledge of these people.

The group of fellows organized and directed the execution of the activities in the workshop format, which was chosen because it is flexible and allows changes in previously planned activities, if necessary (Fernandes, 2000). Due to the extension of the time available, three hours on Fridays afternoon, it was necessary to divide it into three stages, with the average duration between 45min and 60min each, distributed as follows: First part - group dynamics with activities that could encourage interaction among participants (Barba, 2015; Ciavatta, 2016). In the second part, the instruments classes are in the following groups: guitar, percussion, recorder and keyboard. In the case of the guitar, due to the larger number of students, there was a class of beginners and another one whose students have already played. The repertoire was basically composed of Brazilian popular songs and the scholarship holders brought some suggestions of songs from a repertoire known by the students. Both activities can be associated with non-formal learning (Green, 2001; Price, 2012). The third part, the group practice was the moment when informal learning music practices were performed according to the seven stages proposed by Green (2008). Students chose the songs they would like to play, gathered in free-choice groups, they took those songs by ear or sought information about them from the Internet then, they rehearsed and played for their classmates. After their performances, a new stage began and the whole process was repeated with a different song. In this part, the goal was to apply in the school context, the informal practices of musical learning as closely as possible to how they happen in a real musical situation.

The State Public School\textsuperscript{2} chosen for the research is located in the northern region of Belo Horizonte city, known for its high levels of violence and low levels of economic activity. The school provided a large physical space for the activities and no aptitude test was required as a prerequisite. The 482 students in the morning shift were invited to attend the workshop, just 89 showed interest, and at the beginning of the activities 28 students attended the workshop. The main reasons given by the students for dropout were: change of school; personal reasons; need to work and attend another course during workshop hours. During the course of the activities, the number of participants dropped from 28 to 20 students on average, and this frequency varied throughout the year 2014. The average age of the workshop's most frequent students was around sixteen.

A questionnaire was distributed to the twenty most frequent students, we collected data regarding the musical profile of these participants. Some students have already demonstrated some musical knowledge, singing and or playing. Regarding to instrumental practice, in addition to students who reported playing an instrument, there was a small number who reported having practical experience on more than one instrument. The instruments they claimed to be able to play were: drums, bass guitar, guitar, keyboard, piano, flute and percussion. Concerning pre-workshop musical learning, seventeen students mentioned that they never had regular music lessons, two of them had about two months of class, and one student said that he took regular flute lessons on a City music project. Most of the students learned either watching, listening, talking, or

\footnote{2 For ethical reasons the name of the State School will not be mentioned and the original names of all survey participants were changed to fictitious names.}
playing with their families, friends and colleagues. They also listened to music, sought for music or any other information on the Internet that could helped them to play their desired songs.

Regarding your musical preferences, a wide variety of styles have been mentioned. They cited blues, rock, jazz, hip hop, classical, popular Brazilian music, Brazilian country music, Brazilian rock, funk (Brazil) among others. Students reported that they obtained their music primarily either downloading it from the Internet or sharing it with colleagues via Bluetooth and most of them listened to their favourite music on their mobile phones. Music practice was not regular for them and only three people stated that they participated in a musical activity weekly.

**Cifraclub.com.br**

Among the materials used, Internet access was highlighted by the students and fellows, as one of the most important sources of information to search for music-related subjects. Some students mentioned in their statements the access to the Cifraclub website (www.cifraclub.com.br) at the workshop or at various times of their pre-project learning to the PIBID, seeking information on how to play a desired song. This site provides various information for those interested, including video lessons, which show how to play a particular song and its parts separately.

Cifraclub was founded in 1996 and “it was the first Brazilian site to make music with chord symbols (Cifras) available on the Internet [...]. In 2008, Cifraclub started a video lesson creation project, whose main objective was to provide users with another learning resource” (Sandim, 2011, p.5). To get an idea of the scope of this site, the number of active users subscribed reaches 9 million. There are 39 million visits and 298 million page views monthly. In addition to the website, there is an app available for using on mobile phones that in May 2018 had 7.4 million downloads, a YouTube channel and it is also present in Facebook, Instagram and Twitter³.

Sandim (2011) clarifies that the goal of the site owners “was to produce videos with a practical and accessible didactic, in which the main goal would be to teach the user how to play the music he was looking for and that meant something to him” (Sandim, 2011, p.9). The author points out that another important factor to be considered is the musical background of each one involved in the site design. None of them had a formal music learning, they either learned playing or exchanging information with their families and colleagues, “taking music by ear” which directly influenced the didactics and the way the information was elaborated. “When asked about how they learned to play, they all gave the same answer: they learned by reading popular music with lyrics and chord symbols and through imitation” (Sandim, 2011, p.12).

The main features of this platform are its interactivity and the possibility of communication among users. When accessing the site, we can observe the ease of searching for a song or a group of preference, for instance. We can conclude that the site has a large number of entries, due to the quality of the videos shown, the amount of detailed information on how to play a song, the possibility of interaction among users and the ease of navigation on the site.

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Waldron (2012) examined informal music learning in an online practice community - the Banjo Hangout (www.banjohangout.com). The author's goal was to research the Hangout, which can be understood as a place where people have the same interests and, in this case, a website on the Internet. This Hangout was the environment of an online community, based on the existing offline interests (off the Internet) of its founding members (in this particular case, the banjo instrument).

Waldron (2012) highlights the wide range of learning material resources, such as tablature music files and videos, along with the possibility of group member interactions. The interesting, the offline resources such as: acquiring knowledge through books and methods; the exchange of information among peers and the own act of playing and learning an instrument are added to the tools available on the web.

The description above is close to the Cifraclub framework and its features. The main difference lies in the fact that Banjo Hangout is intended for an audience who likes and seeks information about a particular instrument and the music styles in which its use is prominent; while the site Cifraclub is directed to teaching popular Brazilian music of various styles, and on various instruments.

The Cifraclub basically provides two ways for learning music: 1) When selecting a song, its lyrics are displayed along with the chord symbols drawn from a video from Youtube.com that shows the artist(s) or composer(s) singing the song. The visitor will be able to watch the video accompanying the lyrics and the chords indicated for its execution; 2) Video lessons teaching how to play the chosen song. We can exemplify the description of one of the guitar videos as follows: The video focuses on the instrument being played, with the camera detaching both hands of the performer. In addition, the tablature is observed beneath the main image, which synchronously changes from white (notes to be played) to orange (notes that have already been played) as the musician performs the selected passage. In the video, “the instructor's hands movements are shown step by step, which further facilitates understanding of the passage being taught” (Sandim, 2011, p.34). However, the author warns that the tablature does not provide all the musical elements necessary to play a song, exemplifying that the duration of the notes in a solo or the rhythmic learning of a certain part happens from the observation and listening of how the instructor is playing music in the video. In the right part of the screen, videos of the song parts like intro, part “A”, solo, etc. can be accessed separately. This way, the learner can select the part they want to play and at the bottom of the page you can access the chord charts to be played.

Several students cited the access to the Cifraclub website in the workshop and at various times of their learning prior to the PIBID project, for information on how to play a song.

Roberto (student): I have never had a class, just on the Internet, videos, websites. I’ve been learning at Cifraclub most things, it motivates and helps me. (Interview on 11/21/2014).

Carlos (student): I started taking classes and stopped a few times, I had a guitar at home and I started picking up music on the Internet, looking at Cifraclub because they show exactly what you have to do (chords and rhythms), they play the music and teach. (Interview on 11/28/2014).
Robson (student): Cifraclub is very good, the chords I find there, the tuning too, and they give lots of tips, classes, video lessons. (Interview on 11/14/2014).

We can associate the material available in Cifraclub with non-formal learning (Price, 2012; D'amore, 2012) because this material is directed to learning, has a certain level of systematization and is presented by a musician, who shows how to play. Despite the mention of this site, none of the workshop participants cited issues related to video quality, understanding of explanations shown, truth or quality of chords presented or any technical aspect of the site that prevented access to desired information.

Conclusion

The workshop served as an environment for the application of various possibilities of teaching/learning music. The state school offered an adequate physical structure, with several spaces available for the development of the activities, which facilitated their elaboration. The PIBID Project brought the university closer to the reality of the public school and proved effective in providing an ambient for undergraduate students for the practical exercise of teaching.

In this text we describe the context in which the research was developed and highlight how participants sought information on the Internet about how to play their favourite songs in the musical practices performed in the workshop, especially in the instrument class and group practice. The Cifraclub site was cited as an important reference offering easy access, a great amount of information related to music in general, and for learning in a more specific way, and these possibly are the main reasons for its great popularity. According to the reports and observations, the participants were able to extract clarification from this site and were able to assimilate information on how to play a song. We must make it clear that this level of assimilation of the information provided is directly proportional to the learner's practical musical experience, if he can understand what is being presented, he can learn the desired information.

Today, the acquisition, listening and sharing of audio, video and all music information has been hugely popular from increasingly accessible and powerful devices. Possibilities for access to materials that can help music learning were expanded and the Cifraclub website was an example of this movement. It is important to note that on this site you can view and review parts or all of the video as many times as necessary, making the content easier to understand. In addition, through links to social networks or their own channels, there is the possibility of interacting with physically distant people who could never possibly meet each other. Previously, music learning was restricted to face to face situations such as school music lessons, private teachers, and also informal situations with colleagues, neighbours, close people, etc. But now, in addition to these contacts, it is possible to talk and interact with people from anywhere in the world, just by having a proper equipment. The Internet has expanded the possibilities of obtaining, sharing, exchanging information and learning music, with the number of accesses to sites like Cifraclub, revolving in the millions of visits, a confirmation of this phenomenon, deserving more focus and further study according to this new reality.
References


Assistive Technology Test for autonomy in music research of students with special educational needs.
Jessika Castro Rodrigues & Áureo Deo DeFreitas Júnior

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Abstract
Contemporary research points to the need to promote innovative and relevant technological support to improve conditions of autonomy in students with intellectual difficulties. In view of the current scenario, the following question arises: How can assistive technology facilitate the research process of music students with intellectual difficulties? Therefore, the aim of this research is to test and evaluate the strategic visualization movement research tool (MOVE) to assist music students with special educational needs in the development of a research project. In order to achieve the proposed aim, we adopted the Experimental Research which involved the testing and evaluating of the prototype MOVE. The pilot project was carried out with four students on a specialized music course studying at a public high school specialized in music. Three of the participating students had special educational needs (two diagnosed with Autism Spectrum Disorder (ASD) and one diagnosed with dyslexia and attention deficit hyperactivity disorder (ADHD)) the fourth student had no special educational needs. The process was the testing of the MOVE tool by these students to facilitate in the writing of the research project. The tests took place during six meetings and were evaluated using the following criteria (a) first by the participating students who answered a questionnaire using the 10-point Likert scale, including three written justifications and suggestions for evaluating the functionality of MOVE; (b) second was the evaluation of the research projects by independent judges in pairs who followed the scale for the evaluation of academic projects, giving a score from 0 to 10. The collected data was analyzed quantitatively and compared with documents from previous research in this area and served as a support to visualize the results and to raise reflections and contributions. Move is a tool that suggests objective answers, although it carries between its lines subjectivity. The participants with Autism responded directly to the commands and as a result constructed their own research project. They presented precise answers and gave more direct referrals to them, which may have been caused by the characteristic of Autism in regarding lack of imagination. MOVE, by offering a model with step by step instructions, helped the concentration of the participant with dyslexia, who had no difficulty in completing the tasks. Therefore, MOVE can help visualize the writing process by overcoming the memorization barrier and facilitating understanding by following an instruction manual and examples.

Keywords: Music Research, Special educational needs, Assistive Technology

Introduction
Conducting research brings with it a great challenge to elaborate the connections and relations between the investigated realities and what is at the centre of the research. This
research deals with the process of helping students organize and visualize their thoughts in order to complete a research project.

In the area of art, and more specifically the area of music, “it is sought through publication, a way of advertising and participation in the production of knowledge from the different interfaces that the text can generate” (Araújo, 2009, p.160). From this perspective, the construction of texts has become an available resource for the artist as a researcher and / or teacher to share their investigations, discussions and new propositions in art-music and its interfaces. Music research today is a fact that permeates this art sector in its various areas of activity as a manifestation of the need to record the discoveries and a future projection for music and art.

Larocca, Rosso and Souza (2005) point out the rigor, relevance, identity, implications and perspectives as problematic in educational research that are necessary so that the researcher does not lose focus of the centrality of the research but can establish categories of relationships and analysis. Rodrigues (2015, p. 2) highlights that at present “educational models that break with conventional teaching methods have become more plausible from the transformations caused by Digital Information, Communication and Expression Technologies.” In this perspective, it is becoming increasingly indispensable to promote innovative and relevant technological support to improve conditions of autonomy and independence of students and enable the increase of research quality.

To add to the depth of discussion is the necessity to involve those with special educational needs which is the focus of this research. Article 59, paragraph I, of the Brazilian educational law (LDB 9394/96) provides the guarantee of functional educational resources to meet the needs of learners with disabilities. Here, Assistive Technology, according to Bersch (2017, p.2), “should be understood as an aid that will promote the expansion of a deficient functional ability or enable the accomplishment of the desired function that is impeded by circumstances of deficiency.”

Given the current scenario, the following question arises: How can assistive technology facilitate the research process of music students with intellectual difficulties?

Establishing equal rights means enabling these students to achieve the degree required by their educational level, without given privileges for work incomplete and without inaccurate evaluations. From this perspective, items V, VI and VII of article 28 of the Brazilian inclusion law 13.146/2015 determines the adoption of individualized and collective measures to favor access, permanence, participation and learning in educational institutions, and research for the development of new methods, techniques and materials and case study planning for pedagogical usability of assistive technology resources.

Researchers have been investigating issues of access, retention and completion of the undergraduate degree and have highlighted the elements that are still limiting the inclusion in higher education showing the barriers encountered by students with special educational needs.

For students with dyslexia, researchers highlight comprehension caused by the difficulty in reading, interpretation and writing; difficulty in memorizing or lack of vocabulary and poor time control for tasks; and difficulty in structuring a speech. As a strategy, they suggest a teacher who facilitates and guides by providing stimulating and encouraging strategies with differentiated practices. A resource indicated for group work
is software WordRead (Mangas & Sánchez, 2010; Alves, Filipe, Pereira, Seco & Pereira, 2010; Tops, Callens, Cauwenberghs, Adriaens & Brysbaert, 2013).

For students with Asperger's Syndrome and Autism, the main limiting element was social interaction. Which interferes with language, communication, writing and public speaking. Researches defend the use of technological resources as tools to help in the student learning process, assisting the student in developing social interaction skills and completing tasks (Costa & Marin, 2017; Cintra, Jesuino & Proença, 2011).

In this sense, the MOVE tool may offer music students with intellectual difficulties, didactic resource, both for the elaboration of the research itself and for the explanation of the construction of the research process to other people. It can be an intellectual accessibility tool that enables them to develop their research with more autonomy.

Therefore, the aim of the researchers of this paper was to test and evaluate the Move tool to assist music students with special educational needs in the development of a research project.

**Methodology**

We performed data collection through Experimental Research. The proposal was submitted and approved by the Ethics and Human Research Committee with Certificate of Presentation for Ethical Appreciation No. 86093818.1.0000.5174. To formalize the ethical procedures and clarify the research procedures, a consent form was drafted in a language accessible to the target audience and describes the entire research procedure including the benefits and risks of the project.

In order to consider variables that may interfere with the aim of the research, a profile survey was written for each research participant. The document covers a social and educational overview of the participant. The document was produced by a psychologist asking questions verbally to the participant and recording the information provided by the participant with the freedom of interaction where appropriate.

The pilot project took place during the first semester of 2019 and involved four participants from different social, ethnic and cultural backgrounds. The participants were studying a music course specializing in Cello at a public school specializing in music. Of these, 3 are male (1 neurotypical and 2 with ASD) and one female with comorbidity (diagnosis of Dyslexia and ADHD, with a prevalence for attention difficulties).

The process was the testing of the MOVE tool by these students to facilitate in the writing of the research project. Six meetings were offered with each one lasting 1 hour and 30 minutes. Each meeting followed the same routine with a video presentation of the theme, lecture and text construction. The theme of the meetings is a step by step guide to constructing a research project. These are: (1) from the trajectory to the object; (2) from object to words; (3) from words to justification; (4) From justification to problems, issues, and objectives; (5) from objectives to methodological approach; (6) From the methodological approach to project completion.

The test phase also had two independent observers who described in a logbook what happened during the classes, pointing out challenges the participants faced and possibilities for improvement of the Move tool.

Evaluation took place in two ways. The first by the participating students who completed a questionnaire using the 10-point Likert scale, in which the respondents at the end of each meeting express their opinion, marking with a cross (X) on a scale from 1 to
10, showing the level of agreement or disagreement on the usefulness of the tool (DeFreitas, 2005). Besides the scale, the participants recorded three comments, justifying their score regarding their point of view concerning the use of the tool for the established objective in the meeting.

The second way evaluation took place was through the research projects produced. These were reviewed by a pair of independent researchers with a minimum qualification of masters in art. They analyzed the research projects and filled in the evaluation of academic projects form built by Dias, Patrus and Magalhães (2011) validated by Fernandes Malaquias and Oliveira Malaquias (2013), giving a score from 0 to 10 for each item tested.

The data after being obtained by the Experimental Research, was charted and categorized in order to be analyzed systematically. The data collected from the questionnaires were analyzed quantitatively. We performed parametric statistical tests (a) ANOVA double factor with repetition; and, (b) T-test for paired samples.

Descriptive statistics was performed, according to information gathered from the profile of the participant, answers provided by the participants' questionnaires, logbook of independent observers and results from the independent evaluators. Analyzes were carried out to assess the functionality of the MOVE tool according to the special educational needs of students and to propose improvements.

**Results, Discussions and Final Remarks**

Participant 1 is neurotypical, however according to his profile has difficulty understanding quick commands leading to misinterpretation. Therefore, in order to obtain positive results, it was important to require a focus on command organization and attention to interpretation.

In the satisfaction survey conducted through the questionnaire, participant 1, marked 10 on all questions, totally agreeing that the Move tool facilitates the construction of a research project, revealing in the justifications of the questionnaire that:

- at the beginning of the intervention I did not know what my object of study would be but Move enlightened me to the path in which I could create; it facilitated my understanding of my object of study that I needed for research; the tool was with me all the time helping me from getting lost; facilitated the finding of my specific goals; helped me a lot; it organized and facilitated my understanding of carrying out research; facilitated the organization of ideas and the path to finalization (Participant 1).

During the process independent observers pointed out that participant 1 could easily find the necessary articles, however, noted that he had difficulty reading and understanding one of the articles found.

The evaluators of the project produced by participant 1, graded it between 8 to 10, obtaining an overall average of 9.44. The item with the lowest grade, 8, was specific aim. This area was highlighted by the independent observers who accompanied the intervention in which they reported responses to questions by the participant 1 which showed little focus, who therefore needed help to realign his project objectives, undergoing three changes in order to improve the project.
Participant 2 is diagnosed with ASD, it was pointed out, in his profile, that he has little initiative in social interaction and experiences difficulty in writing. During the process, the independent observers highlighted that the participant initially needed verbal help to select the appropriate words from the research and an example to learn how they would be written in the Move tool. He could easily find the articles, however; he had difficulty reading and understanding one of the articles found. He received help in the reading of the article in order to find the results from the selected article.

In the satisfaction survey, participant 2 marked lower scores relating to Move facilitating the formulation of the problem, questions and objectives and methodological approach and marked more than one alternative in the item discovering object. However, participant 2, understood how to complete the student questionnaire only after the second meeting.

Participant 2 received an average of 9.38 for his project. There was greater disagreement among the evaluators regarding the research problem, general aim and project structure, where evaluator 1 gave a score of 8 for these items, while evaluator 2 gave 10. Therefore, there is a need for the opinion of a third evaluator for this project.

Participant 3 is diagnosed with ASD, in his profile it was pointed out that he can read and write alone, but when he has difficulties, he needs advice. He also has difficulty in writing essays. During the process, the independent observers highlighted that the participant needed the instructions repeated verbally. Student 3 also had difficulties conducting research on the internet.

In the satisfaction survey, participant 3 is unsure about discovering object, problem formulation, issues and objectives and project completion; he disagrees that the MOVE tool helps structure the justification of the research however he agrees that the MOVE tool helps with the methodological approach of the research. He did not state his opinion about discovering words. Participant 3 did not justify his answers to the questionnaire.

Similarly, to participant 2, participant 3 showed signs of not understanding how to complete the Likert scale in the questionnaire. Revealing the necessity, therefore, to review how the scale is arranged so that this procedure is self-applicable and understandable to people with ASD.

Regarding the evaluation of the project there was no significant disagreement between the evaluators. The project produced by participant 3 received an average of 9.50. The lowest grade was in the theoretical reference about previous studies.

Participants diagnosed with ASD presented accurate answers and more direct referrals, which may have been caused by the characteristic of the restriction syndrome regarding imagination, data corroborating with Cintra, Jesuino and Proença (2011).

Move is a tool that suggests objective answers, although it carries between its lines subjectivity. Participants 2 and 3 responding directly to the commands and produced their own research project.

Participant 4 is diagnosed with Dyslexia and ADHD. In her profile, difficulty with attention and concentration were highlighted. The student reads slowly, her writing in unstructured and she needs a model in order to follow instructions.

During the process, the participant had difficulties in writing and ordering her ideas and exchanging letters. This same feature was pointed out in the study by Mangas and Sánchez (2010).
The MOVE tool, by offering a model with step-by-step instructions, helped participant 4 in her concentration, who found no difficulty in fulfilling the tasks. From the questionnaire answers, the MOVE tool helped her in discovering the objective and in the descriptive words of the research, revealing in the justification of her answers that it is an easy and efficient process that promotes the drawing together of ideas.

Regarding the use of the MOVE tool for justification and objectives, the participant reveals that in these two steps the objective questions facilitated the process and highlights that following the example offered facilitated the writing and visualizing of questions in the notebook and was also efficient in choosing the objectives. For the writing of the methodology and bibliographic reference, the participant marked grade eight justifying this because of her difficulty with handwriting however when transcribed on a computer this difficulty was overcome. The virtual program corrected the inversion of the letters within the same word and, after reading the text produced aloud, corrected the sentences to give fluency. The use of computers was also detected in the study by Alves, Filipe, Pereira, Seco and Pereira (2010), as a study and writing strategy adopted by higher education students with dyslexia to reduce writing errors.

The MOVE tool, therefore, for people with dyslexia can help in visualizing the writing process, overcoming the memorization barrier and facilitating understanding by following an instruction manual with examples. It reveals the need to use the computer to aid in writing.

Regarding the evaluation of the project produced by participant 4, the grades ranged from 9 to 10, whose variation focuses on the categories: introduction, justification and relevance of the theme; theoretical foundation; methodology; and form, references, general project structure and citations according to Brazilian technical standards. The project received an average grade of 9.59. Evaluators pointed out that the project requires a grammatical and punctuation review. Proximity of this result is observed with the study by Tops, Callens, Cauwenberghe, Adriaens and Brysbaert (2013), when texts produced by students with dyslexia compared to students without dyslexia, presented significantly more spelling and punctuation errors.

During the process, the independent observers highlighted that student 4 did not present difficulties in responding to the commands, complying quickly and objectively.

It is noted in the responses of the participants that over 80% agree or totally agree that the MOVE tool facilitates music research for students with special educational needs. This can be seen in all the themes and in the answers presented, with 1 answer disagreeing, representing 4.5%, 3 unsure answers, representing 13.6%, 6 agreeing answers, representing 27.3% and 12 fully agreeing answers, representing 54.6%.

It can also be observed that for each answer to the theme question the median result is above 4 points on the Likert scale, showing most participants fully agree or agree with the use of the MOVE tool. Another factor observed is that the mode, the most frequently noted element, in the research was 5, confirming that participants fully agree with the application of the MOVE tool.

For better data analysis, it is suggested: to organize the Likert scale in another format in the student questionnaire, so that this procedure is self-applicable and, students with a special educational need do not get confused at the time of filling in the form. Another suggestion is to increase the number of independent evaluators to analyze the research projects to get greater reliability in the data.
The emerging approach in this research relates aspects that direct the focus to music students with special educational need (intellectual) to involve them in research. The proposal presented here is of interest for compliance in its entirety to such that the author has already taken steps regarding the patent registration of this research and request for funding. Therefore, the author does not consent to anyone who wishes to continue this research without authorization.

References


Music education in clinical training

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Abstract
In 2017, the course “Music & Psychology” was offered at the Institute of Psychology at the University of Brasília (UnB). We have invited the musicologist Eero Tarasti (University of Helsinki) to participate in an exclusive conference for the students who enrolled at the course. Although there was no formal evaluation of the course, students offered many feedbacks. We decided to offer the course for a second time in early 2020, but with a qualitative research focusing on the evaluation of the discipline and the impact of Music Education on clinical training and practice. The course will also be offered at a private clinic in Brasilia for professionals only. The main subject of the discipline is the intersection between opera and psychoanalysis (Röhe & Martins, 2016; Röhe et al., 2020). Yet, the course also offers insights into why we chose certain styles of music in accordance to emotional states (Thoma et al., 2006), on the history of music in the Occident (Burkholder et al., 1960/2019), musical and clinical semiotics (Röhe, 2018; Tarasti, 2015) and music making with patients (Philibert, 1997). Although the 2017 students were able to develop short researches on music and clinical theory, we noticed the lack of a more systematic evaluation of the course. Such an evaluation could, in one hand, enhance the clinical literature which pinpoints the relevance of music in clinical training. On the other hand, it could highlight which topics were deficient or did not meet the student’s own musical world. Therefore, a project of qualitative of evaluation was elaborated in order to answer the following questions: 1) what is the relevance of music in the life of students and professionals enrolled in clinical training/practice? 2) why health care professional and students search for music education? 3) how was the experience of receiving musical education in clinical training? 4) what is the relevance of music for clinical practice? 5) how the musical education course should be adapted in order to optimize student’s learning experience?

Keywords: Music Education, Clinical Practice, Qualitative Research.

1. Introduction
The idea of a discipline at the University of Brasilia (UnB) that explored the relevance of music for clinical practice stemmed from a research project originally based on Mozart’s Die Zauberflöte, which was presented in Helsinki, in 2015, in the seminar chaired by Prof. Eero Tarasti, Professor of Musicology since 1984. The work was originally devoted to psychoanalysis, which created a feeling of strangeness at the seminar, which was focused on musicology (Röhe & Martins, 2016). Then, in 2016, a new subject was chosen. Namely, operas based on the Oedipus myth. Following Tarasti’s recommendation, we tried to explore musicological knowledge as much as possible. The networking between the Universities of Brasilia and Helsinki continued between 2016 and 2019 in more than 200 emails and meetings at conferences in England, Lithuania,
Greece and again in Finland, where musicological subjects were explored with a clinical approach.

As of 2017, the discipline “Music & Psychology\(^1\)” was originally established at the Institute of Psychology at UnB. 24 undergraduate students of psychology enrolled in the course, which comprised expository lectures, group-activities and a keynote speech by Prof. Tarasti, who spoke of musical semiotics, existential semiotics and also about Kierkegaard’s view on Mozart’s Don Giovanni. The final exam was composed of an original paper and oral sessions with group debate. Although the course was mainly focused on psychoanalysis and semiotics, students proposed discussions on different subjects, such as music and child development, music and cinema, music therapy, and even a quantitative research about musical choice in different situations (at work, while driving a car, after the end of a love-affair, etc.) was presented. Brazilian and international musicians were chosen as subjects by the students, such as Björk, Caetano Veloso, Richard Wagner, Cazuza, John Lennon, among others.

Students offered informal feedback directly to the course’s responsible (Daniel Röhe). Some of them argued against the main focus of the lectures, which was erudite European music in detriment of the student’s musical background – a criticism already observed in the literature (Arndt & Maheirie, 2017; Hess, 2018; Moore, 2012; Silva et al., 2014). Students also criticized the introductory lecture on musical notation, which comprised examples from around the world (Babylonian, Japanese, medieval and modern occidental notation). A student thought that this lecture was of a very technical nature, with no clinical relevance. This feedback is in accordance with the literature on Music Education, which reveals that musical interpretation based on musical notation makes it less interesting (Moore, 2012), and that non-specialists in music tend to use extra-musical resources in musical interpretation (Stakelum, 2011). Still, the students that enrolled at the course actively participated in the proposed activities, receiving credits that will help them to obtain their degree in Psychology.

A brief account of the course “Music & Psychology” was presented at the Opening Seminar of the Academy of Cultural Heritages, chaired again by Prof. Eero Tarasti, but this time in Syros Island (Greece), where we performed at Greece’s oldest opera theatre still in operation, the Apollo Theatre (Tarasti, 2017). Ideas of a subsequent course about music and clinical practice did not take place again until 2019, when a project of qualitative research was submitted and approved by the Ethics Committee of Institute of Human Sciences at UnB under the code “CAAE: 16525619.7.0000.5540.” Such research aims to evaluate the course about music and clinical practice at UnB.

1. 2. Qualitative Research: A short account on the Literature Review

The Qualitative Research project on the course “Music & Psychology” initially began with a Literature Review on specialized journals appointed by Bresler (2008), namely the Music Education Research and the Journal of Research in Music Education. We selected papers that included the terms “opera,” “higher education,” “anxiety” and “clinical,” for they met our initial requirements of analysis. We also conducted a research on two databases, namely the Web of Science and the Brasil Virtual Health Library in Psychology. We applied the primary descriptors “qualitative research” and “music education” on these two databases. Then, we applied three secondary descriptors:

\(^{1}\)Not to be confused with Music Psychology.
“health,” “clinical” and “psychology”. Our main finding might be labeled as trivial. It was related to Bresler’s (2008) proposition which tells that, from 1980 onwards, Qualitative Research in Music Education stemmed from Psychology. We also noticed that Psychology and Qualitative Research are still present in Music Education Research. This main finding encouraged the project to continue.

We also found out that the field of arts-in-health are expanding fastly (Perkins et al., 2018) due to its psychological, biological and social effects on health. Furthermore, we also noticed that musical interventions at health care institutions improve the quality of life, promote services of excellence in health care and foster the development of communicational abilities (Windle et al., 2019). Yet, Silverman and Bibb (2018) noticed the resistance from more traditional clinicians, which are against innovations in health practice. Still, this resistance is, fortunately, not the same as the one Freud (1914) had with music, but with innovation in general.

Moreover, the Literature Review findings revealed that interventions based on music and art prepare students for creative and cultural production (Burnard & Haddon, 2015; Perkins, 2013), while also fostering the development of a more empathic attitude from clinicians towards patients (Windle et al., 2019). The latter finding is in accordance with Janaudis et al. (2013), who understood the relevance of music immersion in clinical training because it enhances “caring and compassion in students” (p. 51). Ravelli (2004) also corroborated this view when she noticed that “music can be used as a pedagogical resource in the process of Education in Health” (p. 18, our translation). Moreover, Blasco et al. (2005), highlighted that clinical training should not be based solely on technical issues of clinical practice, but on raising citizens aware of their social environment, and that music fosters that aim. In a similar way, Walker (2001) pinpointed that Music Education should aim at raising children for a mature adulthood.

We also noticed many papers that focused on musician’ health. For instance, research on Musical Performance Anxiety (MPA) takes advantage of knowledge that stems from clinical theory and practice. Yet, this sort of research does not exactly meet our aim main focus, which is rather devoted to the improvement of health care services by means of Music Education.

Our second main finding noticed musical interventions in health care services which were considered relevant, although there is still resistance from some clinicians. Yet, we noticed that most papers focus on interventions in direct contact with patients, instead of being directed to health care students or professionals. One example from the movies that represents this case is Philibert’s (1997) Le Moindre des Dhoses [Every Little Thing], which portrays psychotic patients at the Clinic La Borde, where health care professionals, together with the patients, rehearsed and presented Witold Gombrowicz’s Operetta. Activities of Music Education applied to Clinical Training, although were rarely found in the Literature Review, may be found at the Freud Museum London (2018) and at the San Francisco Center for Psychoanalysis (2019), where clinical professionals discuss operas with the public, and at the Brazilian Society for Family Medicine (Blasco et al., 2005; Janaudis et al., 2013), where an immersion in opera and popular music was made with clinical students.
2. Reflections on Music Education in Clinical Practice

Let us first consider a fact in every health care service. What does a clinician do? The answer is: Listening to a patient’s complaint. Naffah Neto (2004), using Bizet’s Carmen as a case study, explored the relationship between the clinical act of listening and musical aesthetics. Naffah Neto (2004) argued that psychoanalysis, as a theory of culture, usually is a theoretical framework for studies in music. Yet, music should also be considered as a reference for clinical practice, mainly because the psychoanalyst uses the patient’s discourse to make his interpretations – prosody included. Naffah Neto’s (2004) major argument is that learning related to music listening educates one to listen to sonic impulses displayed by the patient’s voices. Further, Donald Hodges (2000) once said that music helps humanity to “cope with the many uncertainties of life” (para. 39). Therefore, Music Education should be regarded as a valuable resource for health care professionals, one that helps them deal with the many kinds of reports that are heard on clinical practice, reports that are bounded by the general idea that some life events are unpredictable.

Based on Walker’s (2001) idea that the “analysis of meaning and semantic (…) That, I would argue, is what being educated means” (p. 17), we would like to see the literature on music and clinical practice (e.g. Castarède, 2002; Hutcheon & Hutcheon, 1996; Röhe et al., 2020; Starobinski, 2005) as useful resources for clinical training. The reason underlying this statement arises from the fact that musical examples explored by the aforementioned authors always bring fruitful insight for clinical theory and practice. Even though one could argue that each example was chosen because it improves clinical reflections, it should be observed that there are many other papers and works which tackle the issue of music and clinical training - starting with Max Graf (1900), who published the first work on music and psychoanalysis while working directly with Sigmund Freud – and that his son (Herbert Graf), who become famous in psychoanalysis because of the Little Hans study (Freud, 1909), realized his first work as an opera producer at La Scala in the première of Maria Callas at the same opera house in the 1950’s (Vives, 2012).

3. Qualitative research: questionnaires

All courses at UnB are subjected to quantitative evaluation, in which students are invited to participate. The evaluation is divided in four topics: course evaluation; teacher evaluation; self-evaluation and; institutional support for the course. All topics have different questions which are evaluated by means of a Likert scale (1-5). The first topic aims, for instance, at studying the relevance of the course for professional life, which generally reaches higher scores than the clarity of the objectives and exams, the coherence between Literature Review and objectives, the discipline menu and course contents (UnB, 2015). Nonetheless, as of today, there is no published qualitative evaluation of courses at UnB. Such an evaluation could explain why the relevance for professional life is better evaluated by students than other topics.

In 2020, the course “Music & Psychology” will take place at UnB and at Clínica Diálogo, where we have met patients for more than 3.500 times in individual clinical sessions. This should be the second time the course will be offered at UnB, but the first at Clínica Diálogo. Due to the lack of qualitative evaluation about courses at UnB, we created three interventions that should take place along the course’s pedagogical journey.
The first intervention aims at uncovering student’s previous experience with music. They are going to be asked whether they have previous musical training, which musical groups they prefer, which live musical experience is the most relevant for them and what motivated them to enroll in the course “Music & Psychology”.

The second intervention aims at providing clinical students a complementary tool for emotional expression. This intervention is based on Stakelum’s (2011) and Campos’ (2012) researches, who asked the participants to draw with crayons their musical interpretation of given musical examples, which should be based on student’s background (Hess, 2018; Moore, 2012). The interpretation based on the drawings shall be shared in group, allowing space for criticism and the exchange of ideas.

The last intervention is more directly related to the evaluation of the course. According to Arasi (2006), even students that previously enrolled in a Music Education project should be allowed to express their opinion. Therefore, students who participated in the 2017 course will also be asked to answer the questionnaire, which is made of five questions: 1) describe your experience with Music Education in Clinical Training; 2) Make comments about the expository lectures and group activities; 3) How do you evaluate the course? Explain; 4) Would you recommend the course to a colleague? Why? and; 5) Do you have any suggestions on how should the course “Music & Psychology” could be improved?

The latter questionnaire will be applied to previous students and the 2020 participants of the course at UnB and Clínica Diálogo. Being the only questionnaire that evaluates the course, it meets the traditional methodology of evaluation taking place at the UnB in all of its courses, while also expanding it.

4. Conclusions
The project of Music Education in Clinical Training comprises undergraduate students, previous participants of the course “Music & Psychology” and health care professionals. The project aims at offering an improvement of quality in health services, including mainly psychologists, but it is also open to physicians, nurses, pharmaceuticals, etc. Since the literature suggests that Musical Education improves the quality of clinical training, we want not only to offer such kind of instruction, but also to learn in which way it could be improved. Still, we believe that Music Education might elicit negative feelings on the participants. This expectation is in accordance with Giuseppe Verdi, who once told that when he was alone with his notes he used to cry, and that his heart was touched (Riding & Dunton-Downer, 2006). Still, in Clinical Practice we meet outbursts of emotions in a daily fashion, which means that every negative emotional reaction from the students shall be listened and treated in a clinical way. Moreover, we believe that criticism might arise from the participants, especially if they are aligned with more traditional perspectives of Clinical Training.

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Building a nation system for online education in music, dance, and performing arts in Finland
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Abstract
This paper concerns the DigiArts (2017–2019) project, which brought together eight Finnish Universities of Applied Sciences (UAS) for a joint project. The purpose of the project was to commit these schools to the use of online digital tools and appropriate pedagogical methods in teaching. This study presents a summative evaluation of the implementation and outcomes of the project.

Online education is gaining popularity quite rapidly, and most educational institutions agree that present day education calls for flexible study paths and varied modes of learning, including opportunities to study independent of time and place. To better meet these needs, the UAS'es set out to build a comprehensive catalogue of online courses from the scratch as a core content of the project.

In this paper, we conduct a survey addressed to the stakeholders of the project and report its results along with our own findings, providing an overview of project implementation and an evaluation of the significance of the project by using a realistic impact assessment approach. We finally propose some suggestions for further studies.

Generally speaking, the teachers participating in building the online courses were delighted with the new ways of working. The project clearly activated the teaching staff to use digital tools in education. In addition, it created collegiate relationships across school boundaries. On the other hand, the coordination of student administration and the utilization of learning management systems in different schools was seen quite challenging. The model of shared expertise and responsibility used in project administration also presented some problems. Finally, the financial management of the joint project was plagued with complications.

The departments of music, dance, and performing arts involved in the project are small, and as such cooperation and networking is particularly important. It was generally acknowledged that this type of cooperation should be continued, but it is still unclear how this will be managed after the project funding has ended.

Keywords: Digitalization, educational technology, online education, pedagogy of higher education, project management

Introduction
In Finland there are eight Universities of Applied Sciences (UAS) that have curriculums for music, dance and performing arts. The number of students is 1,700 in total, including both undergraduates and postgraduates. The Ministry of Education has funded a three-year project called DigiArts — eLearning in Higher Education Music, Dance and Performing Arts (2017–2019) to support cooperation between these institutions. The project is led by Metropolia UAS, the other partners being Centria UAS, JAMK UAS,
Novia UAS, Oulu UAS, Savonia UAS, Tampere UAS, and Turku UAS. The budget of the project is 547,000.00 euros for three years, and the project organization consists of a project manager, eight heads of department from each school (steering group) and an eight-member project group (one per school).

There were four main goals in this project:

1. To create flexible study paths. As the number of students in some schools and in some subjects is relatively small, it is often impossible to organize certain courses. Thus, it is not always possible for students to devise a study plan best suited for them. This project wanted to overcome this problem by using modern technologies and by enabling cross-studies.

2. To develop the accessibility of higher education in music. Different schools have different enrolment, assessment, and study support systems. This project created operational ways to support cross-studies. This was done in collaboration with two concurrent projects.

3. To enable year-round studying. In Finland the autumn and spring semesters are full of studies but there are not too many possibilities to continue studies during the summer. This project created courses for the summer season, too.

4. To improve the digital skills of the higher education personnel. This project supported teachers, administrators and technical staff to develop their understanding of digital tools and their usability in music education. The project organized teacher training and built new technological infrastructure for collaboration.

Other concurrent projects
The main objective of the eAMK project is to coordinate a year-round supply of digital online studies, provided by the Finnish UAS'es. This cooperation has produced CampusOnline.fi (National Portal for Online Studies), a shared online course catalogue for students of all Finnish UAS'es. (eAMK, n.d.) The RiKe project (National Cross-Institutional Study Service), on the other hand, focuses on piloting processes of study administration. The aims of the pilot are fluent study paths for cross-institutional studies, closer cooperation between universities, and renewed modes of operation by exploiting digital knowledge. The RiKe project is intertwined with the eAMK project described above. (RiKe, n.d.)

Aims
This study gathers information about the implementation and outcomes of the DigiArts project, summarizing the results and considering the reasons for the findings. Finally, the study gives some suggestions for further studies.

Theory
Evaluation is usually aimed at evaluating the functionality, efficiency, and effectiveness of the systems of some organizations. The need for this type of evaluation in society has increased as societal funds have been allocated to various self-regulatory organizations, replacing former direct administrative control with performance management. (Anttila 1994, p. 452.)
Evaluation may take place before, during or after the project. Many of the sub-projects in this project were experimental, so it is natural that the evaluation of effectiveness or efficiency takes place after the intervention implemented (Anttila 1994, p. 454). Evaluation focuses on the merits, value and significance of the project (Clarke 1999, p. 3). The basic nature of the evaluation study is thus declarative.

Scriven (1967) divided the evaluation study into two approaches, formative and summative. Formative evaluation provides information for planners and executives on how to promote and refine an ongoing project. Summative evaluation — such as this study — aims to determine for decision-makers the quality and impact of the completed project. (Scriven 1967, pp. 42–43.)

Summarization emerges when assessing the effectiveness of a project. It is a decision evaluation that draws conclusions about the value of whether it should be continued and whether the model presented can or should be generalized and replicated to other stakeholders or in other places. (Patton 2002, p. 214.)

Subjects to assess
Owen (2007, p. 42) presented two approaches as the basis for assessment: clarificative and impact assessment, the latter being summative. Its ultimate purpose is to assess the significance of the project, but it may also include an overview of the project implementation features (Owen 2007, p. 47).

Owen's (2007, 48) questions are:
- Has the project been implemented as planned?
- Have the objectives set for the project been achieved?
- Has the project served its target group?
- What are the unexpected outputs of the project?
- Did the implementation strategy lead to the intended outcomes?
- Is the project more profitable for one group than another?
- Has the project been cost-effective?

Of Owen's impact assessment approaches, a realistic assessment is the most appropriate for this study (Owen 2007, 48). It is based on the principle that it is not possible to produce a universally applicable or generalizable cause and effect statement for any project. Rather, it can be said that the project operates under certain conditions, for a particular group in a given environment.

Methodology
In order to be able to assess the impact of the project, the authors looked for answers to the questions proposed by Owen (2007, p. 48). Since the project is still running at the time of this writing (ending December 31st, 2019), there were a few questions that the authors had to leave at least partially open. These questions will be addressed by the project administration in its final report, which will be available to the public by the time of the publication of this study. Notwithstanding, the authors still managed to gather some preliminary data from the informants regarding these questions. In addition, when assessing whether the project has served its target group (the students and staff at the participating UAS’es), the authors were not able to include the students participating in the online courses developed through the course of the project, because many of the courses are still running at the time of the submission deadline of this paper.
The authors set out to collect data by three methods: firstly, by conducting a survey targeted at the stakeholders in the project, secondly, by observing the project from within (since the authors serve as members of the project group), and thirdly, by looking for readily available material provided by other concurrent and noteworthy projects related to the Digiarts project. After data collection, the authors performed a simple thematic analysis in order to identify the essential themes or topics occurring in the data. This way it was eventually possible to thematically present any implications for music education or further research based on this study. The authors will discuss the survey first, and reserve any subjective observations until the end of this paper.

Survey
The authors set out to prepare three different online questionnaires, one for each target group: the project steering group, the decision makers in the concurrent projects, and the teaching staff of the universities. Our objective was to keep the questionnaires as to-the-point as possible, in order to make responding an appealing task. To keep the questionnaires short, we decided to only inquire about topics that the respondents were familiar with — a natural delimitation since the authors were not looking for causal relationships of statistical significance. In addition, wherever appropriate, the questions were presented on a 5-point Likert scale, both in order to speed up the responding process, and to gain at least some numerical data for the analysis. Finally, the authors wanted to encourage the respondents to answer the questions openly, freely, and honestly by making the questionnaires anonymous.

The questionnaires were sent via email to 51 teachers participating in the first round of online courses, 8 members of the steering group, and 4 decision makers in the concurrent projects. We received 7 (14 %) completed questionnaires from the teachers, 3 (38 %) from the steering group, and 3 (75 %) from the aforementioned decision makers. The number of teachers responding may seem low, but of the 51 teachers the questionnaire was sent to, only 12 were responsible for the online courses released in the spring-to-summer period of 2019.

Results
Here the authors present a summary of the survey — first on a questionnaire by questionnaire basis, and then arranged thematically in the next chapter (Conclusions).

The teachers reported the following changes in their pedagogy as a result of the project:

- a new, digital version of traditional classroom teaching
- the ability to use online learning tools and methods
- a renewed focus on the quality and comprehensiveness of one's own online material
- a renewed understanding of assessment
- the comprehensive utilization of readily available online material

In addition, the teachers reported that the project presented them with the following new work tasks:

- online course planning and implementation (several mentions)
- creating new study materials
• familiarizing oneself with digital tools and methods
• testing new technologies
• participation in the project group
• offering technological support to students and colleagues
• acting as a link between the study program and organization helpdesk

The teachers

<table>
<thead>
<tr>
<th>Question</th>
<th>Mean (1…5)</th>
<th>Median (1…5)</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>How well did you know the objectives of the project?</td>
<td>4,1</td>
<td>4,0</td>
<td>0,9</td>
</tr>
<tr>
<td>How well did the resources allocated to your project work suffice?</td>
<td>4,1</td>
<td>4,0</td>
<td>0,7</td>
</tr>
<tr>
<td>How well were you supported by your superior regarding your project work?</td>
<td>4,1</td>
<td>4,0</td>
<td>1,1</td>
</tr>
<tr>
<td>How easily did you get pedagogical support when needed?</td>
<td>3,9</td>
<td>4,0</td>
<td>0,7</td>
</tr>
<tr>
<td>How easily did you get technological support when needed?</td>
<td>3,6</td>
<td>4,0</td>
<td>1,4</td>
</tr>
</tbody>
</table>

2 The forms of support reported were as follows: resources (e.g. allocated working hours, several mentions), encouraging comments, and sincere interest in the teacher's work. The single form of support called for was a clear division of economic responsibilities between the teacher and his/her superior.

2 The received pedagogical support was reported as being help, feedback and/or material from fellow project team members between UAS’es (several mentions), and available presentations on digital pedagogy and assessment. One issue causing frustration was the heterogeneous understanding of basic concepts regarding (digital pedagogy).

3 The received technological support was reported as being testing of (digital) equipment (such as tools for low latency audio-visual interaction), and help in building courses by utilizing a learning management system (LMS). One respondent had not received any technological support, and another was left yearning for practical examples of LMS utilization.

Table 1. Numerical data from the questionnaire targeted to the teachers (n = 7). Depending on the question, the 5-point Likert-scale was presented as follows: 1 = Not at all/Poorly, 5 = Very well/Excellently.

The teachers' reports of success included mentions of excellent and in demand self-made online courses, getting students in from other UAS’es, being able to cooperate with colleagues across UAS borders, and gaining a wider perspective on learning by getting to understand the possibilities of digital tools and their implementations. The project was reported to having generated new networks between institutions and individuals, and the project groups were often described as being tight-knit collegiate communities. New study materials, new pedagogical tools, and overall an opportunity to parse one's own professional skills in readable and shareable form were reported as novelties encouraged
by the project. One respondent reported having gained good experiences in testing a novel model of shared expertise and responsibility in practice.

The goals that were not met during the course of the project were experienced as follows:

- the funds ended abruptly, leaving some courses without implementation, although planning had already started
- credible operating models and plans for cooperation after the project has ended do not exist yet, and the commitment of the heads of departments to the future cooperation has not materialized yet
- the basic concepts of digital pedagogy are still not agreed upon
- development of deeper pedagogical understanding
- practical educational sessions utilizing low-latency distance learning tools

New skills and resources that the teachers felt they needed for the future were…

- training in technological skills, e.g. related to new LMS'es and online pedagogy in general, supported by adequate resources, i.e. paid work time (several mentions)
- skills in utilizing different mediums and media elements in a pedagogically meaningful fashion
- skills in organizing joint studies

Finally, the teachers wanted to share the following views in the free-form feedback:

- the project was poorly managed, and its economy was taken care of weakly
- some UAS'es were seen as taking part in the project only for the external funding
- the sheer joy of cooperation across UAS borders was mentioned

The project was seen as having the following effects on the respondent's own organization:

- more teachers involved in the development of online pedagogy
- improvement of the organization's technological infrastructure and technological skills
- understanding of low latency technologies
- variance to the course catalogue
- national online courses
- new networks
- development of new skills

Factors complicating or inhibiting the execution of project results were reported as follows:

- conflicting student schedules
- the assembly of professionals needed in technological issues was seen time-consuming
- the abrupt budget change during the final stages of the project
- teacher cooperation did not work in all cases
- the planned course did not materialize
- the "model of shared expertise and responsibility" did not work
### The steering group

<table>
<thead>
<tr>
<th>Question</th>
<th>Mean (1…5)</th>
<th>Median (1…5)</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many full-time teachers work at your organization (department-level in music, dance, and/or performing arts)?</td>
<td>21,3</td>
<td>21,0</td>
<td>0,6</td>
</tr>
<tr>
<td>How many part-time teachers work at your organization?</td>
<td>32,0</td>
<td>40,0</td>
<td>13,9</td>
</tr>
<tr>
<td>How many teachers took part in online education planning at your organization?</td>
<td>8,3</td>
<td>8,0</td>
<td>1,5</td>
</tr>
<tr>
<td>How well did you succeed in motivating or inspiring teachers to implement online education?</td>
<td>3,0</td>
<td>3,0</td>
<td>0,0</td>
</tr>
<tr>
<td>How well did you succeed in sharing the good practices found during the project in your organization?</td>
<td>3,7</td>
<td>4,0</td>
<td>0,6</td>
</tr>
<tr>
<td>How well did the project help the universities of applied sciences to profile themselves (nationally)?</td>
<td>3,0</td>
<td>3,0</td>
<td>1,0</td>
</tr>
<tr>
<td>How well did the &quot;model of shared expertise and responsibility&quot; work during the project?</td>
<td>2,7</td>
<td>3,0</td>
<td>0,6</td>
</tr>
<tr>
<td>How cost-effective has the project been?</td>
<td>3,0</td>
<td>3,0</td>
<td>1,0</td>
</tr>
<tr>
<td>How well has the monitoring of project implementation and project impact succeeded?</td>
<td>3,0</td>
<td>3,0</td>
<td>1,0</td>
</tr>
<tr>
<td>How well did the project meet its goals?</td>
<td>3,5</td>
<td>3,5</td>
<td>0,7</td>
</tr>
<tr>
<td>How well is your organization prepared to support, develop, and maintain online education in the future?</td>
<td>4,0</td>
<td>4,0</td>
<td>1,0</td>
</tr>
</tbody>
</table>

The means of motivation were reported as follows: by sharing success stories, by demonstrating (good) practices, by listening to students’ needs, by providing resources, by providing training, and by allowing joint planning (of courses) and sharing of expertise.

Table 2. Numerical data from the questionnaire targeted to the members of the project steering group (n = 3).

The members of the steering group did not see almost any un-equalizing impacts caused by the project. The only issue raised was that not every organization was as committed to the project as the others. Instead, several uniting factors were to be seen, such as the improvements in the cooperation of colleagues in expert teams and the sharing of expertise (several mentions), the shared course catalogue, and the new forms of interaction brought by the new digital tools. In addition, according to the respondents, there were no major surprise effects caused by the project in this particular field of education.
The means the respondents' organizations were going to support, develop, and maintain online education with were as follows:

- by improving the current (data) networking infrastructure and (digital) systems
- by supporting cooperation between teachers
- by participating in future projects
- by offering (work time) resources
- by promoting online courses as a normal part of education
- by developing online pedagogy

Finally, the free-form feedback brought out a conflicting view on the "model of shared expertise and responsibility": one respondent was happy with the way the model performed, but another wanted to share his/her dissatisfaction with the model, stating that "a project like this has to be planned and managed well — not by implementing shared leadership".

The concurrent projects

When asked about the challenges met while compiling the universities' shared online course catalogue, all of the respondents agreed that there were problems with the (in)compatibility of computer- and data-related systems and networks. In addition, two of the three respondents had faced problems with the registration and transfer of study credits between organizations, the differences between different organizational cultures, the lack of economic incentives, and the lack of technological and pedagogical skills of the staff. Finally, the respondents reported (one mention of each) curricula-induced incompatibilities, the universities' unwillingness to produce online courses, problems in motivating or inspiring staff to utilize new technologies or practices, and people's resistance to change. Interestingly, there were no mentions of shortage of digital tools, the lack of economic resources, or the lack of readily available models of digital education.

The respondents proposed the following solutions to the aforementioned challenges or problems:

- online information service for the students
- national (digital) service channel for credit transfers etc.
- a digital service for transferring course catalogue data from closed organization-specific systems to the national (and public) online course catalogue
- continuous development of staff digital and pedagogical skills on both national and organizational levels
- open and comprehensive reporting of ongoing experiments and their results

The respondents reported the following unsolved issues:

- the online information service still has many issues that must be solved before it is made public
- the online course catalogue, course enrolment, and credit transfer are still work in progress
- the online course supply must be organized into preconceived paths and/or entities
- there are still too many separate (digital) systems, resulting in tedious manual work
The respondents reported the following realizations and positive surprises during their project period:

- there is demand for nationally available online courses
- the course supply should be expanded
- the universities should focus their profiles
- the availability of online courses can speed up the graduation of students
- until the online information service is in use, the teachers will be loaded down with support requests
- the cooperation between the universities and their personnel works excellently, and the general attitude is positive towards cooperation and cross-study
- the will to cooperate on a practical level has united people and their organizations
- agile attitude towards experimentation has enabled organizations to improve their performance
- the amount of manual administrative work will decrease in the future

The reported negative surprises were in the minority. The low level of economic incentives was noted, and so was the slower than expected progress in data transfer between the institutions, and other technological advances in general.

The respondents called for the following skills and resources:

- more skills in digital study guidance
- digital tools and applications for all employees
- new digital pedagogy skills for teachers
- general ICT skills
- rapid and prompt digital systems development
- proper resources for corporate ICT management and staff involvement in development work

Conclusions

This study collected information on the implementation and outcomes of the DigiArts project. The following can be mentioned as pedagogical observations. Teachers were delighted to learn about the new digital way of teaching. It was interesting to produce one’s own e-learning material as well as to get acquainted with the already existing online material. It is interesting to note that the other national projects showed the opposite attitude: problems in motivating or inspiring staff to utilize new technologies or practices. However, teachers needed a better pedagogical understanding of e-learning. Exploring new technology was seen meaningful among teachers.

From the perspective of the steering group, the project was seen to commit teaching staff to online pedagogy and developing new teaching skills. The emergence of new networks linking schools was very positive for both teachers and administrators.

Dissatisfaction was triggered by the failure to scale project funding. Some of the courses planned did not materialize. It also seemed that project responsibility was uneven, with some schools investing more than others. Concerns have also been expressed about how the project’s activities will be implemented after the project period. From the point of view of practical work, scheduling and student administration
arrangements were considered problematic. This fact was also the foremost observation in the aforementioned concurrent projects.

A subject of further research would be, of course, solving the problems of the interfaces of the student administration systems. The teachers involved in the project were motivated. It would be interesting to know what inspires teachers to take on new tools besides resources (e.g. work hours) allocated to them. Finally, a good understanding of learning management systems still needs support.

References
Effective piano accompaniment training for music teachers and music performers - A case study from Turkey and Northern Cyprus

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Abstract
This study explores accompaniment playing in higher education in Turkey and Northern Cyprus. It particularly focuses on a module on accompaniment playing that is run in the Eastern Mediterranean University and it investigates the extent to which 14-weeks of training in accompaniment playing could support students’ development of piano accompaniment skills. Accompaniment playing is very important for the careers of all musicians. Recent studies indicate that accompaniment playing tends to be is taught within group piano lessons and often it is only offered for four semesters whereas accompaniment playing is taught as a separate lesson and it is only offered for one semester in Turkey and Northern Cyprus. Preliminary data from interviews with current and former students as well as results from a piano accompaniment test undertaken by the same group of participants before and after the program that is run revealed that there are specific skills that could be developed during short accompaniment playing courses. These skills are particularly useful to students wishing to pursue portfolio careers in music.

Keywords: accompaniment playing, piano accompaniment, teaching accompaniment

Introduction
The interest for this study was fuelled by coming across with fewer sources on teaching how to accompany and Gerald Moore’s discussion in his book called *The Unashamed Accompanist* written in 1943. In this book, he recognised that most of the time during a performance, the role of the pianist is ignored since they are seen as a backstage figure beside the soloist. On the other hand, accompanying was considered as an inevitable skill of any pianist and had less attention on studying accompaniment playing separately. Thus, there were not any sources which put forward the curricula and the materials to be used for teaching of accompaniment playing. However, recent studies revealed that it should be taken as another field for studying. This was supported by the recent studies which demonstrated that a performance with and without accompaniment differs both in quality as well as in the perception of a good performance. On the other hand, recent discussions stated that big supporter of music classroom activities is making music on the piano with an accompaniment. To this end, a 14-week module on accompaniment playing was designed to meet the basic accompaniment skills needs of a prospective music teacher and music performer. This study seeks to answer the following questions about the instruction of accompaniment playing (i) what are the musical skills and knowledge that students on Accompaniment Playing lessons currently have and what are the skills and knowledge that they should develop? (Essentially this question is about what must be taught and how must be taught) (ii) What should be the elements of an effective accompaniment playing curriculum? and (iii) To what extent has the proposed Module
for Accompaniment Playing (MAP) supported the learners’ musical and professional skills as well as their enjoyment in accompaniment playing?

Structure of Proposed Accompaniment Playing Module (MAP)
The module was designed with an intention of providing skills of accompaniment making which enables accompanist to play the chords by the players’ own choices for a melody and also enabling them to accompany a soloist or soloists with a ready score accompaniment. The design was developed by considering the improvement from easy to difficult levels i.e. from kindergarten songs (i.e. nursery rhymes) to university-level songs (i.e. *lieds, duets*, etc.). Thus, a prospective musician will be able to accompany by using his/her own chords and accompaniment model for a melody without accompaniment as well as by making a collaborative work on performance with a soloist or soloists.

To sum, the module aims to enable the students to develop (i) choosing appropriate chords for a melody, (ii) choosing appropriate accompaniment model/pattern for a melody, (iii) playing the chords correctly and (iv) playing the piece with its appropriate accompaniment fluently.

Literature Review
The study mainly explored the literature review on Functional Piano Skills, Importance of Accompaniment for Musicians and Students, and Teaching at Higher Education.

Inferences obtained from the review revealed that Accompaniment Playing is taught within functional piano skills through group piano lessons at many universities (especially in United States) for two years whereas is taught for one semester at fifth semester of the whole study in Turkey and Northern Cyprus (apart from individual piano lessons). Recent studies on functional piano skills and accompaniment teaching revealed that current implementations are not sufficient for developing accompaniment playing skills (Young, 2013). Also, discussions (Young, 2013; Kardes, 2013) revealed that accompaniment playing instructions are needed to be re-organized.

On the other hand, research studies on general and instrumental music education revealed that accompaniment playing has a great impact on developing musical skills. (Britten 2002; Ketouvouri, 2015). Also, music students enjoy music instruction more with piano accompaniment. (Lee, 2009)

Methodology
This study has mixed methods approach as a case study. It encompasses three different sample groups (i) current students, (ii) former students and (iii) accompaniment playing tutors. The recruitment focused on people who have never had academic accompaniment instruction (current students); people who already experienced proposed module and now actively working as musician and/or music teacher (former students) and people who are teaching accompaniment playing at different types of higher education music programs. To this end, the recruitment occurred through researcher’s workplace for current students, social media for former students (where students and the researcher are interactive with each other) and official institution email addresses of accompaniment playing tutors. The email addresses of the tutors were obtained by navigating the official website of the council of higher education in Turkey for understanding the structure of higher education in music. Through the navigation, it was determined that the structure of higher music
education has different programs, and these belong to different faculties and units. Therefore, it was aimed to recruit accompaniment playing tutors from different programs.

Different data collection instruments were employed for these samples after taking ethical approval from the related institutions as well as taking informed consents of the participants. For current students, Questionnaires for investigation of current musical skills; Musical Tests as Pre-test and Post-test to identify the development of the accompaniment skills before and after the proposed module and Focus Group Interviews on Musical Tests and the proposed module for exploring the strengths and weaknesses of the proposed module were employed.

For the Former Students, interviews were used for investigation of the extent the proposed module has supported their accompaniment skills and enjoyment from the module. Interviews for exploring their experience and recommendations on accompaniment playing instruction were also employed for data collection process of the Accompaniment Playing Tutors.

**Pilot Study Findings**

This study is not completed yet therefore the data gathered from the data collection instruments are still only pilot findings. However, pilot findings revealed meaningful inferences. The core inference was that the proposed module has been very supportive for developing both the current and former students’ accompaniment skills.

The former student interviewee that is a music teacher at a secondary level private school stated that her students enjoy singing songs with piano accompaniment so much and emphasized that if she had not acquired accompaniment skills, she could not pursue her current job. This is to say that, the former student strongly emphasized that being able to play school songs on the piano with an accompaniment through the module helped her a lot in her teaching career. She added that this module has also a great impact on the skills needed for other lessons i.e. harmony and solfeggio.

The instructor interviewee that works as a chair at a music education program stated that it is necessary for students to have knowledge of harmony for developing accompaniment skills, and be eager to investigate what accompaniment is appropriate accompaniment for the pieces in focus.

He also stated that the students need to have a basic piano level in order to be able to play basic accompaniment pieces and added that the students should also analyse the masterpieces, especially the ones that written in the style of Alberti Bass, to create the perception of measure systems, tempo and dramatization of a piece.

The data gathered through the questionnaires from current students showed that students generally study Czerny Etudes alongside a piece from standard repertoire at the piano lessons. They think their piano competence is poor since they spend less time for practicing. Also, they think that they are not experienced in piano accompaniment. Many of the participants stated that piano accompaniment is very important for a prospective musician.

The pre-test and post-test aim to reveal the developments of accompaniment skills in the following criteria:
Table 1. The Criteria for Evaluating Pre and Post-Tests

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Use of the appropriate accompaniment model (choosing a model that matches with the character of piece, playing the chosen accompaniment model fluently, spreading the voices of chords appropriately through the model).</td>
<td>25/100</td>
</tr>
<tr>
<td>2. Writing the appropriate chords in an appropriate way (making an appropriate chord progression and chord leading; writing and showing the chords correctly (especially their quality) by either using degrees or leading chord writing; writing of chords properly by properly showing where the chord switch will take place).</td>
<td>25/100</td>
</tr>
<tr>
<td>3. Playing the chords correctly and fluently (playing the chords written by student correctly; switching between the chords without and/or less hesitation).</td>
<td>25/100</td>
</tr>
<tr>
<td>4. Playing the pieces fluently (steady synchronization of the melody and accompaniment/ accompaniment model and playing them fluently). <strong>This section will be evaluated with half mark if the students do not use an accompaniment model but play the melody with blocked chord accompaniment fluently</strong></td>
<td>25/100</td>
</tr>
</tbody>
</table>

A very well-known melody from the school music repertoire was chosen for both tests and for the post-test another melody with the same level was added so as to prevent bias in conducting the tests. Students were given 10 minutes for each piece to write the chords and rehearse the pieces at the piano and then they individually demonstrated what they wrote and chose as accompaniment for the given melodies. Their performances were recorded and analysed.

For the analysis of the test results, Wilcoxon Signed Rank Test was undertaken, and it revealed a statistically significant improvement in the accompaniment test results following participation in the 14 week, twice-weekly instruction in Accompaniment Playing, \( z = -2.578 \), \( p = 0.01 \). The median score for Accompaniment playing increased from 31.4 in the pre-test to 44.8 in the post-test.

In the focus group interviews, the current students stated that this was their first time to get involved such training and stated that they believe this module had a fundamental role in developing the accompaniment skills.

**Discussions and future work for the Study**

The study aimed at discussing the opportunities for teaching of accompaniment skills by proposing a 14-weeks accompaniment training module. The novel framework provided not only accompanying a soloist(s) with the piano but also enabling prospective musicians to choose their own chords and accompaniment models for the melodies they will use in their career. To demonstrate the potential of our methods for assessment, questionnaires for the musical background of the current students, interviews about the module as well as on the different approaches of accompaniment training were conducted and pre-tests and post-tests have carried. Currently, gathered data appears as pilot data by using of 11 current students, 1 former student and 1 accompaniment playing tutors. While questionnaire and the tests worked very well and will be used for the main data collection process, the questions of the accompaniment playing tutors’ interviews slightly needed to be re-organized because the interviewee was missing to give some details important for the study while answering some questions. Therefore, some questions were expanded.

Overall, the data collection instruments worked for answering the research questions of the current study and these will be used for the main data collection.
Further research on exploring which piano method books function as supporters for teaching piano accompaniment and exploring the types of students’ approaches to learning accompaniment playing in more detail are anticipated coming from the current study. Determining all these will contribute to the development of successful portfolio careers in music.

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Classification of musical expression in early childhood through machine learning utilizing motion capture data

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Abstract
This study aims to inspect a classification method based on those feature quantities acquired from the musical expression in early childhood and the characteristics of change of body movement in musical expression of early childhood children in the five facilities through a quantitative analysis utilizing 3D motion capture method.

In this study, 3-year-old, 4-year-old, and 5-year-old children in the five facilities participated in the practice of MEB (Musical Expression Bringing up) program constituted of four phases’ activities. The author devised MEB program referred to previous studies. The children’s movement in musical expression was quantitatively analyzed in the five facilities taking different childcare forms such as K and U nursery schools (n=84) in 2016, F and Y kindergartens (n=94) in 2017, and N certified children’s facility (n=45) in 2018. The author used MVN system as 3D motion capture to acquire the data and calculated the movement feature quantity to clarify the change of body movement to show the development of recognition regarding musical elements from the first phase to the third phase of MEB program. MVN motion capture data included 17 measurement points of body parts such as the pelvis, head, right shoulder, right hand, and right foot. In order to find statistically significant difference of body movements, a three-way ANOVA (non-repeated five standards as facilities, non-repeated three standards as ages and non-repeated three standards as MEB phase) was utilized to process outcomes. The result showed the increase of the moving distance and the moving average acceleration regarding the head and right hand during the third phase of MEB program.

Furthermore, the developmental degree of children’s musical expression was classified by machine learning using the feature quantities of motion capture data. The author used some kinds of classifiers for machine learning method such as decision trees (Boosted Trees and Random Forest), Support Vector Machine (SVM), and Multilayer perceptron (MLP) neural networks (NN). As a result, it was verified to be a better classifier in the order of Multilayer perceptron and Boosted trees. These methods will contribute to support early childhood educators to devise music experiences for children by discriminating developmental degree of musical expression into three levels.

Keywords: Classification, Developmental degree of musical expression, Machine learning, 3D motion capture, feature quantity, ANOVA

Purpose of this study
Researchers with systematic observation have revealed that evolution patterns of body movement in musical expression can be recognized in early childhood children. Although various evolution ways were indicated, little research has applied quantitative approach. This study aims to inspect the classification method using machine learning based on the feature quantities extracted from the characteristics of change of body movement in
musical expression. Therefore, early childhood children in the five facilities participated in a quantitative analysis utilizing 3D motion capture method in Japan.

MVN system as 3D motion capture was applied for movement analysis of body movement observed in the musical expression during the practice of MEB (Musical Expression Bringing up) program devised by the author. In previous studies, experimental studies on the instantaneous body response of infants to sound stimuli have been conducted from viewpoint of the recognition of musical elements (Zenter & Eerola, 2010). Regarding the using motion capture technique, some studies have showed the analysis results of specific movement such as a traditional dance and movement to music during adulthood (Sato et al., 2010; Burger et al., 2013). The author quantitatively analyzes degrees of the change of movement observed in musical expression from the first phase to the third phase in the MEB program focusing activities to encourage the recognition of musical elements.

**Method**

In this study, firstly, 3-year-old, 4-year-old, and 5-year-old children in K and U nursery schools (n=120) in 2016, F and Y kindergartens (n=194) in 2017 and N certified children’s facility (n=90) in 2018 participated in the practice of MEB program. In Japan, nursery school and certified children’s facility include from 0-year-old to 6-year-old children, and kindergarten includes from 3-year-old to 6-year-old children. In Japan, children in nursery school and certified children’s facility, tend to spend more time in their institutions than kindergarten’s children. U nursery school and F kindergarten take a play-centered childcare form. K nursery school, Y kindergarten and N certified children’s facility take a childcare form following the Montessori Method. MEB program is constituted of four phases’ activities such as (1) beginning activity, (2) pantomime and improvisation, (3) story creation, and (4) dramatization of the story. MEB program devised by the author aims to integrate music experience with dramatization referred to previous studies (Rubin & Merrion, 1996). The program begins with sound awareness activity to establish the image of a phenomenon in everyday life such as a name game, song play. Children gradually advance to the formation of a rhythmic pattern and reply-song with body movement to enhance the recognition of musical elements and integration with dramatization and music. The author extracted activity contents from the first phase to the third phase including the recognition of musical elements such as melody or rhythm in MEB program for MVN measurement.

Secondly, 3-year-old, 4-year-old, and 5-year-old children in the five facilities (n=223) participated in the MVN measurement of body movement in musical expression during practice from the first phase to the third phase of MEB program (K nursery school: n=54, U nursery school: n=29, F kindergarten: n=47, Y kindergarten: n=45, N certified children’s facility: n=48). MVN system utilizes 17 wireless motion trackers constituted of light weight and compact device to monitor full human body activity such as head, arm, hands and feet so that even small sized children can be measured. For MVN measurement, the participant children performed musical play of self-introduction with song during the first phase, song play with role acting during the second phase and role acting while singing a song including story and reply-song during the third phase. The children were measured one by one. Each child needed 5-10 minutes including the measurement time of 30 seconds.
Thirdly, a three-way ANOVA (non-repeated five standards as facilities, non-repeated three standards as ages and non-repeated three standards as MEB phase) was applied in order to find statistically significant difference between relevant measures. The author mainly analyzed change of the moving average acceleration and movement smoothness regarding the measurement of body parts. The movement smoothness was calculated by ratio of velocity to acceleration based on Burger's studies (2013).

Fourthly, the musical development of each child was divided into three levels of high, medium and low based on the MVN measurement results. (High: 15, Medium: 27, Low: 34 people.) Regarding the musical expressions of 76 participant children in 2016, the results of model classification training by machine learning based on MVN feature values were applied to the measurement results of 2017 with 2018, and the classification accuracy was calculated.

Results
In this study, firstly changes of movement regarding head and right hand were mainly analyzed using a three-way ANOVA. It is based on the characteristic result of cluster analysis regarding the MVN data including the moving distance such as head, right shoulder, pelvis, right hand, and right foot. The result of cluster analysis showed that the square Euclidean distance was far between the moving distance of head and the moving distance of right hand. In this paper, change of the moving average acceleration and the movement smoothness regarding the head and right hand were inspected. In the following description, nursery school, kindergarten, and certified children’s facility are all described as facility.

Change of the head movement
Change of the moving average acceleration of head
As a result of a three way non-repeated ANOVA (non-repeated five standards as facilities, non-repeated three standards as ages and non-repeated three standards as MEB phase) regarding the moving average acceleration of head, a main effect/ interaction of the test showed a statistically significant difference (phase: $F(2, 588)=391.039, p<.005$, facility: $F(4, 588)=17.736, p<.005$, age: $F(2, 588)=7.772, p<.005$), facility* age: $F(8, 588)=3.243, p<.005$, phase*facility*age: $F(16, 588)=2.683, p<.005$). The test regarding simple main effect with multiple comparisons was carried out by Bonferroni method.

Concerning the phase factor/ phase* facility* age, the simple main effect was statistically significant (K facility: 3-year-old ($F(2, 588)=85.485, p<.005$), 4-year-old ($F(2, 588)=58.005, p<.005$), 5-year-old ($F(2, 588)=46.533, p<.005$), U facility: (3-year-old ($F(2, 588)=10.748, p<.005$), 5-year-old ($F(2, 588)=29.093, p<.005$), F facility: (3-year-old ($F(2, 588)=26.666, p<.005$), 4-year-old ($F(2, 588)=7.186, p<.005$), 5-year-old ($F(2, 588)=12.389, p<.005$), N facility: 3-year-old ($F(2, 588)=26.829, p<.005$), 4-year-old ($F(2, 588)=48.498, p<.005$), 5-year-old ($F(2, 588)=104.61, p<.005$)). As a result of multiple comparison, the average data of all ages in the third phase were significantly larger than the data in other two phases in 5 facilities.

Concerning the facility factor/ phase* facility* age, the simple main effect was statistically significant (the third phase: 3-year-old ($F(4, 588)=12.405, p<.005$), 4-year-old ($F(4, 588)=19.696, p<.005$), 5-year-old ($F(4, 588)=20.824, p<.005$)). As a result of multiple comparison, the average data of K facility was significantly larger than the data
of other facilities regarding 3-year-old. The average data of K and N facilities were significantly larger than the data of F, Y and U facilities regarding 4-year-old. The average data of N facility was significantly larger than the data of other 4 facilities regarding 5-year-old.

Concerning the age factor/phase*facility*age, the simple main effect was statistically significant (the third phase: K facility \((F(2, 588)=5.688, p<.005)\), U facility \((F(2, 588)=10.686, p<.005)\), N facility \((F(2, 588)=20.969, p<.005)\)). As a result of multiple comparison, the average data of 3-year-old was significantly larger than the data of 5-year-old in K facility. The average data of 5-year-old was significantly larger than the data of 3-year-old and 4-year-old in U facility. The average data of 4-year-old and 5-year-old were significantly larger than the data of 3-year-old in N facility.

The moving average acceleration of head regarding all ages in the five facilities significantly increased during the third phase of MEB program. The average data regarding K and N facilities taking Montessori Method tended to be larger than the data of other facilities regarding 5-year-old. The children in K and N facilities tended to frequently recognize the regularity and contrast of musical elements as well as the recognition in the sensory experience of everyday life. Specifically, 5-year-old children obviously expressed the advancement of recognition regarding musical elements by an increase in the moving average acceleration of head as a change in elements of movement in musical expression. Figure 1 shows the change of the moving average acceleration of head by activity phase/facilities regarding 3-year-old.

![Figure 1. change of the moving average acceleration of head by activity phase/facilities regarding 3-year-old (m/s²)](image)

As shown figure 1, the moving average acceleration of head significantly increased from the second phase to the third phase in K facility regarding 3-year-old children.

**Change of the movement smoothness of head**

As a result of a three-way non-repeated ANOVA (non-repeated five standards as facilities, non-repeated three standards as ages and non-repeated three standards as MEB phase) regarding the movement smoothness of head, a main effect/interaction of the test did not show a statistically significant difference. As a result of multiple comparison by
Bonferroni method, the average data during the first phase regarding 4-year-old in F facility was significantly larger than the data of other 4 facilities.

The movement smoothness of head did not change very much. The movement smoothness tended to be observed when regular movement was performed at a constant velocity or when the child made little movement.

**Change of the right hand movement**

*Change of the moving average acceleration of right hand*

As a result of a three way non-repeated ANOVA regarding the moving average acceleration of right hand, a main effect/interaction of the test showed a statistically significant difference (phase: \(F(2, 588)=31.878, p<.005\), facility: \(F(4, 588)=75.762, p<.005\), age: \(F(2, 588)=12.881, p<.005\), phase* facility: \(F(8, 588)=11.013, p<.005\)). The test regarding simple main effect with multiple comparisons was carried out by Bonferroni method.

Concerning the phase factor/phase* facility* age, the simple main effect was statistically significant (K facility: 3-year-old \((F(2, 588)=8.457, p<.005)\), 4-year-old \((F(2, 588)=11.861, p<.005)\), N facility: 3-year-old \((F(2, 588)=19.064, p<.005)\), 4-year-old \((F(2, 588)=20.348, p<.005)\), 5-year-old \((F(2, 588)=16.756, p<.005)\). Concerning the facility factor/phase* facility* age, the simple main effect was statistically significant (the first phase: 4-year-old \((F(4, 588)=4.31, p<.005)\), 5-year-old \((F(4, 588)=19.78, p<.005)\), the second phase: 4-year-old \((F(4, 588)=2.522, p<.005)\), 5-year-old \((F(4, 588)=12.193, p<.005)\), the third phase: 3-year-old \((F(4, 588)=15.171, p<.005)\), 4-year-old \((F(4, 588)=26.154, p<.005)\), 5-year-old \((F(4, 588)=37.203, p<.005)\)). Concerning the age factor/phase* facility* age, the simple main effect was statistically significant (the first phase: N facility \((F(2, 588)=14.88, p<.005)\), the second phase: N facility \((F(2, 588)=9.387, p<.005)\), the third phase: N facility \((F(2, 588)=7.426, p<.005)\)).

As a result of multiple comparison, the average data of 5-year-old was significantly larger than 3-year-old and 4-year-old during the first and the second phase, and the average data of 5-year-old was significantly larger than the data of 3-year-old during the third phase in N facility.

*Change of the movement smoothness of right hand*

As a result of a three way non-repeated ANOVA regarding the movement smoothness of right hand, A main effect of the test showed a statistically significant difference (phase: \(F(2, 588)=60.227, p<.005\), facility \((F(4, 588)=11.737, p<.005)\)). The test regarding multiple comparisons was carried out by Bonferroni method.

As a result of multiple comparison, the average data during the third phase was significantly large regarding 5-year-old in the five facilities.

The author used machine learning as follows as a method of evaluating and classifying the degree of development of musical expression based on the motion feature quantity acquired as described above.

**Classification of developmental degree of musical expression using machine learning**

In previous studies regarding musical expression, machine learning method has been implemented to the data classification of instrument performance (Young, D., 2008) and decision trees used in analysis of breathing during music performance (Igarashi et al.)
learning of music performance studies (Widmer, G., 2001). But machine learning method has not been related to musical expressions in early childhood yet. The author referred research in other fields to enhance the classification sophistication.

The author used several kinds of classifiers for machine learning method such as decision trees, Support Vector Machine, and Multilayer perceptron (MLP) neural networks (NN). From the MVN data, 13 feature quantities were calculated in Excel. The author also discriminates the developmental degree of musical expression of each child. Developmental degree of musical expression was classified into three levels of high, middle and low as video classification data (High: 15 children, Middle: 27, Low: 34) (Sano 2018). Training of classification model was performed along with these 13 feature quantities (as factor) as input and three-level evaluation (as categorical dependent variable) as output (machine learning training targets) (n=76). Regarding training process, accuracy showed Boosted Trees and Neural Networks showed fair fitting (Boosted Trees: 66.7%, Multilayer perceptron: 64.8%).

The result of classification model training was applied to 128 children’s data in 2017 and 2018 to classify the developmental degree of musical expression. As a result, confusion matrix was shown as table 1. The classification accuracy regarding multilayer perceptron (MLP) neural network (NN) was 33.6%. High sensitivity contribution factors were the moving average acceleration of pelvis, the moving smoothness of right foot, and the moving average acceleration of right foot.

Table 1. Confusion matrix of MLP-NN

<table>
<thead>
<tr>
<th>Actual</th>
<th>Prediction</th>
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<tbody>
<tr>
<td></td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>High</td>
<td>2</td>
<td>38</td>
<td>12</td>
</tr>
<tr>
<td>Medium</td>
<td>1</td>
<td>26</td>
<td>15</td>
</tr>
<tr>
<td>Low</td>
<td>1</td>
<td>18</td>
<td>15</td>
</tr>
</tbody>
</table>

Conclusion and Implications for Music Education

In this study, change of body movement in musical expression in early childhood was quantitatively analyzed utilizing 3D motion capture method. The analysis was focused on the activity contents from the first phase to the third phase including activities to encourage the recognition of musical elements in MEB program. As a result, the moving average acceleration regarding head was remarkably increased in the third phase in especially in K and N facilities. When singing while taking beats, movements shaking the head slowly and regularly occurred, and the movement smoothness of head was calculated as a large numerical value. The moving average acceleration regarding the head and right hand remarkably increased during the third phase. There were also statistically significant differences by facilities and by childcare forms. In the N, K, and Y facilities taking the Montessori Method, the increase of the average value of the measurement data at the third phase was remarkable. The children in K, Y, and N facilities had a lot of experiences regarding a sensitivity to awareness of sounds in everyday life to regularity and contrast in musical expression.

Furthermore, a method with higher classification accuracy to classify musical development was inspected to use machine learning based on the quantity feature of body movement in musical expression in early childhood. As a result, it was verified that
Multilayer perceptron (MLP) neural networks (NN) was the most appropriate classifier, and the Boosted trees as decision trees was a better classifier. If the developmental degree of musical expression can be predicted from motion capture data with higher accuracy, it will contribute to provide effective music education in early childhood.

Acknowledgements
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Cumbia: The Latin American's rock
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Abstract
Tacitly, there are cultural capitals that impose a hegemonic hierarchy that values certain musical and pedagogical particularities. Away from these cultural centers, cultural peripheries coexist simultaneously, having their own musical languages, fed by native, popular, modern and contemporary music. Try to understand these contemporary peripheral musical languages, also imply trying to understand these universes. From the cumbia villera of Villa 31 in Buenos Aires to the cumbia chicha of Callao in Lima, the peripheral musical languages of Latin America are part of the daily life of a population that is not submissive to the system, and that, in turn, includes their environment from their own unofficial musical languages.

This work compares the musical language of cumbia with the musical language developed by rock, recognizing its rebellious and rebellious character, in a context of eternal identity crisis such as Latin America. The acceptance and brief description of the peripheral musical languages developed by cumbia could replace the need to search for new ways to focus music education in contexts far from the so-called official cultural centers.

Keywords: Latin America, cumbia, unofficial musical languages.

Cultural peripheries and unofficial musical languages
The peripheral, a symbol of exclusion and submission to something higher in a hierarchy imaginary That which is far from the centers of social and economic power it is considered a minor event or just an exoticism, arisen perhaps from contexts and realities not even contemplated in the cultural maps accepted by the dominant cultural powers. We could claim that many musical languages develop parallel to musical languages tacitly officers. The unofficial musical languages that emerged in Latin America, from its perennial fusion and miscegenation, usually translate, perhaps involuntarily, sound concepts and lyric produced by official musical languages.

The cumbia, emerged in Colombia from the fusion of music of Afro origin and origin indigenous, has expanded in Latin America progressively during the last decades and is the musical language of those who are part of the counter of the centers of political and social power, which we could call cultural capitals self-appointed Uruguayan writer Corihún Aharonián, in his book Hacer música en América Latina, mentions in this regard:

“It is interesting to follow the itinerary of the Zamacueca in the nineteenth century, but it is no less fascinating to discover the dispersión horizontal, regardless of metropolitan interests, of the cumbia in the middle of the 20th century, from southern South America to the southern United States ” (Aharonián, 2014).
A little more than half a century ago, a very similar movement emerged in the United States, in a distant north for Latin Americans, an America that may not be America: Rock, transgressive and irreverent music, complicit in transformations political and social that would change the perception of music in modernity, showing its rebel power capable of convulsing power structures. The book *La historia del movimiento del rock mendocino* explains:

The study of popular culture should always begin for the double game that characterizes it, the double movement of containment and resistance. However marginal and outside the walls that popular culture is, not only press constantly to "society", but is linked and related to it through from a multitude of practices. Alliance lines, in addition to division lines. Does not exist Authentic, autonomous and independent popular culture (Cousinet, Padilla, Etepa, & de Luca, 2009).

Disintegration generates resistance, and the appearance of transgressive concepts of established order, that is, the ideas contained seek an escape point, create a crack in the system and implode to generate transformations.

The peripheral, that which is not, that does not fit the traditional schemes, that is far or out of the control of the socially accepted as worthy of being heard, it exists. Contemporary and peripheral musical languages are developed in parallel to the official musical languages and are part, or should be, considered in the realities Education in Latin America.

It is unthinkable not to take into account maternal musical language in the construction of musical pedagogies that respond to the needs of a certain context. The cumbia has managed to mimic, merge and nurture of original, popular music, modern and contemporary in Latin America, developing mutations and diverse local variations that in themselves become unofficial musical dialects, but representative of social groups or groups, it is the case, for example, of the cumbia villera in the conurbano of Buenos Aires or the cumbia chicha of the Bolivian highlands, Peruvian and Ecuadorian. On the cumbia villera, the Mexican Dario Blanco Arboleda He mentions:

Arriving in 2000, the Argentine cumbia began a new process of both musical and cultural transition. In the musical aspect, new sounds related to rock and pop, they advanced on the purely melodic style. Further, Other instruments such as synthesizers and sound effects were incorporated. At the end of 2000 the neighborhood cumbia is installed, pretending to reflect the experiences of the sectors most marginalized of society. This genus evolved towards cumbia villera as faithful reflection and product of the decline in which Argentine society was immersed, the State and distrust of the political class (Blanco Arboleda, 2006).

If someone visits and listens carefully to the sound landscape of neighborhoods far from the Latin American metropolis will probably hear cumbia in the foreground. In Tepito (Mexico City), Villa 31 (Buenos Aires) or Callao (Lima) the musical language does not official, but predominant, will be that of the cumbia, rebelling and coexisting with the official musical languages. As is the rock in its beginnings, banned from the
media of communication, excluded from the aristocratic society, beating hard in thousands of rebel hearts.

And although this phenomenon is latent, in most cases, it is not considered as a useful element in the construction of musical pedagogies that respond to the needs of these social realities, as well as countless languages and musical dialects opaque, absorbed and reinterpreted by the great cities, cultural capitals.

The rebellious character of cumbia has allowed him to survive and resist a powerful cultural invasion propitiated by globalization, reinventing itself to generate identity collective It responds to the musical needs that the official musical language has not been taken the trouble to solve, or has considered not worthy of study. It's easily evident that the language of Latin American youth we will call cultural peripheries, for their conceptual remoteness of the cultural centers producing ideologies accepted by dominant classes, is that of the cumbia, and it is because of this language musical that they understand and translate the rest of the music, the rest of the languages.

The standard of good and bad, imposed by hegemonic languages, minimizes the impact of other non-official musical languages, that is why they are not considered within the study of music education. Universality, prevailing and inevitable, does not prevents, or should not prevent learning and understanding from conceptualization typical of the musical language of a social or collective group. Every musical language It deserves to be heard and heard, analyzed and understood from its own cosmogony. In the era of identity dissolution and standardization of knowledge, cumbia, at Like primal rock, it claims identity and the right to self-determination regarding other musical languages.

Aim
Compare cumbia and rock, to demonstrate the importance of the first in the development of musical pedagogies that respond efficiently to the needs Musical education of the socalled cultural peripheries in Latin America.

Approach
The approach of this paper is qualitative. It is based on the collection of bibliographic information

Cumbia in contemporary Latin American cultural identity
The search for identity in Latin America has been and is an element paradoxically fundamental in the construction of this identity. The cumbia is a carrier of concepts, yearnings and experiences of Latin Americans. The texmex that recreates the migrant Latino in the United States, the Bolivian chicha cumbia that in the nineties recess the universe of Bolivian seamstresses in suburbs of Brazil and in Argentina, the neo huayño that reconstructs the rural experiences of highland populations of Peru, are examples of the importance of this musical language in the permanent construction of This Latin American identity. Its popular character, a term that is often used Pejoratively, he has considered it for pedagogy, study, musical only as an exotic fact, detracting from its study and therefore its value in development of musical pedagogies that could arise to respond to the needs Musical education of this population.

Like rock, because of its rebellious nature, it has the potential to generate transformations Political and social. He has done so in the past, being fundamental, for
example in protests of the 2000s in Argentina, expressing cumbia villera discontent of
the masses in songs with protest tone like David Lescano in the construction of the chicha
culture in the Lima suburbs settled in rural migration emerged in the second half of the
last century.

This should take away from our eyes the conceptual and paradigmatic band of
prejudice and allow us to listen to the musical languages that have been developing in the
bad called cultural peripheries, and those that already exist, such as musical languages
indigenous and those of afro origin. This knowledge should question the acceptance of a
only dominant musical language, and challenge the creation of new pedagogies Latin
American musicals that consider contemporary musical languages, such is the case of
cumbia, as a fundamental part of the new musical pedagogies that will be part of Latin
America in the present century.

Conclusions and implications for music education

Rock led to the development of new musical languages that managed to expand
all over the world, driven by its character and the rebelliousness of youth. Cumbia has
become the mother tongue of many people in Latin America, with the same answering
character and also supported by the rebellion of the Latin American youths belonging,
and this not pejoratively but more well with a vindictive character, to the cultural
peripheries of a world increasingly diverse and globalized.

Instead of denying this reality, as was done with rock while still in training, should
be taken into account as an important element in the development of musical pedagogies
that understand this phenomenon and respond to the needs educational languages
flourishing, excluded, invisible in Some discriminated cases. The comparison of two
musical languages, apparently as dissimilar as that of rock and cumbia, allow us to
understand the potential transformative and revolutionary power of peripheral musical
languages.

Fighting the current is an act of rebellion, understanding the realities created by
contemporaneity from these realities is a right, beyond tonal harmony, there are other
musical languages that are part of the invisible cultures that at the same time they belong
to the cultural peripheries. Peripheries excluded from an alleged development hegemonic
culture that establishes canons, in some cases unattainable or unreal, that do not know
and subjugate everything that does not fit into them. The language implicitly musical is
the way of reasoning of a culture or social group, by ignore the musical languages of the
cultural peripheries, it is also unknown part of the universal musical culture, which
includes this from a different perspective, perhaps transgressive, of equal validity as
hegemonic and tacitly musical language official for the centers of cultural power. And it
is these centers of cultural power that they feed on these new musical languages, in a kind
of anthropophagy, subsequently returning a standardized and packaged musical product,
ready for monetized consumption.

There is no way to predict the musical educational needs of the future, but it is
possible to analyze and reformulate the importance of the inclusion of musical
languages contemporaries like cumbia's in future musical pedagogies, although these
languages are demerged, or placed steps below in a cultural hierarchy hegemonic, they
are part of the experience and daily life of millions of people transgressors, in fact and
form, to the system, inhabitants and heirs of the rebellion of the Latin American cultural peripheries. Cumbia is the rock of Latin America.

References
Understanding performance anxiety through an emergent self

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Abstract
This paper is based on an exploratory qualitative study involving semi-structured interviews with music students (ages 17 and up) and a discursive analysis of their subjective experience of performance anxiety. The aim is to provide a more complete account of individual subjective experience in relation to anxiety and notions of self in musical performance. Questions concerning this issue cannot be addressed solely through psychological investigation. Thus, the paper requires philosophical clarification by utilizing phenomenological methodology. With this in mind, the aim of the paper is to develop an inter-disciplinary approach to performance anxiety based on Kierkegaard’s conceptualization of it as being both a negative and positive phenomenon in relation to subjectivity of self. The self is presented as an unfixed self that has an emergent potentiality for inducing a successful influence during an actual live music performance comprising of an audience. The ideas and practical suggestions are based on a discursive analysis that takes into account the anxiety of student undergraduate performers preparing a final recital for meeting the degree or diploma requirements for graduation. Student notions of anxiety that arose from the interviews are analyzed for their discursive capacity to shed light on the negative manifestations of anxiety. We argue against the medical model as one that maintains the manipulation and expendability of anxiety as an object and commodity unrelated to the self. The Interview Study explored the subjective experiences of undergraduate music students’ performance anxiety and was able to establish that students viewed anxiety as a ‘real’ thing like an actual disease that attacks them.

Keywords: Positive anxiety, self, performance, qualitative, self-sabotaging, discursive, subjectivity

What is performance anxiety as a negative phenomenon?
We base are answers to the above question based on an exploratory qualitative study involving semi-structured interviews with music students (ages 17 and up) and a discursive analysis of their subjective experience of performance anxiety. Student undergraduate performers before a final recital for meeting graduation requirements for the attainment of a university diploma or degree have likened it to driving on a scary road trying to avoid a car accident, being in a snow suit in the desert or going to the dentist. They have also used adjectives and adverbs such as threatening, frightening, and painful. We know that such negative apprehensions of anxiety activate the body’s defense mechanisms for fight or flight. Feelings that something undesirable or harmful is about to happen frequently lead to edginess and apprehension, a dry mouth, swallowing difficulty, and hoarseness, rapid breathing and a rapid heartbeat, palpitations, twitching or trembling, and muscle tensions leading to headaches and backaches. And if that is not
bad enough, students also alluded to sweating, difficulty in concentrating, dizziness or fainting, nausea, diarrhea, weight loss, sleeplessness, irritability, fatigue, nightmares, memory problems, and sexual impotence.

Even more concerning than the above for music performing students may be the need to control the symptoms of negative anxiety through an understandable hope for a cure via a medical model based on the use of drugs. Such a medical model maintains the manipulation and expendability of anxiety as an object and commodity unrelated to the self.

**The Interview Study and its discursive potentiality**

Subjective experience (subjectivity) of performance anxiety is inextricably linked to an individual’s construction of self. Our sense of self is constructed out of the discourses that are culturally available to us that we use when communicating with others. Subjectivity is constructed or embedded in discourse. Revealing the linguistic resources that individuals use when constructing their accounts of performance anxiety, help to identify patterns of explanations, evaluations, and descriptions that are used to sustain social practices through conventionality and conformity to established cultural norms and values. These ‘versions’ of the world become established as ‘real’ and independent of the individual both in the immediacy of experience and over the longer-term as part of a particular ideology. A discursive potentiality was made possible by 7 undergraduate music students who were interviewed prior to and immediately following final year recitals (compulsory for their degree). They were asked to give reasons for choosing a performance option, the performance preparation, their expectations for the final performance and a self-evaluation of the final performance.

The Interview Study explored the subjective experiences of undergraduate music students’ performance anxiety and was able to establish that students viewed anxiety as a ‘real’ thing like a disease that attacks them. They also believed that they needed to develop particular strategies for overcoming the perceived negative effects of anxiety. This tended to be based on the assumption that an absolute or correct way of preventing or overcoming anxiety was indeed possible to achieve. These are various statements that arose from the interviews in an attempt to overcome their negative anxiety.

“I’m trying different ways of thinking about playing philosophically, mostly, because I do get so nervous and I’m not sure whether it helps or not but… I mean hopefully I will come up with something that really does work.” “I’m trying different ways of thinking about playing philosophically, mostly, because I do get so nervous and I’m not sure whether it helps or not but… I mean hopefully I will come up with something that really does work.”

A common metaphor involved a ‘battle’ or ‘fight’ between the individual and his or her anxiety. “I want to go out there and I want to beat my nerves.” “Hopefully nerves won’t get the better of me.” This conflict tended to be resolved by resorting to an assertion that the more experience you have of performing the less anxious you will be: “I think if you did it everyday then the nerve aspect would… you know obviously get better. But then… if you choose that way of life and you want to do that everyday then fine and you'll obviously get better and you'll be able to cope with nerves (Author & Author, 2001).”
Because the students perceived themselves to have relatively little experience of performing, they were able to rationalize the possibility of failure as resulting from their lack of experience rather than their lack of ability as a performer, thereby protecting their sense of worth as a musician: “I don’t have the control but on the other hand it sometimes, it’s quite nice thinking that I don’t have ultimate responsibility as well you know. Because I know more or less on the day that if I play my bit okay then if anything goes horrendously wrong then it won’t be ultimately mine, down to me, you know my kind of responsibility.”

These student responses were evident of a psychological deficit model related to low self-esteem, perfectionism, low personal control, predisposition to irrational beliefs, poor coping ability, distractibility, and uncertainty/confusion. Students believed that overcoming anxiety could be achieved primarily through developing their self-confidence. Self-confidence was thought to be achieved through various activities, such as “performing rituals”, “positive thinking”, “social support”, “positive evaluations of one’s competence”, and “sustained effort and practice”. There was also concern about “being one’s own worst enemy” or self-sabotaging (Ibid). One may very well wonder how and why students and even professional performers succumb to negative anxiety that can cripple and even self-sabotage a performance. Why is this allowed to happen by individual performers? According to the famous pianist Claudio Arrau:

...We do the most inexplicable things. We frustrate ourselves constantly. Out of fear - fear of failure and, strange as it may seem, fear of success as well - we artists suddenly fall sick before major appearances. We create frightful emotional upsets...the least sign of imperfection can cause one to give up in the middle of an otherwise fine performance. Worst of all, the struggle may suddenly lose all meaning, and the artist, lost in a terrible maze of conflict and despair, may give up performing altogether. This giving up is a real death; the death of the soul (Horowitz & Arrau, 1982).

How does one escape from such self-destructive behaviours and how can they be overcome? For the performer – the performance is not a property of science – it is an event in direct relation to and an extension of the performer. Performers have to try to identify and work through (rather than evade or suppress) their particular and underlying negative anxiety.

Positive Anxiety
Kierkegaard theorized that an evasion of anxiety is detrimental to the performer. One must learn to utilize anxiety and bring life to its interpretations because it is the pivot upon which every thing turns (Author, 1999). “Anxiety supplies essential creative energy... instead of running away from anxiety, it is wisest to ‘move through it’, achieving a measure of self realization in the process (Reubart, 1985).” In Kurzweil’s words “...anxiety cannot be entirely purged from our lives: even if it were possible to do so, it would not be desirable. For anxiety in its milder manifestations has a stimulating effect upon us. It spurs us on to action, it is a motivator without which...our human faculties become blunted. We have to live with our anxieties and it is the task of education to help us bear them (Kurzweil, 1968).” Anxiety in its positive manifestations can take the form of a “creative yearning” (Heidegger, 1927, 1962). What is needed is a
re-conceptualization of anxiety in relational terms because it is the positive side of anxiety, (creative yearning) which ultimately may result in a connected and harmonious self.

The actual performance is an extension of being (self and anxiety). The performer tends to have a fixed or frozen notion of being or self in anxiety. It is this fixed sense of self that we project into the future. It is also this fixed sense of self we expect to find on stage. But the fixed sense of self we have in the practice or rehearsal room is not the emergent self on stage (Author & Author, 2001). During the performance there is great tension between the performer's sense of a pre-existing fixed self and his or her emergent self on stage. Our emergent selves are based on processes so shifty, so ungrounded, that we have an apparent paradox between the solidity of what appears to show up and its groundlessness. Trying to avoid or resist this tension can result in anxiety in its most negative manifestations. Sartre in his monumental Being and Nothingness rejected the notion of a 'real' or 'fixed' self much as the philosophical traditions of Buddhism and Hinduism have done (Sartre, 1943, 1956). But it cannot be emphasized enough that this does not in any way preclude the notion of what may be referred to, in more traditional terms, as the 'soul' or 'psyche' of the humanist tradition.

JH What determines whether anxiety has a positive or negative impact - whether you use it creatively or destructively?
CA I don’t know how it happens, exactly. Thirty years ago, anxiety would often get in the way of performance. But with time, I understood that one should try to simply let things happen, and not worry so much about pleasing or succeeding. Then anxiety becomes less of a handicap, and more a part of the creative stream (Horowitz & Arrau, 1982).

How is this theory of an emergent self to be actualized in practical terms?
If all performers learn to accept the self that emerges during a live performance and not attempt to block it out or repress it, either through physical means such as taking self-medication, drugs before the actual performance or an emotional repression of what emerges on stage during the performance in its immediacy, then the following suggestions can also be utilized to a performer’s advantage: First and foremost we conclude and recommend that a performer stay in the immediacy of his or her performance; i.e., one should not worry about difficult passages that may be coming up. One should deal with them in their immediacy and not worry about them before they occur. One should never forget that an inaccuracy during a performance always seems much greater to the performer than it actually ever will to one’s audience or even to one’s self at a later time when he or she reviews a recorded performance. There are numerous anecdotes of great artists who would not allow a recording to be published because they were under the recollected and false impression, right after the performance, that a previous performance did not match their anticipated standards for that particular performance. Only much later in time when they had distanced themselves long enough from the performance did they finally allow the performance to be released commercially on Cd’s (Monsaingeon, 1998, 2001).
It is amazing how quickly negative anxiety will build up if one forgets to breathe. This is an all too common problem in music performance and even in other walks of life that are also frequently found in sports. One should keep imagining a successful outcome for a performance before and during its actualization and to strive as much as possible to banish imagined negative scenarios. This is not always easy to do but forcing oneself to rather imagine successful outcomes should become a habit. One should constantly imagine the sound that one wants in one’s performance. One should also imagine how good it would and will feel when it is all over—after a very good performance. During preparation and practice before a concert one should concentrate as hard as one can so that the habit of concentration does not abandon a performer during the actual performance. It is quite amazing how frequently performers allow their minds to wander throughout an actual performance.

All performers should remember that no one is perfect - not even you - if you happen to be a performer! One should not demand the impossible from oneself. In Buddhist thought the Dalai Lama has referred to this kind of perfection in any performance as a kind of foolishness. Neither should one fear the audience. Audiences on the whole are benign and innately good and wish the best outcome for a performer. If this were not true the human race would have disappeared off the face of the earth many years ago. This means that one should learn to tap into the audience’s goodness. One should always keep in mind that they are there in the concert hall because they want to hear you. They have, in most cases, made special arrangements to be there, not to mention, costs incurred for the performance. One should never worry about the possible exceptions to the above rule; i.e., negative members of an audience who may be ill willed. Such people are not worth a performing musician’s thoughts or apprehensions.

Whether an established artist or a student performer is aspiring to artistic standards of performance one should learn to sense and encourage anxiety’s positive manifestations in one’s self by working through it – not evading it. If, at its possible best, anxiety really can take the form of a creative yearning (Heidegger, 1927, 1962), then one can embrace one’s emergent self and the possibilities that positive anxiety provides for a successful performance.

Acknowledgements
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References


Teaching soundscapes in the Brazilian Pantanal: Benefits of integrating music and science education

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Abstract
Musical training naturally introduces students to physical properties of sound such as frequency and amplitude as they learn how to control pitch, tone, and volume. This connection between music and science, however, is much more profound than might be apparent. The same ear training and audial-interpretive methods musicians employ to understand and create music are fundamental to modern, technologically advanced scientific studies that seek to better understand our environment by listening to it. We built a field course for musicians that integrates music education with the physics of waves and ecological cycles, taught at a scientific research station with instruction from professionals in diverse fields. Here, we detail the curriculum we use to teach so-called “core” subjects of biology and physics through music. Our program emphasizes the soundscape concept—a realization that all sound can be viewed as music. This approach allows exploration of how multiple sounds come together to form the world we perceive around us, producing mashes of different timbres and melodies whose complexity can be interpreted altogether or parsed apart. Through a survey with open response questions, we demonstrate some of the musical and scientific lessons learned by students. We then discuss the benefits of such a program that extend beyond the purely pedagogical: integration of music into core subjects improves music and science education, as well as providing opportunity for more data collection and processing for research and improving the accessibility of contemporary techniques and compositions. More broadly, this type of combined program builds up the arts as an important part of science, nature, and culture, rather than a secondary, non-scholastic pursuit.

Keywords: Birdsong, composition, improvisation, contemporary techniques, nature

Introduction
Music and nature have a deep, intimate connection. For thousands of years, human cultures have used the sounds of nature in their stories, songs, and rituals (Gray et al., 2001). Modern musicians and composers have continued this tradition. Beethoven employed the melodies of the songs of the nightingale, quail, and cuckoo in the score for the second movement of his Symphony No. 6 and alluded to other natural sounds like thunder elsewhere. Respighi’s Pines of Rome includes a recorded nightingale in the first-ever use of recorded sound in a major classical work (Ferguson, 1968). At varying levels of abstraction (Cross, 2005), sounds of nature manifest themselves in music to the extent that it is impossible to imagine music without them.

Recently, turning a musical ear to nature has evolved from using natural sounds to inspire musical composition into the more formal and scientific study of soundscapes.
According to John Cage, who in addition to his musical achievements once made his living collecting mushrooms: “Music is sounds, sounds around us whether we’re in or out of concert halls” (Schafer, 1994). R. Murray Schafer, one of the pioneers of the field, instructs us to listen to everything, from that traditionally called music to that considered noise, and to take all of this into consideration in a new definition of music. The entire world can be thought of as one enormous collaborative composition, and we all inherently navigate it as musicians, contributing our own sounds, and interpreting meaning in the ways we relate to the sounds around us (Schafer, 1994).

The study of soundscapes represents a paradigm shift in our understanding of sound and music. Harnessing the power of this fundamental definitional change, we set out to build a program around music and the sounds of nature. This program is simultaneously artistic and scientific. In Shirley et al. (2018), we described an early version of this program and explored its potential to change environmental attitudes through music pedagogy. Here, we describe the explicit use of soundscapes and music to teach core scientific principles of ecology and physics. We discuss how both science and music education can benefit greatly from a synergistic pedagogy combining the two.

**Science-music combined curriculum and assessment methods**

The program we describe here is designed to teach music and nature with soundscapes in the Brazilian Pantanal, a conservation hotspot (Junk et al., 2005). The goals of this program were (1) to teach basic theme and variation in composition and improvisation using natural sounds; (2) to teach ecology, which is largely based on cycles that can be viewed as oscillating waves, by learning to identify birdsong in the field and individual animals and their roles in nature; (3) to teach the physics of waves and waveforms, culminating in understanding soundscape spectrograms and perception of biological features and meaning in the soundscape. These goals were accomplished through a curriculum that involved classroom lessons with activities as well as extended field experiences. Specific details of the sequence of activities in and out of the classroom are described in Table 1.

<table>
<thead>
<tr>
<th>Activity/Lesson</th>
<th>Learning Goals</th>
<th>Brief Description</th>
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</thead>
<tbody>
<tr>
<td>Nature in music</td>
<td>Recognize some of the many ways nature inspires music.</td>
<td>Listen to and view scores of nature-related music, such as Beethoven’s <em>Symphony No. 6</em>, Prokofiev’s <em>Peter and the Wolf</em>, Villa Lobos’s <em>Uirapuru</em>.</td>
</tr>
<tr>
<td>Listening to nature</td>
<td>Begin thinking about soundscapes, distinguish biophony, geophony, and anthrophony (Pijanowski et al, 2011).</td>
<td>Quietly listening for 20–30 minutes at a single location in nature. This is repeated several times at different locations and different times of day throughout the program.</td>
</tr>
<tr>
<td>Ecology and cycles</td>
<td>Demonstrate interaction between different species and their environment often follows cyclical patterns.</td>
<td>A classroom lesson covering different modes of species interaction and population models, followed by a version of tag that simulates predator-prey population cycles.</td>
</tr>
<tr>
<td>Physics of sound</td>
<td>Connect musical features like pitch, rhythm, and timbre to physical properties of waves, understand a spectrogram.</td>
<td>Classroom lesson on waves. Live demonstrations using recording software to display waveforms and spectrograms of students playing different instruments and soundscape recordings.</td>
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<tr>
<td>Composition</td>
<td>Experiment with new sounds and techniques, think creatively about what was heard and learned.</td>
<td>Classroom lesson demonstrating some extended playing techniques and contemporary music notation techniques, followed by experimentation and transcription time with instruments out in the field.</td>
</tr>
<tr>
<td>Performance</td>
<td>Tie field listening and ensemble listening together, express and communicate new ideas.</td>
<td>Students rehearse then perform a short semi-improvised concert in nature, incorporating and reacting to the sounds around them.</td>
</tr>
<tr>
<td>Review</td>
<td>Review previous lessons, recognize how these concepts did or did not manifest themselves in the performance.</td>
<td>Listen to performance recording, identify features in its spectrogram. View nature and wildlife pictures, compare their actual sounds to student interpretations. Discuss the whole experience.</td>
</tr>
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**Table 1. Description of pedagogical activities of the Pantanal Aventura Sonora program with soundscapes physics and ecology.**

A group of 18 students, aged 12 to 18, with 6 music teachers went to a biological field station in the heart of the Brazilian Pantanal, some five hours drive by dirt road from the nearest city and on the side of a river where jaguars and other animals are commonly sighted. The group spent four days studying the nature of the area with local biologists and naturalist guides, doing listening exercises, and learning scientific principles. The field portion of the program was followed by a survey that allowed participants to reflect on their experience with open-ended questions. Children’s responses were collected as part of the class, and the use of their responses was duly approved by parents or guardians. The course was subject to a news article and short video, and music composed during the field course was later performed as part of a youth orchestra concert series.

**Pedagogical results**
The essence of our program was to explore soundscapes, music, and nature on three levels. First, we sought to teach complex techniques, composition and improvisation. Second, we taught about ecology through individual animals and their contributions to the natural community. Third, we explored how all individual sounds meld together into soundscapes, whose physics and complexity allow for study of the community as a whole, rather than just its individual parts. Some of these results are described in Fig. 1.
Students developed listening, composition, and improvisation skills from the field experience, which they described in their own words. Students described that they now hear sound differently, and that the program helped in specific composition and improvisation skills. One student said that now they realize “that unconventional forms of playing my instrument are possible.” Another student described specific newfound confidence in playing harmonics and flutter-tonguing on a wind instrument. These skills represent specific musical pedagogical outcomes of the program.

Students also acquired newfound understanding of individual species of birds and mammals and the sounds they create through direct observation in the field. Students reported being able to identify many species of animals, many of which they did not previously know existed. One student described with pride the ability to replicate the sound of a common bird on a violin, saying also that now their hearing is trained to listen
for birdsong in ways it was not before. Another student described being newly conscientious of how “I influence the well-being of the animals, now that I know something about the jaguars and birds of the Pantanal.” This realization of the interconnectivity of humans and nature, as well as the various parts of nature and how they interact with each other, is fundamental to the third goal of the project.

Finally, students developed an understanding of frequency, amplitude, and complex waveforms, which contributed to an understanding of communities in nature as combinations of animals and the sounds they create. “Nature plays a perpetual symphony,” said one student. Another added that “everything is music, from silence to the drone of the mosquitoes.” Collectively, these observations point to a deeper and fuller understanding of nature and natural science, as well as music. Students also discussed that apparent disorder of natural sounds can actually be perceived as music, and that this disorderly noise can be useful not only for music, but also to understand “how biodiversity works” and to incentivize preservation of nature as a rich body of diverse sounds, not merely the individual animals that comprise it.

**Discussion of implications and future directions**
The pedagogical results of the Pantanal Sonora project have implications that extend beyond pure music pedagogy. We showed that students themselves recognize how the Pantanal Sonora project engaged them in learning about nature and science as well as music. Importantly, the program allows these connections to step out of the classroom into important modern directions in research and music creation. Our soundscape experience permits collecting data and conducting biological research, emphasizes the importance of music to core science curriculum, and renders accessible contemporary music in ways that otherwise might not be possible.

Soundscape ecology is an exciting, fast-growing field that recognizes the vast and valuable data potential in listening to nature. Modern data-driven research involves collecting many thousands of hours of high-quality audio (Towsey, 2014). This can be done cheaply and easily with modern recording and storage technology, but the challenge then becomes analyzing data, which can add up to years of constant listening time for a single researcher. Distributing the work among many researchers and assistants can ameliorate the problem somewhat, but enlisting computer assistance is much more efficient. At the cutting edge, researchers employ large computing clusters and machine learning algorithms to sift through data highlighting important features and patterns. But rather than exclude musicians from this work, the turn to advanced technology emphasizes the fundamental ties between soundscape ecology research and music.

Parsing hours of natural recordings into species counts or indices of biodiversity is ultimately a question of musical analysis: given one large piece of sonic information, how can we break it down into distinct sources, describe its organization and patterns at multiple scales, and finally compare it to other pieces? This is no less true in practice. Musicians have developed deep learning and artificial intelligence models for problems such as instrument identification (Lostanlen & Cella, 2017), chord estimation (McVicar et. al., 2014), and music segmentation (Jensen, 2006), and these same algorithms are adapted to parse ecological data from field recordings (Towsey et. al., 2014). In the soundscape school of thought, a chord consisting of a flowing river in the bass, a macaw...
call in the treble, and crickets above that is no less musically valid than a C, E, and G on the piano.

This inexorable musical connection extends to music and scientific education as well. Pantanal Sonora students succeeded at parsing meaning from a spectrogram because of their stronger academic inclination towards music. Explaining mathematically why one often sees stacked horizontal lines in a spectrogram requires deriving solutions to the wave equation, but music students immediately recognize these lines as overtone series. Music also prepares students to interpret and derive meaning from what they hear, a crucial part of the scientific process. This happens at both the immediate empirical level, such as connecting a change in animals’ sonic bandwidths over time to a change in the biodiversity of a place, as well as at the interpretive level, such as pointing to human activity (also present in the soundscape) as the cause, and thinking about how one might act differently to better preserve the environment around them.

The idea that studying music improves student performance in math and science (in addition to other fields) is not new, though a survey of the many studies of the phenomenon produces overall mixed results. Lack of a clear consensus is likely due to the complex nature of music and its impact on children’s cognitive, social, and emotional growth (Guhn, 2019). In the meantime, music continues to be underfunded and undervalued in schools as compared to so-called “academic” subjects (Major, 2012). Our program shows that the value of music can be demonstrated more directly. The structure of Pantanal Sonora does not only include both music and science together in the same program; it also allows students to be successful in difficult and unfamiliar science topics precisely through reliance on their musical skills and experience, all while practicing serious musical analysis, composition, and improvisation.

Soundscape-based music and interdisciplinary education is also inherently inclusive and supportive of diversity. As Schafer (1969) says, “behold the new orchestra: the sonic universe! And the new musicians—anyone and anything that sounds!” The very nature of the soundscape framework means that one doesn’t need to be invited or qualified in some way to participate; we are all joint composers of the soundscape whether we realize it or not, and our only decision is whether to embrace this role we already hold. Our project included students from a variety of backgrounds: rural and urban, poor to middle class. The varied experience of each contributed to a broader group awareness of the soundscape. Thus, our methodology contributes to the literature that music can be a powerful tool of affirmation for diversity in education (Hoffman, 2012). Additionally, our students demonstrated new interest and ability in science, a field where access and performance still breaks sharply along demographic lines (Lee & Luykx, 2007).

Finally, we note the success of using contemporary playing techniques and notations in this program. This came naturally; the program included a brief lesson introducing contemporary music methods but allowed students to use whatever styles and techniques they desired. The majority of students then chose new techniques over or alongside more familiar, traditional techniques simply because they could better approximate and express many of the unpitched or non-Western-tonally-pitched sounds they were hearing. Since contemporary music was simply one of many means to this project and not a primary focus of our study, we have no conclusive results to present, but want to suggest that this would be a productive direction for further research. In studies
of orchestral programming, audiences prefer the standard repertoire on average (Pompe et. al., 2013) but non-standard repertoire can be included successfully in the right circumstances (Pierce, 2000; Pompe et. al. 2011). Our work suggests similarly that contemporary practice can be a larger, more productive part of music education than previously thought when presented in a natural soundscape setting.

Conclusions
Positive outcomes of a combined music and science program are neither surprising nor new. The Pantanal Sonora project builds on previous projects and capitalizes on rethinking the meaning of “music” that dates to over a half-century ago, and which is built on tenets of abstraction of natural sound that stretch back to the dawn of human time. Our program had three primary pedagogical goals: teaching (1) modern methods, composition, and improvisation; (2) ecology of animals in the Pantanal; and (3) the physics of waves, building soundscapes and understanding biodiversity with many sounds put together. Constructively engaging music students in an ecology-music combined curriculum allows students to learn new techniques, ecology, and physics, but also represents a means of enriching scientific research and core science curricula. By collecting and organizing data through the educational program, students actively participate in and contribute to the scientific research process, supplementing existing biological data with soundscapes that can help long-term understanding of changes in biodiversity. Finally, this program generates interest in both core scientific principles and music in ways that might not be possible if music and science are taught separately. In an era when music education is viewed more and more as a superfluous pastime, we hope that programs like this can highlight its intrinsic and extrinsic value to education, science, and culture in the world as a whole.

References


A methodological proposal for dyslexic from the perspective of inclusion music education
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Abstract
Dyslexia is a learning disorder and is characterised by specific difficulties in reading and writing. The importance of music education for individuals with dyslexia as a form of educational practice can enable an important supporting component during the learning process of writing and reading. After the systematic review of the literature with reference to the relevance of Music Education with Dyslexia, the objective was to carry out a case study in an inclusive group of cello class with methodological adaptations in the Cordas da Amazônia Program - PCA of the Music School of the Federal University of Pará - EMUFPA for students with dyslexia, in order to stimulate the learning of writing and musical reading. Twelve students aged between 09 and 14 years participated in this study. The evaluations were made by means of three stages: 1) Musical Learning Assessment Scale - MLAS that comprised the apprehension of theoretical-practical knowledge, 2) and 3) Theoretical-Musical Assessments I and II (MTA I and MTA II) which involved musical theoretical learning. The results of the evaluations cited were submitted to analysis, categorized and exposed in graphs to demonstrate the performance of musical learning of students with dyslexia, in relation to reading and writing music. It is important to carry out more studies aimed at Musical Education and Dyslexia for expansion and contributions which may provide strategies in the methods employed to assist the needs of students with dyslexia, as well as the training of professionals interested in the area of inclusive musical education.

Keywords: Music education, dyslexia, inclusion.

Introduction
Musical education for dyslexics can be an effective means of social inclusion, promoting a strong involvement in the neurological level (Andrade, 2004 & Emmerson, 2013). Andrade suggests that learning or musical development would be able to harmed alterations in the brain morphology, favoring the acquisition of skills that were impaired by development intercurrences. In this way it is possible to make the relationship between music as an environmental stimulus and cognitive development, thus enabling the development of language and writing for dyslexic (Ben, 2003).

The association of knowledge linked to a facilitating and/or adaptive didactics in the teaching-learning process can contribute to minimizing the disorders and/or problems that exist in people with dyslexia. The process of education for dyslexics is complex because it is a set of several variables, for example, the environment, the applied methodology, the curricular organization, resources used, the professional educator and finally, the student. During this whole teaching process, the student with or without dyslexia will be the reflection of what has been offered, it is not only the student’s
responsibility to learn but also a set as mentioned above (Almeida, 2002; Swanwick, 2003; Andrade, 2004; Ciasca, 2004).

Even with the vast literature about dyslexia, the ideal model of intervention has not yet been clearly defined. It stands out that the importance of the formation of a multidisciplinary team in the attention to the subject with dyslexia can be effective, both in the identification of the disorder and level of impairment of reading and writing skills, and in the identification a model of intervention adequate for each case, given the specificities of the ontological history of each individual (Pestun et al., 2002).

The researchers of this research aimed to carry out a case study in a group of cello groups in the Cordas da Amazônia Program - PCA of the School of Music of the Federal University of Pará - EMUFPA for students with and without dyslexia in order to suggest the adaptation of a musical teaching methodology for students with dyslexia, seeking to understand how musical education can positively influence the process of creating language development and its possible contributions to dyslexics.

Based on the assumption that learning is a process involving multiple variables, and in the case of reading, a highly complex process because it involves neurological, sensory, psychological, sociocultural, socio-economic and educational aspects (Pestun et al., 2002). Deficiencies in one of these aspects may reflect learning disorders, and one of the most frequent in the population is DISLEXIA, which is a dysfunction of the central nervous system, characterized by difficulty in acquiring or using reading and/or writing (Ciasca, 2004).

The learning process is recognized as a neurocognitive process, therefore, sensory stimulation would be an efficient tool to subside cognitive deficits and also to stimulate participation in programmed activities without this being a traumatic experience for the dyslexic, since the difficulties it faces in the learning process, have emotional consequences, sometimes severe (Estill, 2004; Salgado & Capellini, 2008). In this sense, understanding the musical activities suggested by researchers who have been studying dyslexia can be an effective tool in musical intervention in dyslexics. Therefore, initially for this research it was questioned why it is necessary to perform methodological adaptations in music education to ensure musical learning as well as to help the language development of students with dyslexia?

Methodology
For the musical intervention of students with dyslexia it was necessary to perform a training focused at the monitors that would act in this intervention, as well as to make them aware about what dyslexia is and its main characteristics and needs. This training was carried out in the PCA, by means of the research group of the Development Disorders and Learning Difficulties Project - PTDDA, and it was organized by sub coordinators of each PTDDA group according to the research objectives. This course aimed to clarify to the interested parties about: (a) What is the Cordas da Amazônia Program?; (b) Who is the PCA coordinator?; (c) What is the Development Disorders and Learning Disabilities Project in the PCA?; (d) What are the cello methods addressed by the PCA?; (e) Do the methods meet the needs of students with dyslexia regarding theoretical music learning? and (f) what evaluation tools does the PCA use?

After the PTDDA/PCA Dyslexia research group, met after the training course to define which materials would be used, such as, for example, documents such as the
Enrolment Form, Free and Informed Consent Form - FICF, as well as the preparation of the intervention schedule, lesson plans and preparation of the environment.

From the established needs, a class was offered to students with dyslexia, where it was observed the importance of promoting the adaptations of the North American and Suzuki cello methods used in the PCA in order to contribute to the theoretical-practical performance of the students in the process of musical learning.

After the intervention of dyslexia was performed the analysis of the data collected from the class involved with the research in question, was analyzed to verify the efficacy and/or possible contributions or not of such methodological adaptations for dyslexics.

The research project was presented to the coordination of the Nucleus of Attendance to People with Specific Needs/NAPNE of EMUFPA. Afterwards, the participants' guardians were asked to sign the TCLE. The evaluations and data collection of the inclusion of students with dyslexia was carried out by a Ph.D. in Music Education, two scholarship holders, and a cello teacher both linked to EMUFPA, a phonoaudiologist and a psychologist. The procedures to evaluate the participants included four evaluations of the Musical Learning Assessment Scale (MLAS) and three evaluations of Musical Theoretical Assessment I and II (MTA I and MTA II), over a period of 5 months. These evaluation processes were recorded by the PCA researchers.

The class was offered twice a week, lasting 1 h/a. A musical educator and cellist ministered the musical interventions assisted by two students of the Full Degree Course in Music (Monitors). Two students from the Graduate Program in Arts of UFPA - PPGARTES and one student from the UFPA’s cello Technical Course were involved in this research. Twelve participants were selected from both genders, aged between 9 and 14 years, being children and/or adolescents five diagnosed with dyslexia and seven typical or with other disorders, forming an inclusive group.

The musical intervention took place inside the PTDDA, in the experimental environment: Experimental Laboratory of Music Education of the Cordas da Amazônia Program of the Music School of the Federal University of Pará.

The following materials were used in this research: Registration Form, Free and Informed Consent Form, circulars, violoncello material, adapted violoncello material, violoncello instrument, support for support the instrument, arches, rosin, chairs, musical notes, posters with notions of musical theory, clipping of words, white glue, scissors without tip, colored pencils, magnetic board, typescope/ Assistive Technology, clips and teaching plates.

At the beginning of the classes, a baseline assessment was performed using the Music Learning Assessment Scale. The application of the scale took place individually with each student, and a teacher exposed the command of the task for the student, and two independent observers completed the scale. After the baseline evaluation, three more evaluations were performed using the MLAS. At the end of the intervention, discussions and analysis of the collected data were made. The following evaluations were performed:

1. Musical Learning Assessment Scale - MLAS: as to the evaluate musical learning was used the MLAS, a 10-point Likert-type scale developed in the EMUFPA’s Cordas da Amazônia of Program (Defreitas, 2005). This scale is composed of 5 items referring to the instrumental cello technique, 1 item referring to the theoretical understanding, and 1 item referring to the student's attention. The items evaluated were: Instrument Position and Musician Posture/IPMP; Left Hand
Position/ LHP; Right Hand Position/ RHP; Sound Quality/ SQ; and Tuning/ T; and Theoretical Understanding/ TU.

2. Musical Theoretical Assessment I (MTA I): MTA I aimed to verify the student's theoretical musical learning by means of reading and writing. This was developed from the theoretical content approached by the PCA, and it was composed of six questions related to: Identification of the Types of Claves/ ITCL; Musical Notes Sequence Identification/ MNSI; Identification of Musical Notes Figures/ IMNF; Identification of Musical Notes in the Pentagram/ IMNP; Identification of the Musical Bars Types/ IMBT; Identification of the Types of Simple Musical Time/ ITSMT.

3. Musical Theoretical Assessment II (MTA II): it was performed collectively with all students in the classroom, by a teacher and a monitor for support. The MTA II was applied similar to the testing suggested by Adams et al. (2006) and its maximum score is 30 points/ pts. For this research was carried out the adaptation of the methodological approach of theoretical assessment for students with dyslexia, in order to verify the student's theoretical musical learning by way of reading and writing, consisting of the following items: (a) Identifying rhymes-4pts, (b) Counting syllables-5pts, (c) Combining initial phonemes-6pts, (d) Counting phonemes-5pts, (e) Comparing the size of words-5pts and (f) Representing phonemes with letters-5pts.

The MTA II can be reapplied in the interval of one month with all students, and the results can be used to monitor or observe the advances of the components of each group. If when repeating one of the students presents unsatisfactory results in any of the six topics of this evaluation, it is suggested that more attention be given to the activities related to this particular item that the student presented difficulties, before the next application.

Results and Concluding Remarks
In the field of inclusive musical education, the results obtained in this research aimed to demonstrate the importance of adapting the cello methods addressed in the Amazon Strings Program to meet the needs of students with dyslexia, in terms of theoretical and practical musical development.

After all the evaluations performed by way of the MLAS, the analysis of the data obtained was initiated. These were categorized for understand regarding cello musical learning into: Instrument Position and Musician Posture/ IPMP, Left Hand Position/ LHP, Right Hand Position/ RHP, Sound Quality/ SQ, Tuning/ T and Theoretical Understanding/ TU.

Figure 1, shows the performance of students with dyslexia from the 1st to the 4th evaluation of MLAS, points out that even if they have learning difficulties, they are able to learn through music education, showing that this can be an additional tool to the learning process for dyslexics.
Still looking at Figure 1, it is noticed that all students with dyslexia had an increasing performance in relation to the cello teaching performed. However, analyzing the graph in detail, student A was the one who had the lowest result, and student E had the highest performance in relation to the others when comparing the four evaluations of the MLAS. After analyzing the results of the evaluations of the MLAS, are exposed the results of the weightings of the Musical Theoretical Assessments I (MTA’s I), in order to highlight the learning indexes of musical reading and writing learned during the lessons the classes in the intervention. This was performed one day after the 1st, 2nd and 3rd evaluation of musical learning.

Figure 2 below refers to the overall performance of students with MTA I dyslexia. Despite their difficulties with reading and writing, the graph shows that it was possible for them to learn from the music teaching to understand what musical reading and writing is like, perhaps this is possible due to the fact that music stimulates regions of brain plasticity impaired by the disorder.
After evaluating the results of the assessments of musical learning by means of the MLAS and MTA's I, the analysis of the results of the evaluations of MTA's II are exposed. Theoretical Musical Assessments II (MTA II) was performed one day after the 1st, 2nd and 3rd evaluation of MTA I. Also, unlike the 1st evaluation of the MLAS, all students have already demonstrated some theoretical knowledge of symbols and/or musical codes in the first application of MTA II.

As for the overall performance of students with dyslexia at the MTA II, it was observed that they were able to understand what musical reading and writing is like, and how this musical learning may have stimulated their processes and skills in reading and writing music.

Given the results of the evaluations of the study carried out, the importance of promoting the adaptation of methodologies aimed at people with learning disorders and/or difficulties is emphasized. Suggesting by means of this research the adaptation of methodologies by way of music education to people with dyslexia, since it can become a means of social transformation, contributing to assist and/or empower students with specific needs during the process of teaching learning.

Proposing a methodology for dyslexics also requires great care with the pronunciation and writing of words, since for these it is of fundamental importance to have a visual aid of the spoken word, to understand the reading. In the theoretical musical evaluations, figures were used to support the student during the process of reading and writing music. All the theoretical musical evaluations were oralized by the teacher-conductor during the course of the questions.

From the situations reported in Musical Theoretical Evaluation I (MTA I), it is suggested that the educator be interested in making adaptations for students with
dyslexia, the main care with orality and visual materials, the whole word should be spoken slowly and if necessary a little stronger to facilitate understanding to the student. At the MTA II, students found it very difficult to identify rhymes through word drawings associated with a particular musical excerpt.

Campbell (2009, p. 151), warns that the educational institutions are these regular, or specialized; "must be adapted to the student according to their needs, respecting their rhythm, recognizing their normal human differences, without imposing pre-established pedagogical rituals," enabling a methodology focused on the potential for overcoming limits. In this way, when relating inclusion with musical education, one must pay attention to the need for awareness of the musical educator about the inclusive context. If they do not know what is inclusion, inclusive education and its multiple faces; they will hardly be able to assist a student with learning disorders and/or difficulties.

Highlighting the inclusive intervention performed in cello teaching aimed at students with dyslexia, it is observed the concern and care of the teacher-regent and the multidisciplinary team, as to the understanding about disorder in question, its needs and adaptations, either in the methodology of the contents addressed, as well as in the evaluations, to aid in the musical educational development.

Although dyslexic presents cognitive deficits as difficulties for reading and writing, from the practice of an adaptive methodology to adapt their needs by means of music education, it is believed that it has enabled students an educational stimulus that favored the growth of their performance in relation to the teaching of cello.

The collective teaching of musical instruments has its advantages, because it is considered by scholars in the area of musical education an important stimulus for the student who is starting, allowing him to develop more in less time in class, as a result of the pedagogical techniques used during group teaching (Cruvinel, 2003; 2005). To establish an inclusive music education we must rethink our actions, seeking to promote the integration of all, with heterogeneous and diverse practices.

The research in question, when making use of the collective practice of cello, concerned with the needs of students with dyslexia, allows us to rethink how to make music today. The results of this research, although relevant, cannot be isolated. The study in question is not an ideal model for intervention. However, it is a harbinger of a first step in which one day one would hope to achieve and enable inclusive music education for people with learning disabilities in society.

It stands out the importance of performing more musical interventions, aimed at the public with dyslexia, for the expansion and effectiveness of the proposed of methodological adaptation, allowing the development of its musical performance and providing to it when starting a study in an instrument the continuation of a technical and higher education in music. Besides enabling and contributing to professionals interested in these area probabilities of discussion about dyslexia and its relationship with music education.

References


Rethinking inclusive music education: proposal for teachers training for dyslexic students in school

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Abstract
Music education is of great importance to the individual’s development for being a mediator with regard to verbal skills, mental, physical, emotional and social. However, it is possible to do the relationship among the music as an environmental stimulus and cognitive development, thus enabling the development of the language and writing for the dyslexic, since by means of music education can provide an increase in the quality of life, besides it can be develop motor skills, sensory and social of the individual. Starting from this assumption, this doctoral research entitled “rethinking inclusive music education: the construction of a training proposal for teachers in the students' inclusion with dyslexia in the regular school”, and is affiliated with the research line 3. history, criticism and arts in education, of the Graduate program in arts of the UFPA. The study’s main objective is of building a training proposal for teachers in the students' inclusion with dyslexia in the regular school. Teachers of arts and special inclusive education, from regular schools in the municipality of Ananindeua and Belém, will participate in this study. They will be divided into two groups, with intention of qualifying them about teaching strategies aimed to students with dyslexia in the regular school. It is expected to achieve a training proposal for teachers highlighting the importance and contributions that has provided the adaptation of methodologies they assist to the students’ needs with dyslexia, as well as in the training of these professionals interested in inclusive music education.

Keywords: Inclusive music education, teachers training, dyslexia and music, inclusion in the regular school.

Introduction
This research starts from the need to understand what it is like to learn the arts from music education in elementary schools, to students with dyslexia. The relationship of art with its different languages, such as music, allows the appreciations associated with the concept of art as a cognitive experience is enabling the emergence of postmodern theories regarding how this art is assimilated and transmitted. It is noteworthy that art as a language that exacerbates the senses imprints meanings that cannot be transmitted by any other means of language, whether discursive or scientific. Emphasizing that among the arts, such as music, because they have sound as their raw material, they enable us to feel and perceive who we are, where we are from and what we feel, when listening to a certain music or sound (Barbosa, 2009; Schafer, 2011; Hummes, 2004).

Ferreira (2001) warns that for students the teaching of arts, whether as a personal expression or culture, it is essential for the cultural identification and individual development of the subject in which one wants to be reached. By means of this teaching students have the opportunity to experience artistic activities, which promote in the
development of their self-esteem, perception and imagination to learn the reality of the environment, and develop the ability to symbolize, analyze, evaluate and judge, making thinking more flexible. It also allows for a broadening of the aesthetic and critical sense regarding the specific arts-related skills, stimulating the ability to better express one's feelings and ideas, broadening the understanding of the relationships between the part and the whole, and understanding that the arts are a distinct way of appreciating and interpreting the world around them.

Barbosa (2009), warns that it is possible to see that Art can contribute in an extraordinary and significant way in the teaching-learning process, as well as in the process of rescuing and creating new articulations involving popular culture, mainly because interdisciplinary and contextualized, respecting students' experiences.

However, it is also important to emphasize that teachers are open to changes, in order to further deepen their knowledge, leaving behind the fixed practices of tradition, aiming at understanding developmental psychology, in order to “build alternatives that meet the needs in the different contexts in which music education can act, always committing itself to a project of democratization of access to art and culture” (Penna, 2008, p. 63), thus allowing teaching art in a more humanized and technological way, since we experience creation of art in technological environments. Therefore, should be discuss the vision regarding this technological creation of the arts, for a better understanding of the ideologies and theories related to these works (Nunes, 2006; Hummes, 2004).

Based on the justifications emphasized above about the importance of teaching arts, whether in its various languages: plastic and/or visual arts, dance, theater and music; should be pay attention to its characteristics and diversified existing teaching methodologies, seeking knowledge, improvement of their techniques and possible methodological adaptations when necessary during the teaching-learning process.

Based on this assumption, the experimental place of mediation of art can be the classroom, being transformed into a laboratory, thus enabling learning both for the student and the teacher, allowing both lived experiences relating art and music with inclusion. In this sense, this work arises from the need to provide opportunities and clarify arts professionals with training in music education, about what is dyslexia? How is it manifested? If it occurs in the same proportion in the world? And what is its relationship with learning and literacy? What are the possible guidelines we can establish to assist the students with dyslexia? What strategies should be considered during the student’s learning process with dyslexia? And how can music be a facilitator in the process of developing the language of dyslexics?

According to the Diagnostic and Statistical Manual of Mental Disorders - DSM-V (2013) dyslexia is characterized by a specific reading and writing learning disorder in children with normal intelligence, without sensory and motor disorders. On the other hand, it is necessary to differentiate its diagnosis from what is known as learning disability, which has its origin in environmental factors such as inadequate teaching methods, inappropriate educational environment, teachers without adequate training; and not congenital as in dyslexia.

It is estimated that 5 to 17% of school-age children are affected by dyslexia, which is considered a central nervous system dysfunction, characterized by difficulty in acquiring or using reading and/or writing (Alves et al., 2011). There are two types of
dyslexia: (a) developmental dyslexia, related to learning disorders, with reference to the teaching model, i.e. the environment is an important aspect in developmental dyslexia, also associated with brain dysfunction and (b) acquired dyslexia, which originates from acquired brain lesions (Alves et al., 2011).

Researchers (Landry et al., 2002; Vellutino et al., 2004; Emmerson, 2013; Przybylski et al., 2013) emphasize that developmental dyslexia has several determining factors, including: cognitive deficits, neurological factors, genetic predisposition and environmental factors. The relevance of environmental factors is observed, because aspects such as inadequate instruction and lack of stimuli in childhood can interfere with the child's neurocognitive development, therefore they are described as precedent of learning disorders such as dyslexia in the literature.

It is known that the “ideal” model of intervention is far from being achieved, however, multidisciplinary assistance to the individuals with dyslexia is highlighted as the best option, both in identifying the disorder and level of reading and writing skills impairment, and in identification of an appropriate intervention model for each case, given the specificities of the individual's life history (Pestun et al., 2002).

These questions above highlight the importance of training and formation of a multidisciplinary team, as well as the awareness of teachers of regular schools; the attention to people with the disorder in question, by means of the development of new perspectives, new approaches and the integration of different perspectives, contributing to new possibilities of resources or expansion of these that help these individuals.

Objective and Methodology
In this topic, the research procedures and instruments will be guided by the goals that guide it. And will be selected from the descriptions below.

In order to suggest the construction of a proposal for teacher training in the inclusion of dyslexic students in the regular school, an exploratory research is sought to achieve the objectives discussed, in order to assist by means of inclusive musical practices, the student with dyslexia and the teacher. For this, the starting point will be the bibliographic review of research already carried out in relation to music education and dyslexia, as a way to conduct and meet the demands of people with learning disabilities, such as dyslexia, enabling the expansion of strategies for both educators and relatives of the subject in question.

Research Design
This research represents an exploratory study and seeks to understand the needs of students with dyslexia in the regular school environment. In order to achieve a proposal for teacher training highlighting the importance and contributions that they has in providing the adaptation of methodologies that meet the needs of students with dyslexia, as well as in the training of these professionals interested in inclusive music education, a bibliographic review will be carried out in order to collect, substantiate and structure the materials that will be used during data collection.
Methodological Actions: Training Course
In order to improve the quality of life of individuals with dyslexia, this project proposes a “Training Course” - for teachers of Arts with Music training and/or Special Ed. of the regular school, where it will be held in the UFPA's Graduate Program in Arts and in a municipal school, with professionals from a regular school in the municipalities of Ananindeua and/or Belém.

Under the general direction of prof. Advisor of this project, the course will have the support of professionals from different areas, such as: music education, speech therapy, psychologist, and pedagogy to assist in the execution, i.e., with the necessary structure to carry out this research promoting the training of professionals of the regular network in the field of inclusive music education.

Search Interlocutors
Teachers from the areas of Art, preferably music and Inclusive Special Education, from the municipal and/or state networks of the municipalities of Ananindeua and/or Belém will participate in this study.

Inclusion criteria
The effective/or temporary professionals of the municipal and/or state education systems who are regularly enrolled in the Secretaries of Education of the municipalities of Ananindeua and/or Belém, they are active in the classroom will participate in this research, pre-selected for the research. The signature of the Free and Informed Consent Form - FICF will be required.

Exclusion Criteria
The participation of permanent / temporary professionals from the municipal and/or state schools regularly enrolled in the Education Secretaries of the municipalities of Ananindeua and/or Belém who are not active in the classroom, and who does not submit the signed FICF, will not be allowed.

Ethical Research Procedures
1. Ethical Committee: The study in question will be submitted to the ethics and research committee by means of Plataforma Brasil, since it is research involving human beings, and is one of the criteria required for its accomplishment, since it establishes the ethical security of the relationship between parties involved in the research. This aspect promotes the formalization of the research and the permission to use the data collected in the research preserving the identity of the participants who proposed to participate in the research. In the procedure for the acquisition of ethical aspects, the research project will be presented to the research interlocutors requesting their authorization to collect data who, upon agreement, they will sign the FICF.
2. Free and Informed Consent Form - FICF: Research participants will be asked to sign the Informed Consent Form and Authorization Filming Consent Form, as the audiovisual materials resulting from the filmed sessions will be used exclusively for supervision, not will be disclosed to third parties for any other purposes. Reports resulting from field observations and evaluations will be made available.
to PPGARTES/UFPA, safeguarding the anonymity of the participants involved and not mentioning names, information or identifications (described or audiovisual) leading to their identification.

Research Location
Experimental Laboratory of Musical Education - ELME. The Training Course will take place at the Experimental Laboratory of Musical Education - ELME, located in the UFPA's Graduate Program in Arts - PPGARTES. And regular schools in the municipality of Ananindeua and/or Belém.

Instruments and Techniques
1. Initial / Final Anamnesis: Anamneses: Initial and Final, will be performed by each professional participating in the research, in order to observe and analyze the teacher's teaching practice before and after the training course. Dyslexic students will also participate in anamnesis to observe and analyze the initial and final learning development of the dyslexic student.

2. Lectures to be held: Lectures will be given during the training course with the purpose, especially to clarify about dyslexia and theoretical and practical studies related to it, focusing on the teacher's behavior in the classroom approaches such as: (a) What is dyslexia? (b) What is the conduct adopted by the school to meet the needs of students with dyslexia? (c) How do teachers and students deal with children with dyslexia? (d) How to dissociate the dyslexic student from school failure? and (e) How can teachers be more skilled and how to empower them to deal with students with dyslexia? (f) What are the benefits of music education for dyslexics?

3. Tiposcope: is an Assistive Technology that will be used with professionals of training classes 1 and 2 to make it easier to view and read the portion of the song or text in which it will be studied. This will be made of colored cardboard, and will have two different sizes of windows/openings, one narrower and one wider, being fixed to the booklet with clips.

4. Didactic Plaques: The didactic plaques will be used in the training during the classes, in order to assist in the visualization and comprehension of the evaluation.

5. Frequency Assessment: will be carried out to ensure the progress of the research, as well as to verify the performance of the professional regarding the frequency and its use in the classroom. Attendance to classes and other activities will be mandatory and allowed only to professionals from municipal networks in the areas of art/music and/or special education. This will be indicated by the signs: P/present, F/absent, A/delay and J/justified absence. At the time of intervention at the municipal and/or state school, they will also be performed the frequency of students with dyslexia. And for the identify students with dyslexia, they will have the asterisk symbol (*) appended to the end of their name on the frequency list, if such information is required to the teacher during the learning process.

6. Reporting Assessment: Will consist of checking for occurrences in the classroom as well as of the professionals who are absent or late. It will consist of 5 objective questions in which the professional at the end of each class meeting will immediately fill it out.
7. Evaluation of the Research Questionnaire: Semi-structured Interview Screenplay: the survey of information on socio-demographic data, educational aspects of the teacher, and preferences and history of relationship with sounds and music in the art content: (a) Regency Field Observations and Daily Reports: Observe and verify teacher’s practice after course, what is being applied or not? What are the difficulties? Possible suggestions for process improvement?; (b) Assessment of dyslexic student performance: aims to verify the development of this student after the adjustments and considerations made by the teacher after the orientations listed in the training course; (c) Teacher performance assessment: aims to identify its development before and after the adjustments and considerations made of the training course, what is being applied or not? What are the difficulties?

Data analysis
The data obtained in this research will be literally transcribed, categorized and analyzed together with the documents evoked in the research. For content analysis, the answers will be grouped in blocks and separated into categories of analysis according to the specific objectives. The perception of the interlocutors involved in the agreement and disagreement will be analyzed.

Results and Concluding Remarks
In this topic is presented the results achieved, after reviewing the literature, highlighting the importance and the need to suggest the construction of a training proposal for teachers in the inclusion of students with dyslexia in the regular school, to promote the development of dyslexic student and teachers. When making the relationship between the Dyslexia to the context of inclusive education, attention should be paid to some aspects to be considered, such as the educational performance of the educator and the actions that he must have in relation to a given inclusive context.

Inclusion requires a restructuring of the teaching system aiming at the institution open to differences and competent to work with all teachers and professionals involved, regardless of color, class, gender or personal characteristics, such as specific disorders and needs, as indicated by Campbell (2009):

The democratic principle of education for all is evident only in the educational systems which specialize in all pupils and not just some of them, disabled pupils, as not only disabled people are excluded but also those who are poor, they do not go to classes because they work, those who belong to discriminated groups, those who from so much repeating have given up studying (Campbell, 2009, p. 136).

Rethinking inclusive music education can become a way of motivating and enabling understanding as an attempt to stimulate the learning for students with learning disabilities and/or learning disorders in the educational system, enabling and ensuring access to their rights. Thus, allowing everyone to be a citizen of law in the regular schools, welcome and accepted, forming part of the life of this community. When identifying a learning disorder in the educational field, it is essential to analyze and understand which are the specific mechanisms that will support the effectiveness of the assistance to dyslexic students and will subsidize the teacher works in elementary school.
(Ciasca, 2003). However, must be learn to live and interact with people who have different skills and competences to achieve the expansion of ethical values such as human dignity, respect for others, equality and solidarity (Shaywitz, 2006).

References


Coloniality in music teacher education: The current reality of undergraduate programs in Brazil

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Abstract
This paper presents the research outcomes of a study conducted on Brazilian music teacher education programs over the last ten years. The research investigated undergraduate programs of the 20 most prominent Brazilian universities, taking consolidated institutions from all regions of the country into consideration. The paper aims to reflect on the traits of coloniality that impact music teacher education as well as the strategies incorporated by undergraduate programs to address this factor. Based on a transdisciplinary theoretical approach, the study dealt with the essential concepts of understanding the current reality of music in higher education by considering the trajectory of coloniality and exclusions that characterized the country. The analyses are supported by an extensive qualitative research approach, which includes bibliographical and documentary research. The findings provide evidence that although the goals and other theoretical definitions of the educational projects consider the diversity of context and music to be pursued throughout the program, the content, knowledge, and curriculum framework continue to hold onto patterns and models which originated from coloniality and its cultural features.

Keywords: Coloniality, Brazilian Music Education, Undergraduate Programs, Teacher Education, Musical Culture

Introduction
Brazil is a country characterized by its broad diversity of people and cultures. This trait is the result of a complex blend of ethnic groups, customs, conflicts, exclusions, and dominations. Music has always been a vital social phenomenon responsible for expressing the identities, diversity, and particularities that represent the cultural melting pot that is Brazil.

Despite the effervescent diversity that constitutes the music-making process throughout the country, music came to be institutionalized in Brazilian education due to an intensive process of colonization. This trait has established since the sixteenth century, a formal music education that does not relate to the cultural diversity of the country. The consequence is that it has been excluding, from universities and other schools of music, several music expressions, their practitioners, and cultures in general.

Hence, it is currently vital to work on the visions of equity and diversity that promote dialogues and interactions between the Brazilian institutional music education and the rich culture of the country. Considering this perspective, this paper aims to discuss and analyze the current reality of music teacher education in Brazil by
considering the trajectory of coloniality, exclusions, achievements, and proposals in music teaching and learning.

The analyses were conducted over the last ten years, taking a qualitative research approach. The research universe encompasses 20 consolidated universities—four institutions from each region of Brazil—taking the regional particularities, institutional history, and representation of these music teaching institutions into account. The main data collection procedures were based on theoretical approaches in music, music education, sociology, anthropology, and correlated fields as well as documentary research encompassing education projects in Brazilian universities, among other sources related to music history, music and education policies, and music pedagogies in the country.

Coloniality: The Concept, Trajectory and Impact on Music Education

The conquest of Latin America became a constitution landmark of “new world order,” as conceived by Quijano (2010, p. 22), which culminated over 500 years later in a “global powering that covers the whole planet.” This conquest process was established based on historical colonialisms that “implied a violent concentration of the world’s resource under the control and for the benefit of a small European minority—and above all, of its ruling classes” (Quijano, 2010, p. 22).

The concept of coloniality emerged in the late 1980s and early 1990s from the works of Peruvian sociologist, Aníbal Quijano (Quijano, 2007). Since the 2000s, Latin American scholars (Mignolo, 2011; Mignolo, 2012; Maldonado Torres, 2007; Walsh, 2013; Walsh, 2017) have worked on this concept in-depth, and it has gained notoriety in different areas and contexts around the world.

Coloniality “[…] names the underlying logic of the foundation and unfolding of Western civilization from the Renaissance to today of which historical colonialisms have been a constitutive, although downplayed, dimension” (Mignolo, 2011, p. 2). Thus, coloniality is one of the mainstays of modernity, and its consequences are still a cultural pattern for/in colonized countries.

While the domination of Western European culture has been intense in various cultural expressions and fields of knowledge, this trait has been overly dominant in the field of music, especially concerning its institutionalization. The celebration of a few sets of music expressions composed in European countries, mainly from the sixteenth century, has perpetuated thoughts and values, projecting Western classical music as the primary and most valuable music style in the world (Queiroz, 2017).

The consequence of this process is that European classical music, and its derived musical expressions, equivocally became the “absolute culture” that, because of its colonial label of “noble art,” is still considered for many music teachers the main type of music that deserves to be taught, studied, performed, and researched into formal music institutions worldwide. We cannot deny that there have been some advancements in institutional music teaching and learning and that other types of music have gained notoriety in this context, at least since the 1990s. However, we also need to recognize that European-centered music is still the main focus of formal music education (Moore, 2017).

In this context, the concept of coloniality is vital to understand the music institutionalization process in Latin American countries. The hegemony of Western classical music has dominated the institutions of music to the detriment of other regional,
national, and international music cultures. This fact, which represents the reality of music and several other artistic expressions, is directly related to the “massive and gigantic extermination of the natives”, their knowledge, and their artistic expressions. It is the result of the “cultural repression and the colonization of the imaginary” that have been imposed on Latin America since the European conquest (Quijano, 2010, p. 22–24).

Based on this perspective, coloniality is a critical concept to understand and analyze the reality of music education in Brazil from its history till date. The country, colonized by Portugal from 1500 to 1982, has institutionalized music education by reproducing the goals, content, curricula, repertories, teaching, and learning strategies, among others, defined and consolidated in Europe. In Brazil, as in many countries, the coloniality continues to be “alive in textbooks, in the criteria for good academic work, in culture, in common sense, in the self-image of peoples, in the aspirations of subjects, and many other aspects of our modern experience. In this sense, we breathe coloniality into modernity every day.” (Maldonado-Torres, 2007, p. 131).

Music and the Institutionalization of Music Teaching in Brazil
Towards the end of the 19th century and the beginning of the 20th century, Mário de Andrade interpreted the reality of Brazilian music production, impressing upon the nationalist ideological dimension, as radical as it may seem, showed himself shocked with the colonial features that composed Brazilian music at that time.

[...] the music that is composed here, whether religious or not, assumes all the hideous aspects of virtuosity. It is an embellishment that is totally unrelated to the spiritual progress of the collective; useful for few; a disturbing ritual that accompanies the bosses and grants them, from month to month, on the eyes of the crowds, the miracle of transfiguration. (Andrade, 1991, p. 18, our translation into English)

This quote is a claim for music production that, somehow, did not resign itself to the impositions that had emerged ever since colonization—impositions which, once incorporated as the ideal way of making music, turned our composers and musicians into mere repeaters of the compositional and interpretive forms and models. They believed that by dominating those models, they would be able to create music that sounded “civilized” to the point of being accepted and recognized by the colonizing nineteenth century European critics.

With the same inclination, music teaching became institutionalized in Brazil due to initiatives to include classical music as a vital component to civilize the country. Under this perspective, the first formal school of music in Brazil was founded in 1948. (Augusto, 2010). The Imperial Conservatory of Music was created based on the European conservatory-based model and provided guidelines to establish several other schools of music in different regions of Brazil. Over the history of Brazilian music institutionalization, this model served as the framework for music teaching throughout the country.

Considering this reality, current studies have been questioning this hegemonic tendency in higher music education by reflecting on and analyzing several other possibilities that emerge from the diversity of music that characterizes Brazilian culture (Couto, 2014; Queiroz, 2015; Queiroz, 2017). However, although some new perspectives
in music education are now present, it is critical to recognize that teaching classical music and its canons is still a dominant perspective in music institutions. This tendency results from what Pereira (2012) conceived as “conservatory-based habitus.” This habitus, in turn, is explicit in higher education curricula in Brazil (Pereira, 2012).

Facing the strength of the coloniality traits and many exclusion processes evidenced in higher education in music, we approach the 21st century as a new era for the field of music in Brazil. This is an era marked by the problematization of dominant hegemonies in the institutional teaching of music and by the ascension of new knowledge and social groups that constitute national culture.

The main objective of this research project emerges from this framework insofar we foresee how vital questions of the contemporary world have interacted and engaged in dialogue with music education at the undergraduate level. More specifically, the primary reflection that we pursue through the course of this paper is as follows: How have traits of coloniality impacted music teacher education programs, and what strategies have these programs incorporated to react to this feature?

**Coloniality in the Current Music Teacher Education Programs**

The data gathered on the current reality of Brazilian higher education in music and a comprehensive analysis focused on the undergraduate music teacher education programs indicate that colonial traits continue to remain steady at this educational level, although the programs provide some perspectives for change. In the following sections, we analyze some particular aspects of this reality.

**Program Goals and Alumni Profiles**

The research data shows that all of the programs covered in this study aim to educate music teachers to work in a broad set of educational levels and teaching contexts such as regular schools—elementary, secondary and high education—conservatories, other specialized music institutions, non-profit organizations, community culture educational projects, and so on. This trait is linked to a worldwide perspective in the field of music, and also in education in general, that considers diversity as a human right, which should be incorporated by contemporary educational programs (Unesco, 2001; Queiroz, 2015). Thus, educating music teachers to work in a varied set of contexts is an essential part of dialoguing with the diverse demands that characterize the current society.

From the same perspective, alumni profiles are expected to be diverse and linked with the social demands, job markets, and current reality of music as a cultural and humane phenomenon. We found this diversity-based trend in the educational projects of all the institutions we researched. It is worth noting that the goals and the alumni profiles propose dialogues that rupture traditional music teaching in Brazil. Thus, we consider this trait as a decolonial perspective incorporated, at least theoretically, by the music teacher education programs.

**Contents and Knowledge**

Requests for changes in higher music education have echoed nationally and internationally principally from 2000s. These claims are mainly related to the needs to incorporate, these days, other contents and knowledge, new educational strategies, and
vary curricula arrays to promote dialogues and interactions between institutional teaching and the reality that characterizes musical cultures around the planet.

Requests for changes in higher music education have stronger echoed nationally (Couto, 2014; Penna, 1995; Pereira, 2014; Queiroz, 2015; Queiroz, 2017) and internationally (Campbell, Myers, Sarath, 2016; Green, 2001; Moore, 2017; Nettl, 1995; Talty, 2017) at least since the 2000s. These claims are mainly related to the need to incorporate other types of content and knowledge, new educational strategies, and varied curricula to promote dialogues and interactions between institutional teaching and the reality that characterizes musical cultures around the world.

This debate in Brazil (Queiroz, 2017), the United States (Moore, 2017), the United Kingdom (Minors, Burnard, Bath, Shihabi, Walt, 2017), and many other countries, strongly emphasizes two main objectives to work on: 1) Create strategies and actions to overcome the hegemony of Western classical music and derived music teaching tendencies produced in Europa until the 20th century; 2) Include and promote music education based on, and integrated to, the local, national, and global cultural diversity.

However, the research outcomes clearly show that the content and knowledge worked on in music teacher education programs are still dominated by Western classical music and its pedagogical features in Brazil. Consequently, although the program’s goals include proposals centered on educating teachers to work in diverse contexts, the incorporation of other types of music and varied strategies for teaching and learning are incipient in the country.

While all of the programs we researched include classical music in their curricula, only 40% of them cover other music expressions in their educational proposals. Considering only those programs that work on music other than Western classical music, the study showed that 85% of their content, knowledge, and teaching activities are still related to this type of music, while only 15% have embraced other music expressions.

The data shows that, even currently, the field of music has an intense focus on European music culture. This is a culture that, according to Quijano (2007), has become a kind of aspiration and, consequently, a “universal” cultural model that should be followed and incorporated by other countries and cultures.

Therefore, we conclude that although the music teacher education programs aim to prepare teachers for diverse music teaching contexts, as stressed in their educational projects, their curricula content and knowledge are dominantly related to Western classical music. Thus, the conservatory training model, as defined by Pereira (2012, 2014), continues to be explicitly hegemonic in undergraduate music education programs.

Curriculum Framework
The hegemony of the course-based model, which is characterized by the organization of content and knowledge into specific courses, stood out as an even stronger colonial trait than the domination of Western classical music in our study. All the institutions which were researched set up their curricula by fragmenting music into disciplines such as “harmony,” “music theory,” “ear training,” “counterpoint,” “music history,” “music teaching methodology,” “music research methodology,” “improvisation,” “instrument,” and “singing,” among others.

The belief which supports this model is that it will create efficient didactic strategies to educate students by separating the music phenomena into smaller units
(courses). Thus, through the educational process, students would build their music knowledge by working on specialized sets of knowledge and music experiences. Although the teaching and learning processes are conducted by separating the music into multiple different categories (disciplinary boxes), the students are expected to reconnect them at the end of the educational praxis naturally.

This type of curricular array leads the students to study theoretical dimensions in one or more disciplines, music history in some others, instruments in others, and so on. The idea is that this framework would enable the alumni to express themselves and teach music by reconnecting the knowledge and practices that they have learned in a fragmented way through the various courses in the program.

Several questions could be asked of this dominant feature and its imposition as a “universal” tendency to set up the music curricula in Brazil. However, the central aspect of being questioned is how we continue following the course-based tendency copied from European conservatories despite the extensive changes that characterize music in the current era.

The following question arises when reflecting specifically on the reality of Brazilian music teacher education: Why do universities keep themselves centered on the same curricular array that was created to teach Western classical music in the country almost two centuries ago? It is a controversial feature, especially if we take into consideration the diversity of Brazilian music and the broad range of knowledge that we have produced about this reality. Some recent research outcomes highlight that, among other traits of diversity, there are uncountable sets of situations, processes, and strategies of teaching and learning that surround Brazilian music (Arroyo, 1999; Prass, 2004; Queiroz, 2005; Queiroz, Marinho, 2017).

From these findings emerge another crucial question to be reflected on: Why did we not learn from the diversity of strategies, situations, and processes of music education that characterize Brazilian culture and that we have academically studied in-depth over the last three decades? The answer from this study is clear: It is because our institutions continue to be guided by the strength of the dominant colonial features since the institutionalization of music in Brazil.

Conclusion
The severe and violent exclusion of local groups and their knowledge that’s promoted by coloniality is still highly prevalent in Brazil. In this context, the fascination and admiration for the European culture of the past have created patterns, values, and types of guidance which have been used as the Brazilian cultural references for over five hundred years.

By following this tendency, the institutionalization of music in the country has established Western classical music as the main focus of formal education since the 19th century. Aligned to this trait, the canons of teaching and learning European classical repertories have become a model that’s been unsurpassed for over a century.

Considering the trajectory of coloniality and its impact on formal education in music, this study conducted on the reality of music teacher education programs currently present in Brazil provides evidence of some advancements regarding the content and music proposals worked into the programs. However, what catches our attention is the permeance of colonial features as the central mainstay of the curricula.
Thus, while the goals and other theoretical definitions of the educational projects point towards pursuing diversity in contexts and music, the content, knowledge, and curriculum framework, in particular, continue to hold onto patterns and models which originated from coloniality and its cultural features.

Overall, the research outcomes indicate that we need to acknowledge this cultural and pedagogical deficiency and consider some decolonial options for Brazilian music education to overcome the current reality. The social disparity and inequality, which have characterized Brazil throughout its history, need to be considered as essential features in music teacher education. This implies that we need to create strategies to overcome music impositions in the teacher education process and assume current visions of diversity and equity to surpass the coloniality and injustices that still dominate Brazil.

References


Introducing the orchestra: Expanding musical horizons in three rural communities in Ceará, Brazil

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Abstract
This paper describes a project focused on reinforcing the importance of local music traditions through the presentation of orchestral music formation and music education opportunities to three rural communities in the northeast of Brazil. In Ceará region, many rural areas have very little access to instrumental music learning possibilities compared to those available in urban settings, and orchestral music is little known or even unknown for most of the residents. This gap in people’s knowledge also indicates that many of them are not aware of opportunities to study music in a university setting. This is especially unfortunate given that the Federal University of Ceará in Sobral accepts students into the music program without any previous experience of playing an instrument and without charging any fees to its regular students. The music program’s unique pedagogical approach supports beginners who enter the program, and yet despite this provision, local people who are not familiar with the program or orchestral music are unlikely to take up this opportunity to engage in music learning. How could the orchestra members help residents of Ceará’s isolated communities value their own culture? This project will allow to increase awareness of these opportunities by promoting social and musical interactions between people from these communities, and the students and professors involved in the Symphonic Orchestra of the Federal University of Ceará in Sobral (OSUFC Sobral), valuing the artistic culture of each community. The project will provide opportunities for local communities to learn about the study of music at the university through musical experiences of current students in the program, at the same time they share their own culture with the orchestra’s musicians. This paper describes the program as well as the experiences of students and community members to be developed on this project. The Orchestra will visit the three communities on two occasions to build relationships and share different artistic traditions. The analysis of outcomes of the project focuses on the human, musical and cultural sharing carried out between people of the communities and OSUFC’s musicians. This will be achieved through interviews and a rich description of the experiences as they unfold over time. Our goal is to provide reciprocal learning opportunities that will encourage young people’s engagement in music education through the sharing of musical skills, knowledge and music-based interactions with the residents of local rural communities, contributing to preservation of each community own artistic culture.

Keywords: music tradition, rural communities, orchestra, sharing.

Introduction
This project was born from the need to take music education into communities located in the countryside of the Brazilian northeastern state of Ceará, where this type of education
is either absent or poorly available, encouraging residents to share and nourish their own artistic culture. To address this demand, we developed a project involving the Symphonic Orchestra of the Federal University of Ceará (UFC) in Sobral, which is staffed by students and professors from the music department.

The aim of the project was to foster social and musical interactions between residents and musicians from communities located in the countryside of Ceará and members of the Symphonic Orchestra of the University. How could we help residents of these isolated communities to value their own culture? Throughout the years, we came to realize that daily concerns push people away from their own cultures. In Indigenous communities or fisherman villages in our State, young people are commonly losing interest to know and maintain their ancestor’s customs and traditions alive. To avoid total oblivion of their own cultural values, we planned three sets of actions to take place between May 2018 and April 2020 (period to be reviewed due to the COVID-19 pandemic), to present the orchestral culture, the possibilities to study music, instigate locals to learn and share about their own artistic culture. We will be calling these steps A, B and C. Step A will consist of reciprocal sharing of musical knowledge between the orchestra’s musicians and the people from each community; in step B, we will conduct artistic and knowledge-sharing presentations; finally, in step C, communities’ residents will share with us their own traditional artistic culture. It is important to highlight that, nowadays, Brazilian universities have been receiving scant funding, especially the campuses located in rural communities, which makes it impossible for such projects to be carried out without external financial aid. In the same way, the communities chosen for this project are, like many others in the region, rather poor, economically speaking. This project, which was funded by a grant from ISME, was therefore able to address a need in the community by covering key expenses such as travel costs, room and board for members for community visits, in addition to an assisting student in charge of the production efforts associated to the project.

**Context and methods**

The Symphonic Orchestra of the Federal University of Ceará is an extension project created in 2015. Since then, it has been performing in the city of Sobral and surrounding areas, with the purpose of disseminating orchestral culture. It does so by playing a diversified repertoire during educational concerts, where the members of the orchestra present their instruments and the pieces that are being played. The orchestra counts on musicians from UFC, from other educational institutions and from the overall population, provided that they master any one of the instruments that are part of the orchestra. The current project focuses on social and musical interactions between OSUFC musicians and residents of communities located in the countryside of Ceará, which have little or no access to formal music education. In order to do this, we will count on the support of the Music Teaching Department from the Federal University of Ceará (UFC), Campus of Sobral, as well as on the help of those who participate on OSUFC-Sobral.

Three rural communities located in the northern portion of the state of Ceará and within the UFC-Campus of Sobral’s radius of action were selected to participate in the project. Members of the Geography department of the UFC Fortaleza are working on this project to select these places according social researches done in rural communities in Ceará region, which showed the needs of this communities. The criteria for selection was
that no music classes were offered as a school subject and that no music schools were available in such towns. In this way, the orchestra’s visits would contribute to relationship building and musical collaborations, while encouraging a deeper and more expansive awareness of musical culture among the residents. This is important, since recent research data based on Nascimento & Nascimento (2017) indicates that local musical activities are vanishing in certain areas of Ceará. According to this research, young people are not motivated to sustain local music traditions, while traditional musicians are getting older. This project is, thus, an opportunity to highlight, share, spread and perpetuate the musical culture of each community.

During our visits to such communities, the project will engage in six steps.

**During the first visit:**
1. OSUFC Sobral performs free of charge: explaining how an orchestra works, as well as its role within society, and presenting the instruments which form the orchestra;
2. Presentation of the musical traditions of each community by the residents for the orchestra musicians;
3. The OSUFC musicians, in their turn, will present music pieces, instruments, and techniques that they learn/play in class or with the orchestra.

**During the second visit:**
1. Hold roundtables on Music Education Advocacy regarding the presence of music in these cities, and on the existence of a Music Teaching Department at UFC-Sobral, which is intended as a way to support local music education and expand the existence of qualified local music teachers to work in such communities (WEBSTER, 2018, 145);
2. Create opportunities for community residents and the orchestra to play music together;
3. Dialogue with community members about the value of local cultural identity and how to preserve and perpetuate their own artistic culture.

The intended duration of the project is of two years. The OSUFC Sobral will make a total of two visits to each of the three selected communities. Throughout those two years, besides the above-mentioned actions, data collection will take place through interviews and documentation of the visits to assess the impact of the musical activities shared between the orchestra members and the residents of the communities.

We have already made our first visit in the first community, before the pandemic period, and we are waiting the other visits to organize the results and measure the impact of our interventions on the valorization of the artistic culture of the communities visited.

**Project Outcomes**
Based on our teaching experience and previous research done at the Music department of UFC/Sobral, we have ascertained that, in Ceará, especially in rural communities, there are gaps regarding access to formal musical education (Nascimento, 2015, p. 238). Such gaps are due to, among other issues, the challenges faced while attempting to introduce music classes in schools, in addition to the lack of availability of orchestral musical instruments. It is clearly acknowledged that communities located far away from large cities have low access to music education, as well as lower access to orchestral music and to the instruments belonging to an orchestra. The lack of access to artistic education
reinforces residents, specially youth members, lack of interest on knowing and preserving their own artistic culture. This project, according to ISME’s philosophy of promoting the development of music education around the world, aims at sharing knowledge on symphonic orchestras through verbal exchanges, concerts and roundtables which will aim at learning, becoming acquainted and encouraging music culture in this part of the country, besides offering insights about the basic formal aspects of music education to communities with little or no access to any of this. We have drafted this project inspired by the ideals of democratizing the access to music education and highlighting the relevance of music education in promoting social transformation within communities. In our perspective, the mission of OSUFC goes beyond performing stand-alone musical repertoires for orchestras: it has to fully undertake its role as an engaged agent in promoting deeper social and cultural changes. Through musical exchanges, joint activities and knowledge-sharing sessions, the OSUFC can teach and learn from local musical cultures while, at the same time, encourages and contributes to their development. We believe that valuing local musical cultures, especially when it comes from professionals and musicians linked to a locally renown teaching institution such as UFC, will help encouraging local musicians to continue playing and deepening their musical knowledge. Furthermore, this incentive will be amplified by the roundtable session, that has two main goals: 1) to emphasize that UFC’s Music Undergraduate Course occurs in a public free-of-charge University, and applicants to the music program are not required to do admission tests requiring a demonstration of previously-acquired musical skills; 2) to discuss the importance of music education as part of a more holistic and meaningful human education, as well as raising awareness of the Brazilian law that establishes students' right to music classes in schools (music is mandatory in the curricula) (Brazil, 1996, 1997, 1998, 2008).

Target Groups Reached/Involved in the Project
The project and the research associated to this initiative will be led by coordinator Adeline Stervinou (PhD) and professors Marco Toledo (PhD), Rita Gomes (PhD), and Israel Victor (MA), with the institutional support of ISME, UFC and of the musicians belonging to the OSUFC Sobral. The target audience shall consist of members of three communities with no access to formal musical education and to orchestral culture within the territory of Ceará. Such communities were chosen based on the criteria set forth in the description of this paper. We estimate that 100–300 people will benefit from the orchestra’s performances in each community. Furthermore, the project will also offer 50 seats for the roundtable and verbal exchange sessions, as well as classes and masterclasses to be held in each community, amounting to a total of 150 people benefiting from such actions throughout the two years of the project’s duration in each chosen city.

Given the project’s characteristics, the target audience will be comprised of people with limited access to formal music education, with no age restriction. It is worth emphasizing that professors, researchers and members of the OSUFC Sobral will explain at the first contact with community members that the participation in the project’s activities does not require any kind of previous musical knowledge. Such clarification will be emphasized as often as necessary. Once we invite the locals to participate in the proposed activities, our intention is to welcome everyone who has interest in taking part
of the project and to clarify that their own cultural and musical knowledge is an essential component for the development and success of our program.

We are currently in the process of visiting the selected communities and organizing the intervention in each place. Until now the project was received by the community with a lot of enthusiasm and curiosity surrounding music and the orchestra. On the other hand, orchestra musicians are looking forward to meeting the community and learn about their musical culture. To carry out this project, we are organizing activities where communities will get to know the music and the orchestra, and the orchestra participants will learn about the musical practices and traditions of each place. This exchange of knowledge is a strong point of this project, allowing all participants, both orchestra musicians and communities members, to enrich themselves through experiences sharing.

During the visits, we will investigate the musical style and customs they practice in their own communities to record and keep their musical traditions alive. All these experiences they will share with the orchestra will be presented at the end of this project. We will invite all the participants of each community and the musicians of the orchestra to play together during an event we will organize in Sobral. It will be the project’s final presentation, showcasing all the knowledge that has been shared among all the participants and highlighting the importance of music education in bringing people together. With this event, we intend to expand the seminal idea of the project, inviting several communities, with different cultures, to make music and share their own artistic cultures through common musical activities.

References
A review of manifesto and its enlightenment to china's undergraduate music curriculum reform

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Abstract:
This article starts from the reform of undergraduate music curriculum in the context of Manifesto, by reflecting on the traditional western European music curriculum, analyzing the reform core concepts (e.g. creativity, diversity, and integration), and comparing the strategies of Chinese and American curriculum reform to answer the question that what it means to be an educated musician in the twenty-first century in different social backgrounds in China and the United States. To be specific, what are the purpose, direction, and tasks of the undergraduate music curriculum for the 21st-century college students. The huge changes should be based on great thinking. The starting point of the music curriculum is to enable students to think about music structure, practice, and pedagogy in different cultures and historical periods. Therefore, the focus of the music curriculum should enable students to understand the expression of music in each different social and cultural context, and to have research-based knowledge like scholars, to support them in the different roles as students, scholars, teachers, artists and leaders through initiating, participating and promoting creative music activities.

The Manifesto is a document that was developed by a task force of national professionals. Their ideas and concepts are only intended to encourage serious discussion on a national level. It is not a roadmap for the future. It is food for thought.

---- William Ballenger, Director, OSU School of Music

Keywords: music curriculum, undergraduate music, college music

The understanding of creativity, diversity, and integration between the United States and China in contemporary music curriculum reform

In the past fifty years, both in the United States and China, several times undergraduate courses reforms were done but gradually enlarge the gulf between academic and real-world musical engagement and development. TFUMM (The Task Force on the Undergraduate Music Major of the United States) believes that the main problems arise in two aspects: At first, the reformers kept adding burden atop an unchanging curriculum foundation. Secondly, ethnocentrism resists the process of reform. Therefore, they propose a model solution: creativity, diversity, and integration. In this article, I will state my understanding of how the three concepts function in the undergraduate curriculum reform according to the different conditions of social development in the United States and China.
Creativity: A truly educated musician is a visionary creator, not just an interpreter of existing work. In other words, performance should be a music composing process based on the performer's fundamental understanding of the work from symbol to sound. However, the current curriculum cannot help and support the students to be creative in their profession. As Campbell compared the current curricula seldom support students to think about how music conceived, composed, and performed (p. 59). This phenomenon seems to be more serious in China. Can you imagine that to urge students to accurately play some specific pieces of Beethoven's piano sonatas, teachers encourage students to watch five or six different versions of pianists’ performance of the same work, but tell students not to "wasted time" to see other works? Even the other works of Beethoven himself. However, there are two contradictions: First, could the students understand all of Beethoven's work by playing one or two sonatas? Second, could Beethoven's work help the student understand everything in music? So many times, I saw such a phenomenon that many Chinese music competitors prepare a set of works that are quite "fit the standard" when they participate in international competitions, and even win awards, but they often faded away from the stage after winning the award. In China, people usually call that phenomenon "begging with a golden bowl". It can be seen that the lack of creativity caused by current undergraduate courses in China or the United States has already jeopardized the future career development of students. Situated reforms are imperative.

Diversity: If creativity is the engine of artistic creation, then diversity is its fuel. According to the reform model proposed by TFUMM, the two concepts cannot be separated. The purpose of diversity is to engage with the ways that creative expression (p. 50) because it brings different thinking patterns, lifestyles, and logic based on different contexts and offers the conditions for creativity. Students are highly encouraged to participate in diverse cultures, generations, and social contexts. TFUMM believes that the necessity of diversity is to help students become world-conscious citizens in and through music for the common good of a more socially responsible society (p. 20). Cultural diversity has always been a rich source of creativity in American art. But even if it is not for financial considerations, many universities are reluctant to open music courses beyond western classical music, which cannot immune the influence of ethnocentrism. Why? I think there are two possible reasons. First, in many cases, people prefer to understand their own culture but seldom have a chance to look and listen beyond it. According to Harold Abeles's view, the tendency that people tend to think of their own culture as right, true, and good, as the best way of life, regardless of which culture or subculture that they are in (Abeles, Hoffer, & Klotman, 1995, p. 132). Second, the design of non-western European classical music courses is far away from students' current and future life. In other words, students prefer to learn non-Western music through the lens of classical European tradition, which comes to the result that even if the students complete the study, they may not know where to use it in the future. Therefore, reform is not an easy task. It requires not only people's interest and courage to participate in and experience different mindsets. More need for reformers to solve the problem at the root of the curriculum, from reforming the content (simple addition or deletion of content) to reforming the process, to restore the diversity of music culture, instead of judging all kinds of arts only through a single western European lens. This will allow students to get in touch with the original style of art in different cultures, and stimulate their knowledge.
transferability and artistic innovation ability. The model of TFUMM's new curriculum reform is based on the opposition to ethnocentrism. But there is a big difference between China and the United States in the specific interpretation of this concept. The United States is an immigrant country and faces people from different cultural backgrounds all around the world. China is a non-immigrant country and faces different ethnic minorities under the same ethnic group. This makes China and the United States have a very different understanding and positioning of diversity in the process of music undergraduate curriculum reform.

In the past 50 years, China's undergraduate education reform has been tried many times in music majors, but the change is limited. After 1978, the central task of China's undergraduate curriculum reform was to match with undergraduate courses in developed countries. Due to the international mainstream music curriculum system based on the courses of music theory, history, and performance, Chinese undergraduate courses in music majors directly transplanted this curriculum framework after the translation of many textbooks since 1992. It is no exaggeration to say that many music skills teaching and learning had been in line with international standards since 2000. Ironically, when the Western music curriculum system became more and more perfect, the Chinese folk music curriculum system has not yet been established even until today. For example, in 1982, the western ear training and sight-reading curricula system were established. However, it was not until 2010 that the first Chinese folk music ear training and the sight-reading course was just opened at the China Conservatory of Music. Another example is the completion of the western harmony curricula system in 1990. However, even today, the Chinese music harmony course has not yet been established. Therefore, even Chinese students' knowledge is fragmented when learning Chinese music. More than that, the most precious part of Chinese music lies in minority music. There are 55 ethnic minorities in China, and each ethnic group has its original musical works. That is to say, each original ecological work represents the history, cultural characteristics, and lifestyles of one side of China. As described by Campbell, Ngoma is a particular process of participatory musicking that invites all to join in a thorough-going expression of the human spirit (p. 29). Such lively music and dialects co-exist in the daily life of Chinese ethnic minorities. However, with the increasing popularity of Mandarin and the acceleration of China's urbanization process, fewer and fewer people speak dialects. In 2014, over 70 percent of elementary schools in Hong Kong use Mandarin rather than Cantonese to teach Chinese (Sin, 2014). There are even fewer people who can play Cantonese opera and music. Therefore, the main meaning of diversity in Chinese music undergraduate education is to protect and restore the ecological diversity of Chinese minority music, so that students can experience different folk music more directly. This is also the primary reform task of the music major undergraduate curriculum in China. However, music does not exist in isolation. In diverse world music, every kind of music and the relevant art form are integrated into the picture of the culture. And each kind of music itself also must be integrated at deep levels of understanding, engagement, and creativity. This involves the third concept proposed by TFUMM - integration.

**Integration:** Two aspects are expected to be included in the understanding of integration. At first, the reform of the new curriculum should provide learners with a music experience that is as diverse as possible and different from the original classification to help students form a creativity-based and holistic foundation of growth.
To this end, Edward Sarath in Chapter 6 introduces us to a framework for broader global excursions and synthesis by taking jazz music as an example. The new curriculum should help students acquire musical wisdom and not just knowledge. Secondly, music-centered and integrated knowledge of other related disciplines will open up new pathways for students’ career development. For example, taking music development as the core, combining attachment theory, intuitive parenting, communicative musicality, and other disciplines, which bring students to think about music development in a broader sense. Therefore, integration is proposed for the dual problems existed in the current curriculum framework and its prior reform—the fragmented knowledge and the disconnection between courses.

**What can we learn from TFUMM strategies in the music major curriculum reform in China?**

Although the interpretation of the three core concepts differs between China and the United States, there is a consensus that breaking the boundaries of the curriculum structure and cultivates musicians with wisdom who love music, use, and share music (the improvisers-composers-performers). Therefore, in this round of reform, both countries shift the focus from content reform to process reform. But the US approach is to call on all those who can participate in the curriculum to participate in the reforms, including faculty, staff, administrators, and students. Contrastingly, the reform in China is still led by experts. From the perspective of administrative management, China's management system is based on top-down reform. Therefore, some of the reform strategies proposed by TFUMM need to be adjusted before applying to China's undergraduate curriculum reform. I will list the basic norms of TFUMM's two reform actions and what can I learn from it to promote China's reform.

**Strategy One:** TFUMM suggests to initiate an ongoing conversation committed to the critical scrutiny of both conventional and alternative models of music study (p. 65). To this end, TFUMM proposed eleven related questions for reformers to think about based on each specific circumstance of the curricula and practice. Therefore, how to cultivate improvers-composers-performers for the 21st century is the key to measuring the success of curriculum reform. In the reform of music undergraduate curriculum in China, students have rarely sung folk songs of their people because of long-term neglect and shelving, and they rarely know the cultural customs of their ethnic group. The reformers should reconstruct the connection between the social ecosystem of Chinese folk songs and academic research, encourage students to go back, learn, and experience in the diverse ecosystems in which all ethnic music is located. In this transformational action, diversity and integration are combined. Because this is a promising way to make students realize where is the music comes from, how to serve in the music community, and where the cultural, social, and academic values of this music are, that is, the meaning and direction of learning. Therefore, it is advisable to use new principles to conduct a pilot study in a certain music school where we can learn and summarize a lot from it and lay the foundation for further, larger-scale curriculum reform.

**Strategy Two:** Institution-driven approaches: I think this strategy is most suitable for China's undergraduate curriculum reform. Such a curriculum change requires a new foundation to make the courses related to each other. For example, students should not be limited to the understanding of abstract concepts in music theory, but use
performance and eurythmic movement to learn and perceive the theory, and connect it with aural skills. From the teaching perspective, the theory course should lead students to participate in music activities directly to understand and generalize the rules in the phenomenon. In this way, we expand and transcend the boundaries of the courses. It is a hierarchical teaching approach, from sound to symbol, from phenomenon to rules. But does the new curriculum reform mean denying all the content of the current curriculum and then creating all-new curriculum content? TFUMM clearly states that curriculum reform is not to create a new thing but to think about what the new curricula to support to reach a high level or pursuit change avenues based on the principles of creativity, diversity, and integration. The basic consensus is that China and the United States have obvious differences in the understanding of college-level education. For example, I sent the following three questions to the curriculum reform experts in China. Let us see how they ask questions, which were asked by TFUMM.

<table>
<thead>
<tr>
<th>Questions (TFUMM)</th>
<th>Questions (China)</th>
</tr>
</thead>
<tbody>
<tr>
<td>What dimensions are integrated within university undergraduate music majors degree programs?</td>
<td>What are the abilities we are aiming to cultivate the students in the new curriculum reform? [Creativity]</td>
</tr>
<tr>
<td>What is the nature and extent of attention to the issues of creativity, diversity, and integration, and so forth?</td>
<td>Is the essence of the new curriculum reform comprehensive or one-sided education? In other words, is the essence of the new curriculum reform is to let students learn music as a skill or a culture? [Diversity-Integration]</td>
</tr>
<tr>
<td>What degree of change can reasonably be claimed to have been achieved amidst these efforts?</td>
<td>How many stages should the new curriculum reform have? What kind of problems would be solved in each stage? How to test the results of the reform? [Assessment and Evaluation]</td>
</tr>
</tbody>
</table>

Table 1: Questions sent to curriculum reform experts

It can be seen that China and the United States have the same understanding of the problem in terms of curriculum reform, but the ways of thinking are different. So, what are the differences?

What does it mean to be an educated musician in the 21st Century?
Regardless of the United States or China, the core purpose of the music undergraduate curriculum reform is to enable students to succeed in the future career and society. Many questions are based on this premise. It is the primary responsibility of teachers to promote social progress that successful completion and promotion of curriculum reform to help students achieve their ideals. For undergraduates, what should they learn at school? How many possible pathways they have in their career? Where are these pathways coming from? After graduating from undergraduate studies, are they continuing to engage in in-depth and pioneering research in a certain field, or engage in social music activities? If their interests are in certain field research, what are the basic conditions they should have? If they participate in social music activities, what changes are taking place in the society that they have to know? What are the requirements for these changes for
practitioners? Would their effort contribute to narrow the gulf between academics and the change of society? Would it be possible that these new music practitioners and teachers will promote music prosperity or protect endangered culture for the next generation? These requirements and standards are discussed deeply in the direction of the two countries' curriculum reform.

To this end, TFUMM proposed five points of focus on music curriculum reform. By analyzing these five points of view, let us look at the similarities and differences between China and the United States in the expectations and assumptions of 21st-century music talents.

<table>
<thead>
<tr>
<th>The United States</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social-cultural context From western European classical tradition dominancy to diverse ethnicities prosperity</td>
<td>From the mainstream culture (Han ethnicity) dominance to all 55 ethnic group culture prosperity, with national self-confidence and identity.</td>
</tr>
<tr>
<td>Research-based knowledge Critical deliberation on music learning and cognition from the broader literature on change and organizational dynamics</td>
<td>Ability to create music, the ability to value and understand diverse musical cultures of diverse peoples, familiar with national literary and educational policies and regulations. Understand the research methods of related disciplines (including natural sciences), the relevant laws and characteristics of the development of music, and possess the relevant knowledge and skills needed in the information age.</td>
</tr>
<tr>
<td>Core competence in music 1. Solo or ensemble ability; 2. History and theory; 3. Teaching; 4. Innovation and teamwork; 5. leadership and entrepreneurship; 6. Health and human potential;</td>
<td>Improvisers-composers-performers; Real-world global navigators who came up through multicultural training</td>
</tr>
<tr>
<td>Roles as artists, scholars, teachers, and leaders Protect, develop, and disseminate the diverse ethnic music of China. Not just learning a skill, but learning a way of life</td>
<td>Engage in music performances, citizen music education, protect and develop multi-ethnic music culture, manage community music organization, diverse traditions as tributaries that flow into the global ocean via creativity</td>
</tr>
<tr>
<td>Contribute to society through music Narrowing the gulf between academics and society</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Five points of difference between the USA and China: expectations and assumptions of 21st-century music talents

In general, the reforms in China and the US are both very pragmatic. However, the national conditions of the two countries, social reality and needs are all different, so the curriculum plans are different too. As an immigrant society, cultural diversity is the fundamental driving force for the development of American culture. It absorbs the essence of the culture of the world and is the source of innovation for American musicians in the 21st century. The problems that American music education needs to
solve should start with integration. But learning, absorbing, and accepting different cultures requires a process that cannot be accomplished overnight. Fortunately, jazz is a successful example of curriculum reform. In contrast, for the undergraduate curriculum in China, the reform focus should be to foster minority music development in a culturally ecological way. In other words, as far as China itself is concerned, music culture has a very rich diversity in all ethnic groups. If the new curriculum can help students to have a syncretic view of the musical landscape, it will benefit more than just China, but also the whole world. Paying attention to minority music does not mean to ignore or even deny our current success in western European music, nor does it mean the indifference to the music culture of other countries. On the contrary, many minority music is not only the source of Chinese national pride and self-confidence, but also the link between China and the culture of neighboring countries, and even western culture (e.g. the relationship between Mongolian music and Hungarian music, the relationship between Xinjiang music and Middle Eastern music, the relationship between Chinese court music and Japanese court music, etc.). All of these need to be implemented in the curriculum reform to provide students with more possibilities and pathways to help them build a more diverse music ecosystem. These are what I learn from Manifesto has given me, and the main tasks that my colleagues and I have to do in the future.

Reference
Future primary school teachers lack the necessary competence to teach music
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Abstract
The function of the National Core Curriculum for Basic Education (FNBE, 2014) is to ensure that the music education given in Finnish primary schools is uniform in terms of equality and the realization of study goals. The curriculum also shapes the music education of future primary school teachers, the purpose of which is to provide the student teachers with the requisite qualifications to teach music in grades one through six (7—12-year olds).

In my Doctoral Thesis (Suomi, 2019) I studied the musical skills of students in the primary school teacher education and whether these were sufficient to teach music in grades one through six of basic education. To these skills I applied the concept of musical competence, which, in short, refers to a student’s actual musical skills. The main components of musical competence are: declarative knowledge of music; procedural knowledge of music (skills); and pedagogical content knowledge, which combines both knowledge and skills.

Three hundred and ninety-two students from five different primary school teacher training units participated in the study. The students filled in a questionnaire, which was based on the relevant sections of the National Core Curriculum for Basic Education (FNBE, 2014) and measured the students’ musical skills with some 200 variables. In the subsequent analysis I utilised key indicators typical of quantitative data. Correlative methods and selective regression analyses were used in the determination of dependences.

On average, the students' musical knowledge turned out to be moderate. Their knowledge of the basics of musical notation and musical concepts was moderate. However, almost half of the students possessed only poor or passable knowledge of musical concepts. When asked to assess their own music skills, the students deemed them to be moderate, but there were significant differences between individuals as these skills are influenced by the students' previous musical activities. As many as 8 out of 10 students questioned their competence to teach music in primary school.

On the basis of this study, then, it would appear that the music education provided by primary school teacher education is not valid in relation to the qualifications it awards to the graduates. Primary school teacher education produces formally qualified primary school teachers who however lack the actual competence to implement the National Core Curriculum for Basic Education (FNBE, 2014).

Keywords: music curriculum, music education, music teaching, musical competence, primary school teacher education
Background – The changing status of artistic and practical subjects

Prior to Finland’s transition to comprehensive school, primary school teachers had been educated here for approximately a hundred years. During this period, the mastery of artistic and practical subjects was considered an important part of a primary school teacher’s skills. Up until the 1960's, primary school teacher students received more than 300 hours of musical education during their 4-year course (Ahonen, 2009). Applicants to the primary school teacher education were awarded points for their prior musical and artistic activities up until the 1980’s found to be inconsistent with the democratic aims of the training (Anttila, 2010; Ruokonen & Ruismäki, 2010).

The deteriorating status of artistic and practical subjects reached a culmination point in the 1990’s, when poor national economy led to heavy cuts in these subjects in particular. The number of music lessons was severely reduced both in primary school teacher education and basic education (Ruokonen & Ruismäki, 2010). The status of music in Finnish schools was further weakened by the general nature of the National Core Curriculum for Comprehensive School (FNSB, 1994), where the study goals were defined rather ambiguously, leaving a lot of room for interpretation. Indeed, a later national survey commissioned by the National Board of Education established that the curriculum had not sufficiently guaranteed the uniformity of music teaching in all Finnish schools. (Heino, 1998.)

The next National Core Curriculum for Basic Education (FNBE, 2004) aimed to be more normative with regard to study goals. But this did not lead to the uniformity of study goals in artistic and practical subjects as a national survey for school-leaving ninth-grade pupils (n = 4,792) showed that learning outcomes in music were on average only passable or moderate at best. Most pupils had had significant gaps in essential music skills and knowledge since primary school, and it was too late to fill these in upper-level comprehensive school. This was in reference to primary school teacher education, which has undergone significant cuts as late as in the 2000’s. (Juntunen, 2011; 2017.)

The prerequisites for the implementation of National Core Curriculum for Basic Education for music

The aim of primary school teacher education is to produce experts in interaction and pedagogy who also master the concepts of the various subjects and are able to critically update their understanding of the contents of each subject (Lummis et al., 2014; Mikkilä-Erdman, & Iiskala, 2013). Therefore, it is no surprise that according to the National Core Curriculum for Basic Education (FNBE, 2014), primary school teachers should possess a versatile set of both cognitive and practical skills relating to the methods of music teaching, i.e. singing, playing an instrument, listening to music and musical expression (see also Anttila, 2010).

To these skills I apply the concept of musical competence, which, in short, refers to actual musical skills. The main components of musical competence are: knowledge of music (declarative knowledge); musical skills (procedural knowledge); and pedagogical content knowledge, which is a combination of both knowledge and skills (Bereiter, 2009; Haston, 2018; Schunk, 2012; Shulman, 1987).

To teach music in grades one through six, the teacher must, in terms of declarative knowledge of music, possess adequate knowledge of key musical concepts and theory as well as the ability to apply these in their teaching. In the National Core Curriculum for
Basic Education (FNBE, 2014), the concepts focus on the basics of music (such as melody, rhythm, dynamics, timbre, harmony and form), the meaning of which should be seen as the building blocks of music. To master the declarative knowledge of music, the teacher should also possess adequate knowledge of the various styles of music and musical cultures as well as an extensive repertoire in singing, playing an instrument and listening to music.

The areas of procedural knowledge – i.e. musical skills – required of primary school teachers in the National Core Curriculum for Basic Education (FNBE, 2014) are, among others, correct vocal and singing technique as well as the ability to sing in tune. A primary school teacher should also be able to accompany easy school songs on an instrument and master the basic techniques on various school instruments. Among the challenges faced by primary school teachers are teaching band instruments and guiding the pupils to create their own music or compose, which in the current curriculum has been given equal status alongside other methods. Teaching music in grades five and six, in particular, places heavy demands on the teacher’s musical skills, which, accordingly, should be advanced and versatile (Juntunen, 2017; Ruokonen & Ruismäki, 2010; Sepp et al. 2018; Mäkinen, 2020).

Pedagogical content knowledge is a combination of declarative and procedural knowledge, and according to Shulman (1987), it refers to a teacher’s understanding of how a certain topic or problem should be organised or presented in the learning situation to take into account special learners with their special needs and abilities (see also Haston, 2018). I also draw a connection between pedagogical content knowledge and the concept of tacit knowledge (Polanyi, 1958; Lam, 2000), which refers to an individual’s experiential, implicit knowledge. Since my study focused on students, it is obvious that their experience of teaching and its practices was very limited. On the other hand, pedagogical content knowledge – i.e. “how I teach” – should be given enough attention in the training of future primary school teachers (Haston, 2018; Mateiro et al., 2012).

Research method
Of the eight Finnish-language primary school teacher training units in Finland, five participated in the study. These formed a purposive sample, which ensured, among other things, that the sample was geographically representative (Vogt, 2007). The sample (n = 392) consisted of almost half of the population, i.e. second-year students during the academic year of 2014—2015. The study was carried out at the point in the training when the students had already completed the universally compulsory music studies.

The research materials comprised an extensive questionnaire consisting of more than 200 variables, and it was based on the contents and goals laid down for music teaching in the National Core Curriculum for Basic Education (FNBE, 2004, 2014). The students’ declarative musical knowledge and their familiarity of (piano) chords were studied through measurements, while the students used self-assessment to evaluate their musical skills (procedural knowledge). The research data was gathered using a group administered questionnaire with a rather large group of students gathering to fill in the questionnaire simultaneously under the guidance of the researcher. The key advantages of this method are a high response rate and the uniformity of the research events in the various research units (Gravetter & Forzano, 2012; Whitley & Kite, 2013).
The data were analysed out using descriptive indicators (frequency, mean values and standard deviations, percentages and diagrams) typical of quantitative research. Selective regression analysis was applied in the determination of dependences (Punch & Oancea, 2014). Additionally, some analyses were complemented using selective t-testing and factor analyses.

**Key results**

**Students’ knowledge of the basic concepts of music only moderate**

According to the *National Core Curriculum for Basic Education* (FNBE, 2014) the purpose of music teaching is to “help the pupil to understand musical concepts and the principles of musical notation while making music”. In my study, students were asked to define nine musical concepts (piano, forte, crescendo, dynamics, intro, tempo, major chord, interval and AB structure) and to name the four basic types of the human voice (SATB). These are all concepts that students should in principle be familiar with when entering the primary school teacher education – at least this is to be expected.

![Figure 1](image_url). Students’ (n = 392) knowledge of the basic concepts of music (Suomi, 2019, 147).

The students’ knowledge of these concepts turned out to be moderate (Figure 1), even though the average (M = 9.5 points out of 20) was closer to passable. Almost half of them (48 %) had serious gaps in their knowledge. Even such basic concepts as piano (66 % correct) and forte (69 % correct) were totally alien to many students. Especially challenging were also interval (27 % correct) and the related major chord (19 % correct), the defining characteristic of which – a major third – was mentioned by only a few students. The structure of both major and minor chords is, however, among the very basics in the music curriculum for grades three and four.

The students were then asked to identify the following on a music stave: clef, accidental sharp, chord symbol, time signature, dotted minim, crotchet rest, bar line, prima volta and music end. They also had to name certain notes on the stave and the key of the music sample. The students’ knowledge of basic musical notation was somewhat better than that of musical concepts, though even in this section the results turned out to be only moderate (M = 14.1 points out of 25) on average.

All of the afore-mentioned sections measured content for the fourth grade in basic education. Since the students were, on average, only moderately familiar with the terminology, the results show that there are rather serious gaps in future primary school teachers’ declarative knowledge of music. The study indicated that particularly those
students who have not been musically active prior to the course are often unfamiliar with many basic concepts and notation symbols, which can seriously hamper their learning and become a major restrictive factor in their studies. This is illustrated by a student’s comment on this: “It feels like those teaching music theory find it difficult to see things from the perspective of an absolute beginner.”

Indeed, prior musical activities were found to have a statistically significant connection to the students’ knowledge of musical concepts ($r = .55, p < .001$). In the regression analysis, a degree in music theory turned out to be the most important coefficient of determination with an explanatory frequency of almost thirty per cent ($R^2 = .298$). Trainees with prior musical activities formed approximately one-fifth (21%) of the population, while some 25% had no musical background whatsoever.

**The significance of music skills and pedagogical content knowledge**

In the study, the students were asked if the learning content included in their music studies in the primary school teacher education was adequate. They were also asked to assess their own musical skills using a five-step Likert scale (1—5). On the basis of their assessments, the music education emphasised the basic techniques of playing school instruments ($M = 3.7$), while important pedagogical content and correct vocal and singing techniques received significantly less attention ($M = 2.6$). Accordingly, only about a quarter (28%) of the students assessed their skills in these to be quite good or good.

*Singing* is perhaps the most sensitive and demanding of the methods of music teaching, because here the instrument is the child’s own body and vocal organs. Incorrect voice teaching, such as making the child sing too low, may, at its worst, cause physiological damage to the child’s vocal organs (Phillips & Doneski, 2011; Regelski, 2016; Valtasaari, 2017). The deterioration of schoolchildren’s singing skills is a common source of concern among music educators; accordingly, primary school teachers should in their education attain such skills in voice teaching that they are able to make their pupils sing in the correct range (Pihkanen, 2011; Valtasaari, 2017). This is consistent with the results of my study and is also one of my key suggestions for development. Furthermore, the students expressed a wish to be given individual voice training, which up until the 1980’s was still considered to be an essential part of primary school teacher training – teachers are, after all, supposed to have good speaking and singing skills.

One of the most important skills for a music teacher is the *accompaniment skill*. In primary school teacher education, the minimum goal is for the student to be able to accompany easy school songs on an instrument (piano or guitar). Depending of the school, the number of instrument lessons received by the students varied from between 10 and 22. This was mainly carried out in small groups. On the basis of the notation identification tasks included in my study, more than half (55%) of the students assessed their accompaniment skills for grades one and two as good or quite good, but only about a quarter (28%) of them considered these adequate to accompany pupils in grades five and six. More than half (57%) of the students felt that they would not be able to accompany songs in the upper grades at all, or poorly at best. The number of instrument lessons received did, however, have a significance in terms of learning chords as there was a very significant ($r = .37, p < .001$) statistical correlation between this number and the chord identification task included in the study.
Musical creativity
As far as teaching music is concerned, the *National Core Curriculum for Basic Education* (FNBE, 2014) emphasises interactive learning and the development of the pupils’ musical creativity. What about primary school teacher education? How well have these factors been taken into account? Based on my study, the answer is: passable at best. Even though the education focuses on the playing of school instruments, only approximately one-third (36%) of the students deemed their skills in teaching these instruments to be quite good or good. Teaching band instruments or, in particular, guiding pupils’ personal musical activities (composition) turned out to be even more demanding, because in both of these only a small minority (17%) regarded their skills as sufficient.

The result clearly reflects the amount of education received by the students, because according to about half (52%) of the students, there had been little or no training in composition. “We were not allowed to plan anything that was our own or to try anything new.” However, music lessons should provide all pupils with adequate tools for self-expression, but approximately half (51%) of the students who participated in the study felt they had not attained the necessary skills to guide the pupils in creating their own music. This poses a significant challenge to current primary school teacher education (Burnard, 2013; Muhonen, 2016).

Music listening
According to the current curriculum (FNBE, 2014), music lessons should include children’s music, music from various cultures as well as art, popular and folk music. In the selection of learning content, the teacher should endeavour to offer the pupils an opportunity to get to know a wide range of different music cultures and styles. However, according to the students’ feedback, the education contains very little material on the music cultures of other countries. It would appear that the dominant status of popular music does not leave enough room even for Finnish music, of which the students had only a passable knowledge.

We therefore need to ask ourselves: is, for example, the goal of listening to a wide range of music in schools currently only realised through those primary school teachers for whom music is a hobby, for whom music has special significance, and who are able to guide their pupils to *experience musical meanings*? This is, after all, one of the key goals in teaching music (Jorgensen, 2008; Kivy, 2002; Lummis et al., 2014).

Conclusions
There is an inherent belief in our society that primary school teacher education is of a high quality and that teachers are qualified experts in their role. For example, Niemi (2011) and Sahlberg (2017) state that Finland’s extensive teacher education guarantees that all graduating teachers possess a balanced combination of theoretical knowledge and practical skills. Against this background, the results of my study reveal a blatant discrepancy between reality and the ideological basis of the education (e.g. Buck & Snook, 2016): only one-fifth of primary school teacher students felt that they were almost or fully competent to teach music in grades one through six (Figure 2.). There is, accordingly, every reason to think that the music education given to primary school teachers does not give them the necessary tools to implement the goals expressed in the *National Core Curriculum for Basic Education* (FNBE, 2004, 2014) equally in all
Finnish schools. Previous studies have yielded similar results (Juntunen, 2011; Juvonen, 2008; Mäkinen, 2020; Tereska, 2003; Vesioja, 2006).

The groundwork for individual music skills is laid in primary school, where music teaching is usually the responsibility of a non-specialist primary school teacher. The music education provided by schools plays an extremely important role in Finnish music culture as it creates and shapes an individual’s musical values and practices. For many children, school is the only source of systematic music education, so it may have a crucial effect on a person’s views of the meaning of music. (Anttila, 2006; Ruokonen & Ruismäki, 2010.) Also, every child has the right to receive expert tuition both in music and other artistic and practical subjects as well. A child should have the right to versatile music-making, such as singing, playing various instruments, listening to a wide range of different music styles, making their own music and, in particular, to enjoy the positive feelings arising from music in all its forms. (Gordon, 2011; Jorgensen, 2008; Ruismäki & Juvonen, 2011.) As music is crucial for pupils’ development, it is necessary primary school teachers have adequate music skills and knowledge and are equipped with the pedagogical content knowledge to effectively implement the music curriculum.

References
(The Finnish National Board of Education).


Choir festivals in the south of Brazil: establishing a pedagogical project for choral singing
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Abstract
This paper, an excerpt from my doctoral dissertation, focuses on the establishment of a pedagogical project for choral singing from the choir festivals held in the state of Rio Grande do Sul, Brazil, between 1963 and 1978. The general objective of my doctoral research was to understand the music-educational practices engendered in those festivals during the period 1963–1978. The mentioned investigation followed a qualitative approach with a combination of oral history procedures and written sources such as letters, newspaper articles and music programs. The research was based on the figurational theory of Norbert Elias. At the same time, authors were also brought in to explain and support the socio-historical period. As soon as the festivals were established, one of their goals was to make the local choirs of Rio Grande do Sul visible. However, because the finalists were chosen by popular vote, a tension atmosphere began to grow amongst the participants. Some state groups feared they were unable to compete with choirs from other countries, and so they threatened to give up participating. Any aspect of the performance that touched the audience, such as the inclusion of scenic movement or instrumental accompaniment to the choirs was prohibited by the organizers, and stated in the regulations for participation. The eliasian understanding of power helps outline the social positions the festival organizers found themselves in that time which facilitated them with a wide margin of religious, political, and public opinion-forming powers. While they had the power to regulate the forms of participation in events, they also suffered the tensions of other agents, since they were also stuck in a figurational network of dynamic characteristics. Thus, while individuals modify social structures, they are also modified by them. The tensions between groups, criticism of certain types of participation and musical repertoires helped to change the rules of the festivals and created a pedagogical project for the choral singing during that time. The 16 consecutive years of existence of those events were responsible for the establishment of music-educational practices that impacted generations of conductors, singers and audiences. Some of our findings were also linked to the socio-historical period of civil-military dictatorship in the country.

Keywords: choir festivals, music educational practices, oral history, sociology of music education

The choir festivals of Rio Grande do Sul and the socio-historical period
Between 1963 and 1978 the city of Porto Alegre, in the state of Rio Grande do Sul (Brazil), hosted choir festivals that began regionally, and went on to become national, pan-American and international events. The festivals took place on the stage of the Rectory Hall of the Federal University of Rio Grande do Sul (UFRGS), on two consecutive weekends of October, and featured children's and adult choir performances.
Throughout the first weekend, when an audience member bought him/her entrance ticket it was accompanied with a voting ballot that allowed the member to vote for him/her top four groups. The most voted choirs performed again the following weekend, competing against each other to be chosen as finalists to perform at the last concert.

The festivals were responsible, in a relevant sense, for the music education of diverse choir conductors, singers and the public in general. In the 1980’s and 1990’s I had the opportunity to experience myself in both positions, first as a choir singer and, some years later, as a conductor when I had the chance of hearing about the “origin” of the festivals as well as the impact they had on choral music in the state, inspiring me to study it further.

The festivals took place during the years of the Brazilian civil-military dictatorship, which lasted from 1964 to 1985. Throughout this era, culture assumed an integrating role within the country. Particularly during the military period, Brazil was under the ideology of National Security which emphasized the need to integrate the different regions of the country under the hegemony of the State. For the Superior School of War – institution where the military formation occurred – culture fulfilled the function of “cementing the nation's organic solidarity” (Ortiz, 2012, p. 82). In the period of the dictatorship, borders were not only geographical, but also importantly ideological, in which the greatest enemy to be fought was the communist idea.

Objectives and methodological procedures of the research
The general objective of the research1 was to understand the music-educational practices engendered at the Rio Grande do Sul Choir Festivals, which took place during the period 1963-1978, in Porto Alegre, the capital of Rio Grande do Sul. The research’s specific aims were: 1) to analyze the constitution and organization of choir festivals; 2) to examine how the social actors were mobilized for the choir festivals, the involvement strategies that were used, the cooperation and interdependence networks that allowed an “updating” of the events, and the plots that involved the social actors in that specific context; 3) to interpret the participation of choirs, conductors and audience and the demands placed on festival’s participants; 4) to analyze the conceptions about choral singing, the learning and musical formations that occurred from and in the participation in the events, and the contributions of these choir festivals.

The research followed a qualitative approach (González Rey, 2005; Melucci, 2005; Pires, 2010) and the oral history procedures (Alberti, 2014; Bosi, 2003; Delgado, 2010; Meihy, 2005). The oral statements (21 interviews with conductors, singers, organizers and journalists involved with the festivals) were combined with written sources (291 newspaper articles of the time, 661 letters from the organization of events to participants and authorities and also 25 music programs). At first, I knew some of the conductors, singers and family members of one of the organizers we were working with. As time went by, the list of contacts expanded as the interviewees themselves would often share the contact information of other participants. I also had access to musical programs, once some of the collaborators had kept them as souvenirs. The daughter of the secretary of Rio Grande do Sul Choir Festivals Association, an entity founded by the event organizers

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1 The doctoral research entitled Choir Festivals in Rio Grande do Sul (1963–1978): music-educational practices by choirs, conductors and audiences, was guided by Professor Dra. Jusamara Vieira Souza, within the Graduate Program in Music of Federal University of Rio Grande do Sul (UFRGS).
to get sponsorships from governments and enterprises, lent me the letters her father had sent to conductors, authorities and friends.

The choir festivals seen from Norbert Elias's figurational theory
The eliasian conception that social spaces are constructed by individuals dependent one to another, forming a large web, has helped us to understand that individual actions, intermingled with other people's actions, working as a trigger to “other sequences of actions, in which the direction and outcome is provisional. Those actions will not depend on this individual, but on the distribution of power and the structure of tensions throughout this mobile human network” (Elias, 1994, p. 48). Besides the myth that festivals were “born” from the timely need to generate funds for the exchange of a church musical instrument, I sought to examine who the participating social actors were and how they acted. The data revealed the involvement of closer individuals whose action I called internal mobilization. The internal actors were the organizers, conductors, singers, and the press, represented by the newspaper Correio do Povo, the most widely circulated newspaper in the state at the time. Most of the organizers were journalists who worked at this newspaper and lawyers who worked at the State Legislative Assembly, the Touring Club, and had contact with individuals from the city's cultural circuit. One of the newspaper's key figures, and the organizers' personal friend, was precisely the newspaper's cultural promotion manager. These individuals, working closely together, acted to mobilize other individuals outside of their social circle. Thus, external mobilization was promoted by these agents, who were considered “moral authorities” (Tilly, 1999) and also wielded the power of circulation among other means (political, religious, informational), aiming to attract authorities, governments, sponsors, supporters and the public.

For Elias, from the understanding that individuals are connected to each other and therefore interdependent, the idea of power is not viewed in a static way, but as a “special extent of individual scope associated with certain social positions, designating a particularly broad social opportunity to influence self-regulation and the destiny of others” (Elias, 1994, p. 50). From this understanding, the organizers relied on their social positions, at that given socio-historical moment, in order to mobilize other participants, acting as propellants of the festivals.

The establishment of a pedagogical project for choral singing
One of the goals of the festival organizers was to give visibility to the local state choirs. For this, the secretary of the Festivals Association and its president visited various cities within the state inviting choirs to participate in the events. Initially, the festival’s regulations provided three categories for the choirs’ inscription: 1) choirs dedicated to the interpretation of sacred musical repertoire; 2) choirs performing non-sacred repertoire and 3) children's choirs. The process of public voting through a ballot delivered with the acquisition of the ticket began in 1964. Groups had 15 minutes for their musical performances. The Rio Grande do Sul Choir Festivals Association was aware of the important role those events had on the musical formation of the participants. In a letter to the director of the Department of Cultural Affairs of the Ministry of Education and Culture, the secretary of the Association revealed actions of the institution such as the granting of scholarships to conductors highlighted by the festivals and the promotion of
national competitions for Brazilian music arrangements. In addition, it emphasized the promotion of festivals to create new choirs:

Choral activity started to be practiced by numerous private companies, banks, etc., recreating working-class jobs and acting as a mechanism of public relations, creating a very rewarding labor market for conductors and music teachers, which are now very much professionally requested (Secretary of the Rio Grande do Sul Choir Festivals Association, personal communication, October 06, 1974)

As time went by, however, tensions between the participants grew. As a result, the rules for participation changed. According to Elias, it is in the course of the imbricating actions of individuals in the social network in which they are involved, that an order is not deliberately foreseen by those involved (Quintaneiro, 2010, p. 74). Many regional groups were unable to compete with foreign choirs, especially groups from countries such as Uruguay and Argentina which had a long-standing tradition of school music education and choir singing, no longer wished to attend the events. In this way, the Association's initial objectives of enhancing local state choirs were threatened. In a letter to a friend and coordinator of one of the choirs performing at the festivals, the secretary of the Association expressed his concern:

I have been thinking a lot about the technical and artistic aspects of the festival held here. For three years from now, I have been noticing a withdrawal of the gaucho [local state] choirs, and, more seriously, good choirs. In 1973, the Lutheran [choir], for example, did not attend, despite the great relationship we have with them. In one of the closing performances I met [his] conductor and he simply told me that he had not applied because he did not think the choir could compete with foreign choirs and others from other states. This is very serious, because our fundamental intention is to promote and improve the gaucho choirs. [Another choir] from Santa Maria, for example, also did not come this year and even suspended its activities. So we must urgently do something to improve the level of our local choirs. For 74 I foresee the withdrawal of two choirs that have been with us since 1963, … discouraged because they hadn’t reached to the final of the festival twice. (Secretary of the Rio Grande do Sul Choir Festivals Association, personal communication, November 29, 1973)

Amongst the changes in the rules for participation in the festivals, it was established that scenic movements in the classifying concerts were prohibited, as well as instrumental accompaniment, once the organization of the events began to hear complaints from the participating choirs that the groups with accompaniment, or those who performed with some kind of choreography, were chosen over the choirs that sang a cappella:

… The idea of suppressing instruments was magnificent. We really believe that one of the reasons why the festival reached such a technical level recognized by the press resulted from the fact that all choirs sing a cappella resulting in beautiful concerts. And we will continue with the idea, only allowing instruments in the final concert. (Secretary of the Rio Grande do Sul Choir Festivals Association, personal communication, October 29, 1973)
It is worth noting the Association's own intention to proceed with the ban, by making the choirs seek to improve their musician-vocal technical level. In addition to the traditional works of the European choral repertoire, urban songs arranged for choir were presented at the festivals, whose lyrics were in opposition to the current regime of government, some of them presented in the song festivals of Record and Globo television. However, these arrangements represented a minority of the chorus repertoire and, as festival editions passed, organizers and the press highly encouraged arrangements of traditional music from Latin American countries or works written for choir, with forms of singing strongly inspired by the European vocal technique for the groups that came from neighboring European colonized countries mentioned previously.

**Further Findings**

The audience involvement of voting had a pedagogical characteristic that led to enormous public participation. Antonio Hohlfeldt, at the time of the festivals, performed the duties of choir singer and journalist of the *Correio do Povo*. According to his statement:

I think it went over very well with the city. If you talk to people from that generation, who are today in their 50s or 60s and attended these festivals, they were delighted because it wasn't a concert, it was a celebration, it was a party, I mean, it was such a joy to be there and there were really exciting moments.…

(A. Hohlfeldt, personal communication, April 03, 2013)

Boosted by choir festivals, conductors and singers started having group meetings throughout the year. The festivals, for their grandeur, as they involved two weekends and had wide dissemination by the newspaper, became events eagerly awaited by the participants and the public. Conductors began to feel motivated to seek improvement, as an interviewed conductor stressed:

The conductor is doing his job, all right. Feeling as isolated, conductors didn't have much contact. Suddenly, they began to participate, and festival doors began to open to him. He started to get scared and thought: “I'll have to discreetly look for a few more things, I'll have to see here, see there”. The interest in improving the conductor’s performance began because he wanted to present something better; comparatively he saw that he could improve here, there. Everyone could get better. And everyone did it. Everyone did it: conductors, singers, groups (A. Ruschel, personal communication, April 24, 2012).

This period experienced the impact of the orpheonic singing (school choir), which had been mandatory in Brazilian schools, from 1931 to 1961. Thus, many children and youth choirs not only kept the word “orfeão” in the name, but brought songs linked to the orpheonic singing that had characterized school music education in Brazil for thirty years. Coming from French military institutions, the songs served as means of civilization of bodies and minds, as lyrics exalted the natural beauty of the land and the ideal love for the country. Musically, they are characterized by the very striking rhythmic patterning and repetition of hymns and marches (Gilioli, 2008). Some of these songs could also be observed in adult choirs participating in the festivals. It is noteworthy that this idea of
love and servile obedience to the homeland adequately served dictatorial regimes and Brazil was living in a period of dictatorship (1964–1985).

Learnings related to the socio-historical period also occurred through the musical programs of the concerts, which brought welcome messages from state and city authorities to the participants, extolling the spirit of “integration among peoples” and the idea of diminishing socio-cultural differences. In the same music programs, there were also advertisements from enterprises that alluded to the idea of harmony and integration among the participants: “In the simplicity of the essence, a source of harmony radiating peace, beauty and security, for greater unity among peoples!” (Advertisement of a financial institution in the 1976 International Choir Festival music program)

Final considerations
The sociological analysis of choir festivals during the studied period (1963–1978) along with Norbert Elias' concepts allowed us to understand social actors as dependent individuals, whose actions are conditioned by the configurations in which they are socially, culturally and historically inserted. Thus, the power that the organizers held, in the sense of “margin of decision”, as individuals established in certain social positions, whether through their professions, friendly relations and/or links with political, religious or as public opinion shapers, gave them “a particularly large social opportunity” (Elias, 1994, p. 50). Such power enabled them to determine the forms of presentation and the delineation of musical repertoires to be presented at festivals through the formulation of rules for the events. However, the intervention of other agents (conductors, singers, press, public) made it necessary to reformulate these rules, which helped to establish a way of participation in festivals for 16 years. This habitus – worldviews, ways of acting and symbolic constructions – can be understood as the pedagogical project of choir festivals and has impacted the musical formation of generations of conductors, singers and the public.

References


Incorporating physical expression into junior high school music classes
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Abstract
The purpose of this research is to focus on “physical expression” activities for music classes in Japan’s junior high schools. These activities were heavily emphasized in the recently revised course of study put forward by the Ministry of Education, Culture, Sports, Science and Technology (MEXT). However, while many practical examples of physical expression classes have been observed in elementary school settings, at the time of this study, the number of concrete lesson-plans developed for junior high schools was limited. To help rectify this, one of the authors proposed and performed practice lessons, which were designed for junior high schools, with her university students at a teachers’ training college.

In this study, an example lesson program focusing on “appreciation was produced, and expression” as directed by the revised curriculum. It incorporated materials and songs from existing junior high school textbooks.

Up to that point, junior high schools in Japan had mainly focused on chorus activities and a smaller number of instrument classes such as those that teach the recorder. However, we developed physical activities to be used in music appreciation and creative music making classes.

The university students who performed these activities were in a “Secondary Music Instruction Method” class at the author’s university. After completing the lessons, these students wrote comments indicating that they had become aware of the following:
• Concentration skills when listening to music could be improved by simultaneously using appropriate body movements that are in sync with the tempo, the timing, the beat and the dynamics of a musical score.
• By connecting motion with emotion while listening to music, students could gain a better understanding of a composer’s intent.

Further, the author believes that, since physical expression activities do not require advanced performance or reading skills, participation in these activities would not be limited by students’ musical abilities. Also, since it is generally accepted that female students tend to participate in music classes in higher numbers than boys, the author hopes that a class that deemphasizes skill and emphasizes physical activities will encourage more male students to participate in music classes.

Keywords: Physical Expression, Junior High School, New Course of Study

Theoretical background and focus of the study
Humans have integrated music into their various cultures since before recorded history. Even today, people sing songs that have rhythms that support certain types of repetitive movements which they do while performing certain types of labor. Also, communities
throughout Japan have special dances that its citizens perform at festivals which celebrate community achievements, such as harvests.

However, despite the marriage of music and body movement in society itself, teachers in Japan have had a long-standing tendency of not integrating physical activities into their chorus, instrument classes, music appreciation and creative music lesson plans. However, the new course of study created by the Japanese Ministry of Education, Culture, Sports, Science and Technology, abbreviated as MEXT, wants to revise music education in order to “deepen the interest and understanding of musical works in culture and society”. For this reason, the ministry wants teachers to include more physical expression and collaborative activities in their lesson plans. (MEXT, 2018)

The learning guidelines that support the foundation of Japanese school education are renewed once every ten years. In the latest version, the objectives changed greatly.

Instead of emphasizing only the acquisition of skills, the ministry wants physical expression to be utilized in a way that indicates that students have “an understanding of different musical styles and are able to create and perform appropriate body movements based on various musical factors” (MEXT, 2018). With this new standard in mind, this study will focus on lesson plans for junior high school music departments that incorporate “physical expression”.

Until now, music classes at junior high schools in Japan have centered around choral performances and recorder training. Starting in 2021, however, the ministry has called for more “physical expression”. The ministry notes that “dance is a combination of music and physical expression that can capture musical styles physical expression” and that it is important to devise techniques that effectively incorporate “improvisational and expressive body movement activities” (MEXT, 2018).

While several practical example lessons have been developed for elementary school music classes in Japan, very few plans incorporating physical expression have been generated for Japan’s junior high schools. Therefore, there is a strong demand for the development of these kinds of activities (Tokie, 2018).

The following activities are excerpts from lesson plans that the author developed for undergraduate and graduate students taking her course in teaching methods for secondary education. These lessons have all been modified to meet the nation’s new educational goals.

**Listening to music while incorporating physical expression**

In a recent revision of Japan’s course of study for junior high schools, MEXT introduced a major policy aim to be shared across all subjects and fields in Japan. They want students to practice “proactive, interactive and authentic learning” (MEXT, 2018). By interacting with others and expanding their movements based on the movements of others, the ministry believes that certain types of active learning, such as physical expression, encourages student collaboration and nurtures nonverbal communication.

The authors learned through implementation that physical expression is effective in proactive and interactive learning situations. In previous studies, one of the authors found that students must listen more carefully and be more aware of their own involvement with the music when they need to incorporate body movement into their music activities. (Iimura & Tokie, 2017a).
Dalcroze eurhythmics, Orff’s music education and physical expression

The “physical expression” described in the elementary and junior high school curriculum guidelines is closely related to music education methods in Europe developed by eurhythmics founders, E.J. Dalcroze, Carl Orff and Zoltan Kodaly. The emphasis on learning while experiencing various elements of music such as “beat” and “phrase” through body movement is based on the developmental approach of the eurhythmics method (Abramson et al., 1986).

In a 15-lesson class called “Secondary Music Instruction Method”, this study practiced physical expression activities that incorporated Dalcroze eurhythmics as a teaching method for junior high school music classes (as shown in Table 1). These activities were used as ice-breaking activities at the beginning of each class to engage the students and to support the activities of the main lesson.

<table>
<thead>
<tr>
<th>Name of Activities</th>
<th>Action by all the class</th>
<th>Action by the leader</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face canon</td>
<td>Imitate the leader’s action, <strong>3 beats behind</strong> while pointing out the part of the <strong>face</strong></td>
<td>Movement example</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eyes, Mouth, Mouth Nose, Nose, Ears</td>
</tr>
<tr>
<td>Body canon</td>
<td>Imitate the leader’s action, <strong>3 beats behind</strong> while pointing out the part of the <strong>body</strong></td>
<td>Movement example</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Head, Shoulders, Shoulders</td>
</tr>
</tbody>
</table>

Table 1. Activities Utilizing Dalcroze Eurhythmics

The performance evaluations provided by the students of that class showed the following results:
1) Students were able to more easily understand the repetitive patterns of musical canons through physical expression.
2) The practice of a matching physical movement helped the students to align beats and better maintain tempo together.
3) Imitating a leader’s practices helped students to cultivate collaboration and communication skills.
4) Learning to listen to and imitate other students, helped individual students better understand how to sustain beats and improve performance synchronization.

Music appreciation and physical expression
(1) Presenting the style of music

In the past, music appreciation activities were mainly passive. Students listened to songs and, afterward, expressed their opinions. However, MEXT’s revised curriculum required that physical expression, which had, in the past, only been used in creative expression classes, also be used in “appreciation” classes. In response, the author devised activities to be incorporated into junior high school music classes where students would listen to
various musical elements of a song (pace, dynamics, the overlap of melody) and replace them with physical expression.

1) Using music from “West Side Story” composed by Leonard Bernstein
While trying to grasp the CHA-CHA-CHA rhythms of the Latin mambo, the students tried to perform dance steps. They did this by first comparing the differences between modern dancing, such as hip hop, to the previously unknown characteristics of the mambo. This allowed the students to better understand the wide range of dance and music styles.

2) Using Bill Evans “Waltz for Debby”
As most modern Japanese students are not familiar with jazz, the bebop sounds of Bill Evans and his Trio presented the students with several challenges. Not only did they have to create movements for the waltz melody that the song was built around, they also had to take into account the many improvisations as well as the many changes in chords used by the musicians during the song. To cope with this, the students developed specific facial, hand and foot movements to express the various pictures painted by each of the musicians.

(2) Appreciation focused on dance and music
In ballet music, such as Stravinsky’s “Petruska”, the story unfolds through dance and pantomime matched to the music. The students, after watching a taped performance, discussed the appeal of nonverbal body expressions to help deepen their understanding of the musical performance.

Students also viewed certain scenes from Verdi’s opera, “Aida” wherein only dance was used to complement the musical score. As there was no singing in these scenes, the students discussed how the expressive movement of the dancers helped them to understand the musical score.

We believe that sharing ideas with classmates, as in the above situations, gave the students the opportunity to recognize the significance and to think about the role physical expression can play in music. It is also a useful tool to help deepen students understanding of art in general.

(3) Practical examples of singing Japanese folk songs while using physical expression
1) “Soran Bushi”, a fishermen’s working song from Hokkaido
As well as the traditional folk version, the students also listened to Takio Ito’s version of a fisherman’s work song. Ito, a native of Hokkaido, recreated the traditional music of his home prefecture and combined the more traditional beats of Japanese folk music with a rock and roll melody. The students were able to compare the musical differences of the two styles when they made movements to accompany the two versions.

2) “Awa Odori” A Bon festival dance from Tokushima Prefecture
The students, using video, compared the different characteristics of male and female dance steps and how each synchronized with the music. The odori dance is very intense and energetic and is seen only in this particular prefecture. After gaining an
understanding of the culture of the people and then learning the dance steps, the students performed them while hollering Japanese phrases on specific beats of the music.

**General art and physical expression – A practical example lesson from a junior high school**

Though currently very limited, a small number of junior high schools in Japan are using physical creation practice in their music curriculum. Amongst them, Joetsu University of Education’s Attatched Junior High school (Fuzoku Junior High School) in Niigata Prefecture, has been using such activities for more than 20 years, including productions of student-created musicals. Third-year students at the school, over the course of one year, work on the production during their music, art and physical education dance classes. The author has been involved in this activity for many years.

In class, students devise choral expressions that combine singing and body movements. They call this activity “Harmony with Voice and Body – Let’s Enjoy Chorus and Dance”. During the creative process, the students try to find ways to convey the message of their songs’ lyrics directly to an audience through movement of the body.

Students have stated that they feel that dance can convey their message just as well as scripted lines. Feedback from the audience indicates that the message of the music when combined with the students’ physical expression was easier to understand. (Tokie, 2017b).

**Results and Conclusion – the future of music class and physical expression**

The lesson plans that incorporated physical expression activities were created by the authors in response to the contents of the new course of study. After practicing them in their “Secondary Music Instruction Method” class, the participants noted the following:

- Using all the body’s various senses improved their concentration skills when listening to music.
- Moving various part of their body in time with various kinds of music helped them gain a better understanding of various kinds of world music.
- Using “motion” and “emotion” when listening to music helped them discover nuances in the music they studied that were not previously apparent.
- Incorporating movement into the study of music from different cultures helped them grasp the music more intuitively.

From the participants written descriptions, it became clear that using physical expression activities had different effects on the way each understood the various kinds of music studied during the lessons. However, as the course of study demands music educators connect music with students’ daily life and culture, it became clear that, while the use of physical expression is useful, the impact of these lessons could be limited by time factors.

However, some of the limitations could be mitigated through the use of cross-disciplinary learning. As demonstrated at Fuzoku Junior High School, the school’s physical education, social studies, history, Japanese and music departments collaborated...
to varying degrees to help the students achieve their goal of creating a musical. The combination of limited teaching time and the demands of the course of study will increase the need for such multi-curricular lesson-planning. If this can be achieved on a larger scale, students would be able to utilize a wide range of activities that deepen their understanding of various subjects, including music. (See Figure 1.)

Figure 1. Integration of Music with Other Subjects

Lesson plans that incorporate physical expression in music classes as proposed in this study are beginning to be practiced in more public junior high schools. We wish to explore further how these classes can best be utilized on a wider scale to provide students with the best education possible.

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Utilizing “YAMAHA VOCALOID" in collaborative lessons: A study using ICT in an elementary school music class

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Abstract
In 2017, a new curriculum for elementary schools was introduced by Japan’s Ministry of Education, Culture, Sports, Science and Technology (MEXT) focusing on the use of technology. The authors believe that the application of information and communication technology (ICT) in lessons would be effective in helping educators teach certain courses of study, such as music, even for teachers without an extensive background in the subject, and that it would also help them utilize time more effectively. The authors also concluded that ICT could help students learn about a subject independently and enhance their overall creative abilities.

In 2018, the authors observed a class with 19 pupils at Tsukuba City Municipal Tamiyama Elementary School, a public school in Ibaragi Prefecture that incorporated ICT in its advanced music class. In this class, teachers and pupils used Yamaha’s Vocaloid, a software application that uses voice synthesizer technology to create singing by entering notes and lyrics into a computer.

The class used the educational edition of Vocaloid as it is optimized for classroom settings. It allowed the pupils to create a melody without the need for reading notes or performance skills. However, the observers noted that, even with Vocaloid, the activities required much trial and error when it came to combining sound length, pitch and rhythm.

One of the clear successes of Vocaloid is how it allows equal participation in music activities regardless of each pupils’ musical backgrounds. For example, the authors observed that by utilizing the “Chord Guide” function, the software helped pupils create a melody that matched the overall accompaniment and assisted them in the completion of the class objective – creating a song.

The authors also noted that using Vocaloid in music class saves time and allows for collaboration in more creative activities as well as interactive and proactive learning as required by MEXT (MEXT, 2017). Previously, pupils had to spend more time studying musical grammar or playing instruments. Now, however, since music lessons in schools have been reduced to only 1.3 hours a week, ICT can help learners create music with less training time. An added bonus is that logical thinking and computer literacy skills are also fostered.

Keywords: Vocaloid (ICT), computer literacy, creative music activity, collaborative lesson
Theoretical Background
In 2017, a new curriculum for elementary schools was introduced by the The Ministry of Education, Culture, Sports, Science and Technology (MEXT) focusing on the ability to use information, environmental arrangement and the development of computer literacy skills. With regard to the last of these, the ministry wanted technology skills to be incorporated into all subjects in the Japanese curriculum. (MEXT, 2018)

As these parameters were mandatory, an informed action plan was required. For elementary and junior high school music curricula, an informatic approach, "learning and experiencing the combination of the length and the pitch of sounds by the use of ICT software for creativity" was proposed. The informatic approach, which involves the practice of information processing and the engineering of information systems, was chosen because educators believed that it would “let children notice the combinations and patterns of rhythm by visualizing music constructions and by monitoring the music they've made.” Also, officials thought it would “help improve children’s creative musical abilities, and expressions.” (MEXT, 2016)

Because of the rapid growth of information technologies in society, MEXT, which revises courses of study every ten years, stressed that "programming education” be mandatory in elementary schools. Curriculum Management, which trains teachers in the use of cross-curricular subjects, the use of information technologies and the effective use of ICT, clarified that computer literacy should be implemented in all subjects and that elementary school teachers should be willing to take a flexible approach to the new teaching criteria (MEXT, 2018).

To help teachers, the ministry created a list of example activities. Below are some examples (MEXT, 2016):

- Using ICT tools to program and construct sounds and turn them into music.
- Noticing the difference between a digital performance and a live performance.

The authors understood these new criteria, but they had yet to see them be put into practice. They wanted to observe an actual classroom that used programming education methods in its music curriculum to see if they were capable of improving children’s musical expression.

To better understand how these new criteria could be implemented nationwide, the authors, in 2018, were able to observe a public elementary school class which had already incorporated ICT into its curriculum. This paper offers observations of the classroom practices and the achievements of the teachers and pupils. The authors also considered whether using ICT in music classes throughout the country was an achievable goal.

The Current Situation in Japan
Music classes in Japan are roughly categorized as "Instrumental Music", "Singing", "Music Appreciation” and “Creative Music” (MEXT, 2017). Of these categories, "Creative Music" is widely considered the most difficult for both teachers and children. Elementary pupils, especially, are neither familiar with musical scores nor the creation of melody for either instrumental or singing performances. The difficulty of creating melody is high as is the establishment of an effective teaching method.

Makabe (2016) states that because of the current situation where music lessons in elementary schools are limited to once a week, the use of ICT could eliminate the need for the teaching of reading music and musical grammar. Also, it would allow teachers
and students to focus more on creative activities. For the reasons Makabe states, the authors believe that this would be a valid utilization of ICT in most general public schools.

Still, the authors do see one very large problem. Schools in Japan are not always equal. There is a disparity in the distribution of ICT equipment, often due to a school’s location, as funding depends on local financing. Also, some music teachers may not be up to date on the use of current technologies and so have delayed their implementation.

However, the school where the observed class was located was adequately funded and the teachers had been fully trained in the application of the ICT used. Further, the activity's final goal, to let children sing a song composed using ICT equipment, was believed to be achievable by the teaching staff.

After the goal had been achieved, the authors paid more attention to the pupils themselves rather than just the use of the ICT equipment. Unlike a class in which the schoolchildren passively learn while a teacher lectures, in this class, pupils, in small groups, learned how to achieve the goals of the class at their own pace, with less able pupils being assisted by those with higher abilities.

Children in today’s Japanese society, having become accustomed to using computers, smartphones and other technologies, already seem to have the foundation for educational activities that utilize ICT. Because of this familiarity, the authors observed that the children were able to communicate ideas with their classmates easily as to how the technology used in this class could be utilized. Through these exchanges of opinions, pupils were able to foster cooperation both in small groups and in whole-class settings.

Traditionally, in music departments, pupils master most of their music elements by performance activities. Properly funded, adding ICT could widen the possibilities of music classes and provide a more flexible and creative learning environment.

**Method and Summary of the Main Ideas**

**Observations at Tamiyama Elementary School**

In 2018, the authors observed a class at Tamiyama Elementary School, a public elementary school in Ibaragi Prefecture, that practiced advanced music classes incorporating ICT. In this elementary school, they used Vocaloid, a software application that uses voice synthesizer technology to create singing by entering notes and lyrics on a computer. The class used the educational edition of Vocaloid as it is optimized for classroom settings.

The classroom teacher chose the software to help those pupils who do not have enough skill or knowledge to create original music compositions unaided. She instructed them to use the software to intuitively “create music". (See Figure 1)

According to Yamaha, the software developer, "By trial and error, elementary, junior high, and high school students can have fun creating music using this software. It can be useful, not only in music classes, but also in integrated studies, special support classes, and various other subjects as a cross-curriculum support tool." (Yamaha, 2019)

The learning process, as observed by the authors, happened as follows:
1) Lyrics & Rhythm Making
First, the pupils were assigned to be in one of four groups and each group was given a tablet computer with the Vocaloid software already installed. Each group contained three to four pupils. Then, following the instructions of the “Vocaloid Education Edition Manual”, which they were using for the first time, they created lyrics based on their school experiences and used the software to create a matching rhythm.

To do this, pupils learned how to input sound. They learned that one measure is separated into eight squares and that one square is one note and that a lyrical syllable can be input on that note. Therefore, one measure can have a maximum of eight syllables. (See Figure 1)

Before creating their own lyrics and corresponding rhythms, the pupils practiced by using a set pattern phrase of seven syllables + five syllables: "Ya-sa-shi, se-n-se-i / A-ri-ga-to-u", (In English, this means, "Thank you kind teacher"). During this phase, they learned, that on the second measure, they could change the sound by stretching the syllables and inputting rest notes. Using the "Rhythm Entry Sheet", which was in the “Lesson Model Pack”, they discussed how they wanted the rhythm to sound. After this, the pupils entered the same notes they had written in the “Rhythm Entry Sheet” into their tablet computers. Just a single practice was enough for the pupils.

2) Creating a Mental Picture
In the next stage, pupils created a mental picture of an experience from their school life. When the groups decided on which school events they wanted to use, they were ready to make their original song. The pupils fit their lyrics within the confines of eight syllables per measure, just as they had learned.

When the lyrics were done, they then discussed what kind of song they wanted to make and the effect they wanted their song to have on listeners. Pupils wrote the key
words of the lyrics on Post-It Notes. They then selected which of these key words to use in order to get an image of the melody. When they had an image of their song, the whole class listened to various kinds of accompaniment, and discussed what they thought would match the lyrics.

3) Making the First Half of the Song
Next, they worked on making the first half of the song. After choosing the accompaniment, they began composing using Vocaloid. For an easier visualization of the song, the pupils input the first eight measures and the last eight measures separately. The pupils then used the software’s ”Code Guide”, which gave them a visual guide to the music, to match appropriate melodies and accompaniments to create a composition. (See Figure 2) Being able to visualize the music made it easier for the pupils to have input on how the melody should sound. Also, it allowed them to discuss and fix problems more easily.

![Figure 2. Image of "Chord Guide"](image)

The software automatically highlights in yellow chords which match the melody.

4) Making the Second Half of the Song
After finishing the first half of the song, they began work on the second half. It was important that the last half of the song did not break the atmosphere of the first half, so the pupils had to work carefully. By singing, children tried to match the melody. Each group moved through this process step by step.

Through this process, the pupils learned about the basic rules of composition. They became aware of and were able to recognize the various musical patterns used to create their composition, such as “repeating” melodies or “question and answer” melodies.

5) Performing at the "Thank you, Tamiyama Elementary School" Ceremony
After the composition process was completed, the pupils planned to perform their song, "Thank you, Tamiyama Elementary School" at the school’s closing ceremony. Because of the declining student population in the area, the school, which had been serving the community for 141 years, was being closed and the pupils were to be integrated into a larger school with pupils from other areas of Tsukuba City. This final school ceremony was planned to thank parents, the people of the neighborhood and the teachers, officials and supporting staff who had worked at the school.

Before the presentation, they made a manuscript to explain their song to the audience. The creation of the manuscript also helped the pupils to reflect on their song’s meaning.

The song was sung by the whole school, including the authors. After the event, parents remarked that it was hard to believe that the song had been composed by elementary-age children. Others, including the teachers, remarked that the song resonated well with them.

Analyzing the Learning Process of this Activity
The pupils’ reason for creating this music was to evince special memories and to show their love for the school. Through the creation of the composition, the children had an opportunity to learn the elements of music in a more personalized way. By trial and error, they learned how to match chords to accompaniment and lyrics to melody.

The authors noted that by having a performance goal, the pupils achieved a sense of accomplishment not normally attained in more traditional music classes. Moreover, from reading student feedback taken during the class and after the event, it was clear to the authors that the experience of presenting a song that the pupils had composed to an audience who supported them became a meaningful one.

Conclusions and Implications for Music Education
1) Communicative Music Classes Aid Teachers in Meeting MEXT’s Requirements
The draft of the new course of study for Japan's elementary education calls for lessons that foster “interactive and proactive learning” in all subjects. This goal was formally released by MEXT in February 2017 and it began being used at the elementary school level in April of 2020. It will begin being used at the junior high school level in 2021. It will continue as the main focus of Japanese education for the next 10 years. Our study showed that collaborative and cooperative learning with the help of ICT software helps meet these requirements.

The low level of pupils’ communicative skills in Japan has long been a topic of concern among academics. The new course of study has made it clear that schools need to do a better job at fostering them (Tokie, 2017).

The official English translation of the course of study specifically states that elementary music classes should “encourage pupils to cultivate their sentiments, fundamental abilities, a love for music as well as a sensitivity toward it, through music-making and appraising.” (MEXT, 2009) Participatory music classes, as compared to classes where students simply perform existing musical works, may give students a better opportunity to meet these objectives.

2) ICT Software Allows for More Interactive Elementary-Level Music Classes
Music education in Japanese schools is currently undergoing many changes. Up until now, the main focus of our music lessons has been the acquisition of singing and instrumental skills through the performance of existing musical works. In contrast, the ongoing focus is attempting to develop a more collaborative process that lets children pursue and learn musical expression in a more creative manner.

The authors think that music lessons, such as the one they observed at Tamiyama Elementary School, wherein pupils compose a song with the aid of ICT software, amplifies logical thinking, saves teaching time and allows pupils with limited to no musical training to participate in a creative process. Also, the authors believe the use of this software further enhances computer literacy skills, as required by MEXT, and that such classes may help foster some pupils’ technical abilities.

Most of all, the authors found that a creative lesson where pupils must, through collaboration, construct the elements of music, such as the length of the sound, pitch, and rhythm patterns, gave them more opportunities to express themselves. Pupils had to communicate, first with their teacher when learning to use the technical equipment, second with the members of their small groups when helping to compose their part of the musical composition, and, finally, with the whole class when putting all the parts together to make the composition whole.

The authors found that ICT, specifically Vocaloid, allowed pupils to visualize and simplify the learning of certain musical concepts through color coding and that it allowed pupils to easily integrate both individual and group projects into the larger class project as it progressed. Further, each of the smaller groups were able to look at the progress of other groups in real time, allowing the children to share information efficiently.

When observing these creative activities, the authors found that the children not only shared their thoughts and positivity with other pupils, they also encouraged initiative. During the class, pupils could be seen sharing their own ideas as well as borrowing freely from friends.

The use of Vocaloid in the composition process improved the children’s technology skills as the authors observed the pupils become more proficient in its use with each class. Unlike passive learning situations, pupils were able to learn through their own personal experiences and in concert with the members of their small groups. Through this collaborative process, the children’s communication skills noticeably improved and a marked advance in motivation and confidence were noted in some of the pupils. (Tokie and Tokie, 2019).

Further, the technology greatly enhanced the teacher’s ability to explain difficult musical concepts in ways that were easy for her pupils to understand. The authors believe that, in the future, ICT will become an increasingly important tool for teachers in the Japanese school system.

3) If Properly Funded, ICT Could Alleviate Some Current Problems Facing Music Educators in Japan

While ICT is prominent in larger corporations in Japan, its use in Japanese schools is still quite novel. The availability of ICT equipment in Japanese schools often depends on where one lives. Some areas simply lack the funding. This is a problem that MEXT and the individual prefectural governments will have to tackle in the near future if the full scope of the course of study is to be achieved.

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Musical activities are naturally active, not passive. When people sing, it is naturally expressive. Further, virtually all the music that people listen to on their smartphones is achieved through collaborative efforts. That is why the authors believe that developing creative and proactive music lessons that rely on a naturally collaborative process, such as the one observed at Tamiyama Elementary School, is important. A classroom where children can share their thoughts and expressions and where pupils’ activities and conversations bounce around the classroom is one that is full of vibrancy.

Using Vocaloid in the Tamiyama music class saved the teacher time and allowed the pupils to have more inventive activities. It also reduced the time the teacher would have needed to explain musical grammar or to cultivate instrumental skills. Since the time for music lessons has been reduced to only 1.3 hours a week in Japanese elementary schools, using ICT could reduce training time and allow for more ambitious educational goals.

Finally, in most current Japanese public schools, music is taught by classroom teachers, at least 80 percent of whom have inadequate musical training. Worse, the number of applicants for teaching jobs in Japan has been decreasing, forcing many local governments to remove the musical skills section of the teacher certification process as a way of maintaining recruitment. As a result, fewer teaching candidates have acquired musical expertise. In light of these and other current problems affecting the Japanese educational system, the authors hope that ICT can assist teachers in various fields, but especially in music.

Acknowledgement
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References


Autonomy, volition and music learning: Research high school students
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Abstract
Knowing the motivational behavior of students to explain under which influences and causes (internal and external) students learned volitional and autonomous music at school is the purpose of this article based on the research Master of Motivation to learn music: a study with high school students. However, in this research, we present the results of motivation data collection through the questionnaire applied to sixty-four high school students from the state public school of Belém (PA). Recognizing that decreased autonomy affects volition, we seek to understand the energizing problems that have reduced the chances of students achieving school success. We realize that it is of fundamental importance to consider in planning the mobilization of content and inclusive school tasks, musical experiences lived outside school and in family and social life. We believe that by encouraging autonomous attitudes, the teacher will enable students to experience democratic teaching environments where they can experiment with new forms of involvement with music, which would reduce the dropout, repetition and abandonment that causes suffering for a significant portion of young people. Thus, we verify and recommend conducting more research, interested in knowing the impacts of autonomous motivation on music learning to provide psychological health, satisfaction and well-being to students.

Keywords: high school education, self-determined motivation, music learning

Introduction
Learning should ideally be an autonomous and volitional attitude. The willingness to learn by energizing student behavior in readiness and engagement enables them to self-determine how they will perform a task. Thus, goodwill, autonomy, satisfaction, and well-being do not dissociate from the innate desire that every person has to grow, develop, and act in the world (Deci & Ryan, 2000, 2008; Deci et al., 1991; Deci et al., 1996; Reeve, 2015).

In the classroom, materializing the student's self-determined feeling also depends on the teacher's instigating character. In this sense, the researchers, Rufini & Engelmann (2015), Tapia & Fita (2015) and social psychologists Boruchovitch & Bzuneck (2009) Deci & Ryan (2000, 2008), Deci (2009), and Reeve (2015), say that mobilizing the student to perform activities in the school environment is a boost to their protagonism and autonomy; a way for him to explore and investigate diverse ways of conducting his own strategies, devising them both to master content and to solve problems; It is also a means of enhancing their willingness to participate in collective actions and learning to become an important member in their environment.

Therefore, the teaching environment needs to ensure the integral development of the student to live musical experiences of volition and autonomy while learning music at
school (Brasil, 2018). However, not all content proposed in the curriculum is consistent with the student's life projects and their desire to act in the labor market (Deci, 2009; Deci & Ryan, 2008).

So, how to ensure volitional participation in lessons, autonomous involvement in tasks and consistency of the contents applied with the objectives and goals of the high school music learner? This is the motivating question that has aroused in us this teacher-researcher and has led us to discuss and understand what motivation the student wants to learn music in school.

Exploratory research related to music education reflects the importance of the teacher to know the motivational state of the music learner in the final stage of basic education (Silva & DeFreitas, 2016; Silva & Henderson Filho, 2016; Silva, 2017). In conducting these studies, it was evidenced the lack of investigations focused on students' energizing problems to learn music in high school; student interest and motivation to learn; and the need to highlight causes, reasons and influences that promote or not the students' involvement with musical tasks in the classroom.

As a result, the lack of unmotivated students in the collected research is unanimous and notorious; what the studies point out is a controlled motivation of an extrinsic nature marked by the fact that the student has to comply with the contents determined in the basic education curriculum and undemocratic experience and controlling learning environments.

According to the Basic Education Development Index, the most public high schools’ students in Pará with regard to the learning of the high school student, is on alert. The learning difficulties faced by him are marked by high failure rates, age-year distortion, dropping out and dropping out, factors that distance him from developing a life project, academic progression or entering the job market (Brasil, 2014; Q-Edu, 2015).

Facing these adverse conditions, we investigate the learning disability if would be mobilized learning disability would be mobilized by the perception of partial attendance of the basic psychological needs of these students or if by other factors. Aware of the motivational theories in vogue (Boruchovitch & Bzuneck, 2009; Reeve, 2015), we adopt the Self-Determination Theory and thus, we started a master's level survey research.

This proposition is supported by the postulates of the Self-Determination Theory, whose choice occurred because it is a theoretical construct based on the sociocognitive perspective of motivation considered by Reeve (2015) as an object of study of needs.

The Self-Determination Macro-Theory, distributed in six sub-theories, combined and interrelated, allows the study of motivation in its entirety and in part, as it uncovers different facets of the human personality that is the goal of each mini theory (Deci & Ryan, 2000).

Each approach is based on different perspectives of student personality analysis as follows: Basic Psychological Needs Theory; Cognitive Evaluation Theory; Organismic Integration Theory; Causality Orientation Theory; Goal Contents Theory; and Relationship Motivation Theory.

The study of self-determined motivation, which can be forwarded by researchers and teachers as a study of event, process and outcome, made us opt for the mini theory of Basic Psychological Needs, part of the Self-Determination Macrotheory. The Theory of Basic Psychological Needs comes from the natural tendency that everyone able to learn,
grow and develop while actively exchanging with the environment (Deci et al., 1991; Deci et al., 1996; Reeve, 2015).

**Objective and Methodology**

In this topic, we present the main results of the research Motivation to Learn Music: a study with high school students (2017). It will show the exploratory and descriptive study about student’s motivation to learn music and the application of a research of survey. The aim is to understand the contributions of motivation to music learning and to know the condition of motivation to explain the internal and external influences that motivate student participation, involvement and permanence in musical practices in the final stage of basic education.

We choose for this research 139 music students, enrolled in the first year of public high school as main informants of this investigation. We applied a descriptive cross-sectional survey, after it was subsequently analyzed of the Self-Determined Theory to projected both the questioning and aim of this research.

We analyze the result using the quantitative method generating graphical analyzes, tables and the description of the motivational profile of the researchers (Babbie, 2003). Thus, we support our advances in the theories of Deci (2009), Deci and Ryan (2000, 2008), Deci et al. (1991) and Deci et al. (1996), Reeve (2015), we applied the seven-point and 24-item Likert scale, adapted from the scale called Psychological Needs Satisfaction and Frustration Scale validated in research conducted in Peru, Belgium and the United States (Chen et al., 2015).

The scale as Chen's 7-point Likert with 24 items (et al., 2015), after being translated, was contextualized in a panel of 9 judges, linked to the Developmental Disorder and Learning Disabilities Research Group at Federal University of Pará. The data collection instrument was tested with 64 music and public high school students of Pará.

Other research instrument was structured: the questionnaire was applied in participants following characteristics: (1) personal characteristics about gender, age of students and educational background of their guardians too; (2) characteristics related to music, dealing with out-of-school musical learning, musical experience, whether as listener or practitioner and if family members develop any musical skills.

The design of the chosen descriptive intersectional survey allowed us to conduct a study on the motivation of a small portion of music learners in a single time (30 to 40 minutes). The informants did not know to say about their basic needs.

According to the result of the answers by the informants presented statistically obtained 84% of variability in the answers, as well as Cronbach's alpha of 0.84 for autonomy, 0.58 for competence, 0.69 for relationship frustration and 0.67 for autonomy frustration (Table 1 attached).

After the research, we were able to project extrinsic motivation, influenced by the perception of poor fulfillment of their basic psychological needs, caused by volition on input stage and a sense of self-determination by the perception of relationship frustration at a moderately high level.
Results and Final Considerations
In this topic we present the results of the descriptive intersectional survey on the motivational behavior of the stratified sample of high school students using a 7-point Likert scale questionnaire with 24 items adapted from the Chen scale (et al., 2015) that were coded and analyzed quantitatively to present the state of motivation and measure the volition and autonomy presented by the respondents to learn music in school.

In the analysis of the 5-factor clustered A Questionnaire, we selected the items according to the Kaiser-Meyer-Olkin criteria and rotated them by the Parsimax method for a better interpretation of the selected factors. In this instrument, 84% of data variability were obtained.

In the B questionnaire, personal and other characteristics related to music were typed.

In the study, we identified that the average age of the participants is 18 years and there is female superiority (59.4%). Retention, dropping out or failing are also higher in female participants. In the school census of basic education, it is reported that in high school, specifically in the 1st year, there is an average of 12.5% of failure and 19.5% of dropout, also noticed in the studied sample (N = 64). The information about the educational background of the student’s guardians where 85.9% of all parents completed all stages of basic education, it was understood as the interest in academically progressing in high school and the high sense of competence of these students.

There was probably that support from parents and close people to experiment musically in family and church (9.4%) contributed to the student's interest in music lessons and the high level of competence identified in the research. The research also points out that 37% of students recognize having musical skills acquired in family life and 16% learned music out of school.

Among the students, 40% assumed to exercise music learning as an extracurricular activity in places such as their home (4.7%), in the church (4.7%), Curro Velho Social Project (1.6%), School fanfare (1.6%) and School of Music (1.6%). Looking at the number of students who learn music outside school, 80% of them are female.

To identify in the sample the number of students who experienced the practice of music, either as a listener or as a practitioner, it was asked if they or their family members play instruments or sing; 64 students, 37% of them, answered to play some instrument or to sing in the family.

In the A questionnaire, we intend to understand the perception of attending to the feelings of autonomy, competence and relationship of the researched sample to measure volition and autonomy to learn music in high school. In the factor analysis by Parsimax method, we found a correlation between the motivational construct and its different variables, which we considered sufficient to statistically project of motivation in the informants.

The A questionnaire was analyzed and his factors related and correlated with the degree of care or frustration of psychological needs. The propose measured the incentives that moved the studied sample to act, influenced sometimes by intrapersonal incentives, sometimes by interpersonal incentives and to reflect on the environmental supports of interference in the student's autonomy to learn music.

There was in A questionnaire a partial satisfaction of the basic psychological needs of the sample (N = 64) confirming the Self-Determination Theory thesis (Deci & Ryan,
which admitted that meeting basic needs is an innate characteristic of the person. From the coding of the data, we found associative correlations between the feelings of autonomy, competence and relationship (Table 1) linked to factors 1, 2, 3, 4 and 5 specified below.

Factor 1 correlates items 1, 5, 7, 15 and 19 demonstrating superiority in the perception of satisfaction of the feeling of competence at the level of 80% of intensity, influenced by intrapersonal incentive. Then we understand that the sense of high competence increased the willingness of the student to want to participate in music classes willingly result in diverse interests.

In students who do not learn music out of school (84.4%), the feeling probably articulated with the goal of progressing academically, and for those who learn music out of school the incentive to please those close to them was found experience music in a family and social environment (specialized school, church groups), or, for the opportunity to improve musical skills experienced in everyday life, sometimes as a listener, sometimes as an interpreter seen in 40% of the sample surveyed.

<table>
<thead>
<tr>
<th>Item of the A questionnaire</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
<th>F4</th>
<th>F5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. I feel sense of choice and freedom in the things I undertake.</td>
<td>0.5810</td>
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<td>Q5. I feel confident that I can do things well.</td>
<td>0.8087</td>
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<td>Q7. I feel that my decisions reflect what I really want.</td>
<td>0.5488</td>
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<tr>
<td>Q15. I feel close and connected with other people who are important to me.</td>
<td>0.4722</td>
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<tr>
<td>Q17. I feel competent to achieve my goals.</td>
<td>0.5584</td>
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<tr>
<td>Q19. I feel I have been doing what really interests me.</td>
<td>0.6024</td>
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<td>Q12. I feel disappointed with of my performances.</td>
<td>0.4144</td>
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<td>Q14. I feel pressured to do too many things.</td>
<td>0.5193</td>
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<tr>
<td>Q16. I have the impression that people I spend time with dislike me.</td>
<td>0.7668</td>
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<td>Q18. I feel insecure about my abilities.</td>
<td>0.6689</td>
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<td>Q20. My daily activities feel like a chain of obligations.</td>
<td>0.3850</td>
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<td>Q24. I feel like a failure because of the mistakes I make.</td>
<td>0.4163</td>
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<tr>
<td>Q3. I feel that the people I care about also care about me.</td>
<td>0.5241</td>
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<tr>
<td>Q9. I feel connected with people who care for me and for whom I care.</td>
<td>0.6864</td>
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<tr>
<td>Q10. I feel that people who are important to me are cold and distant towards me.</td>
<td>4.213</td>
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<tr>
<td>Q11. I feel capable at what I do.</td>
<td>0.7833</td>
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<td>Q13. I feel my choices express who I really am.</td>
<td>0.5408</td>
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<td>Q21. I experience a warm feeling with the people spend time with.</td>
<td>0.3045</td>
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<tr>
<td>Q23. I feel I can successfully complete difficult tasks.</td>
<td>0.2421</td>
<td></td>
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<tr>
<td>Q2. Most of the things I do feel I like &quot;I have to&quot;.</td>
<td>0.4311</td>
<td></td>
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<td>Q4. I feel excluded from the group I want to belong to.</td>
<td>0.6256</td>
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<td>Q6. I have serious doubts about whether I can do thing well.</td>
<td>0.5946</td>
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<td>Q8. I feel forced to do many things I wouldn't choose to do.</td>
<td>0.5114</td>
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<td>Q22. I feel the relationships I have are just superficial.</td>
<td>0.2096</td>
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</tbody>
</table>

Table 1 continued:

<table>
<thead>
<tr>
<th>Item</th>
<th>Score information</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
<th>F4</th>
<th>F5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5,7982</td>
<td>2,1083</td>
<td>1,4119</td>
<td>1,2321</td>
<td>1,1239</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Variance explained</td>
<td>0,4188</td>
<td>0,1523</td>
<td>0,1020</td>
<td>0,0890</td>
<td>0,0812</td>
</tr>
<tr>
<td></td>
<td>Cumulative Variance</td>
<td>0,4188</td>
<td>0,5711</td>
<td>0,6731</td>
<td>0,7621</td>
<td>0,8433</td>
</tr>
</tbody>
</table>
Factor 2 correlates items 12, 14, 16, 18, 20 and 24 that reveal the perception of relationship feeling frustration at the 76% level influenced by the lack of interpersonal environmental support. The fact that the student did not have his ideas validated by the group seemed to us promoted by the lack of support received to solve the music tasks. This condition of control seemed to be the result of tasks that, in their resolution, do not allow the student to explore and develop strategies for solving music problems, even disregarding their experience and musical ability developed outside school.

Factor 3 estimated correlations between perceived service and relationship feeling frustration, correlating items 3, 9, and 10. In it, the perception of relationship feeling at the 68% level for interpersonal incentive increased the volition of students surveyed to learn music at school when they were encouraged by people close to them.

Factor 4 demonstrates correlations that indicate the perception of attending to the feeling of competence with those of autonomy and relationship, correlating items 11, 13, 21 and 23; Among them, the perception of satisfaction with the feeling of competence at a high level stands out, indicating that 78% of the sample suffered intrapersonal incentive. Probably, the student became involved volitionally with the music tasks that increased his personal interest in music lessons at school, to achieve personal goals, possibly articulated with the desire to progress academically to complete high school, go to university or enter the market. Work In addition, we consider the likelihood that students who learn music out of school want to articulate the musical experience, experienced at school, to their life project.

On Factor 5 correlated items 2, 4, 6, 8 and 22 showing that perception of autonomy’s feelings, competence and relationship frustration were more pronounced them relationship’s frustration, at 62% level influenced by the lack of environmental support.

The student's perception of not feeling an important person in his high school probably reduces their volition to participate in learned content and tasks in this school environment. This situation must have been caused by the student's experience of a controlling and undemocratic school. A place where must be obey commands it is a place unable to create ideas or validate the group's ideas.

The empirical directions applied in music education and others applied in other to Self-Determination Theory gave us the opportunity of to reflect about the autonomous motivation impact on the psychological health of these public high school students and to learn music in school must be to satisfaction and well-being.

In the literature of Boruchovitch and Bzuneck (2009) Deci et al. (1991), Deci et al. (1996), Rufini & Engelmann (2015), and Tapia & Fita (2015) there is increasing their conceptual learning and decrease their reality of repetition and dropout cause to the volitional and autonomous interactions of students and their environment.

Regarding their volition to learn, we identified that the sample obtained locus of causality perceived externally at an input stage by acting in the school environment oriented to please people close to them; The educational institutions that evaluate the Basic Education Development Index and show the tendency to failure in learning.

| Alpha de Cronbach | 0,8449 | 0,7266 | 0,6322 | 0,5824 | 0,6746 |

Table 1 Factorial Analysis. Fonte: Silva (2017)
occurred because the mechanisms that caused suffering and dissatisfaction in the students were driven by coexistence in a controlling, undemocratic and not supportive school environment that did not favor the integral development of the student in high school.

The teacher having their planning articulated with validated teaching methods and procedures, in addition, encouraging students to exercise in their music learning tasks combined with the rhythmic and melodic diversity music of the young people. Promoting musical experiences with improvisation and composition for the students are more challenging to learn music. And the teacher can use the talent of student with the volitional interest, sense of exploration and autonomy of the learner (Fonterrada, 2008, 2015).

The teacher might considering be a couching to promoting students to develop musical skills at school and to feel like to encouraging this student in his exercises plural music, making a articulated planning with validated teaching methods and procedures.

We believe that the subjects of this study can be motivate by teacher to maximize the learning of music. Thus, we recommend articulating different artistic languages combined with cultural codes, knowledge and diversity to encourage the student to enjoy the artistic expression of the paraense Amazon in same time, reforcing the important to promote in high school the protagonism among students, essential practice. (Brasil, 2013, 2018).

In this sense, we believe in the importance of this research to form new opinions on how to learn music in public high school, by adopting strategies from the self-determined motivational perspective. Thus, we verify and recommend conducting more research, interested in knowing the impacts of autonomous motivation on music learning to improve psychological health, satisfaction and well-being to students.

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Perspectives of spiritual aptitudes development in general music education
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Abstract
One of the educational objectives accepted by the world is the development of child's personality, his/her spiritual, physical and potential abilities. Music Education school subject in Moldova is fully within the scope of this objective. From this perspective it is very important to address the problem of spiritual aptitudes — characteristics of individuality, which establishes the qualitative specificity of behavior. Spiritual behavior is conditioned by virtue of personality and its spiritual qualities. So, spiritual aptitudes evolve as virtues of personality, and virtue is related to morality and is oriented to doing good. Spiritual aptitudes are manifested by the tendency towards spiritual progress — intellectual, moral, through activity and are realized by an integral psychological system.

The function of education is to form and develop spiritual skills. Music is predestined to hearing, and musical perception is the essence of any musical activity. An important role at music education lessons is given to the vocal-choral activity, which aims to shape the students’ musical culture — a component of spiritual culture. A person, who learned to sing systematically will be taught to alternate song with meditation upon the music and experience it offered. Reflection towards music implies reflection which is musical-vocal and continues the inner workings of sounds. Reflection stands on humming and is a “melodious thinking” or “meditative humming”. Music becomes a spiritual master for students. The peculiarity of vocal music, as a spiritual master, lies in helping to reach the deep self.

Prayer is also meditation. Prayer, plus disciplined altruism, produces the mystic. Meditation, plus disciplined and organized service, produce connoisseur. Meditation differs from prayer by the fact that it is primarily an orientation of mind that brings about achievements and recognitions that become formulated knowledge. Meditative internalization leads to reestablishing contact with the luminous depth. One of the human evolution goals is coordination between Will, Love, and Energy. We can say that the Vox Mentis theory consists of unifying all physical parts of the body with the psychic under the control of mind-assisted consciousness.

Meditative song contributes to the development of creative imagination and determines the spiritual state of an individual. The development of spiritual aptitudes is possible with the help of meditative song, which induces an individual with a profound experience of the intoned sounds and, thus, leads to the development of spiritual aptitudes.

Keywords: Spiritual, aptitudes, singing, humming, meditation, interiorization

Strategies of developing spiritual aptitudes at music education classes
One of the educational objectives accepted by the world community is the development of the child's personality, his/her spiritual and physical capacities and aptitudes at the
level of his potentiality (Curriculum Național. Învățământul primar, 2018; Curriculum Educație muzicală, clasele a V–a–a VIII, 2019). In the Republic of Moldova, Music Education is fully within the scope of this objective, its aims being centered on the need to form the students’ musical culture, as part of their spiritual culture. In relation to spiritual education, the music was partially approached in its specific nature, in its necessity, in the action and power of the message it carries, in spiritual life and value act (Plato, 1986; Aristotle, 2011; Hegel, 2000; Schopenhauer, 2012; Cioran, 2016 etc.).

The spiritual development of students can be successfully achieved during musical education classes. But in this regard the issue of spiritual aptitudes needs to be addressed. Aptitudes are features of the functional systems, which perform certain psychic functions, which have an individual specific of expression and result in success and qualitative originality of knowledge assimilation during certain activities.

Psychologists proved that, to some extent, aptitudes are, on the one hand, genetically transmitted (this refers to the functional mechanisms of aptitudes), and on the other hand — they are individually acquired (this refers to the operational mechanisms of aptitudes). Thus, the predisposition for something appears as an integral manifestation of aptitudes within a concrete activity (Шадриков, 2004).

The aptitudes and the predispositions are certain and concrete qualities: some (the first) are properties of the functional systems, the others — properties of those systems’ components. Along with the development of a system, its characteristics, as system’s components, also change.

The characteristics of functional systems are systemic qualities. In the characteristics of systems, the properties of the components, which can be presented in the form of special predispositions, can manifest themselves and they do so. In addition, the productivity of activity is influenced by the characteristics of sub- and super-systems, which are noted as general predispositions. General and special predispositions, likewise, can be treated as systemic qualities.

The Russian psychologist Vygotsky (1983) underlined that the development of higher forms of behavior requires, biological maturity, a structure known as a premise. In this sense, it is particularly necessary to investigate, in the research of higher psychical functions, the degree of possession of some particular function by a child — not only the nature/type of his memory, but also his skill to use it (Выготский, 1983). The qualitative feature of aptitudes can be explained by its determination by other aptitudes rather than by its general property.

Lomov (2008) follows a complex approach to this issue and considers that it is impossible to create conditions that could separate the perception of memory, thinking, emotions, etc. The real process of perception includes all — memory, thinking, etc. (Ломов, 2008).

Aptitudes and activity do not confront each other — they are studied in a dialectical unity within their formation and development. In psychology, the viewpoint that aptitudes are understood as a product that is formed throughout the entire life is more widespread. Rubinstein (1976) considers that all external influences on an individual are manifested only by refracting through his inner conditions. Aptitudes generate from inter-correlating biological and social factors and, thus, the individual is endowed with a range of aptitudes from nature (Рубинштейн, 1976).
The process of aptitudes development is operative by nature, which is highlighted by fine adjustment of a personality’s qualities to the requirements of a certain activity (as well as the reverse process — the acquisition of the individual image through certain/ Various activities). Thus, the special aptitudes are general aptitudes, which cumulated in themselves operability qualities under the influence of the activity requirements. Aptitudes development represents development of: functional system, which performs a concrete psychic function; operational mechanisms; operability in the system of functional and operational mechanisms.

The ancient philosopher Aristotle emphasizes ten basic categories, around which spiritual aptitudes can be formed and developed: substance, quantity, quality, attitude, place, time, position, possession, action, sufferings. Most often, three categories are considered the most general: the thing (the object), the particularity (or the quality) of the object, the attitude of one thing towards another. Finally, the aptitude can be viewed either as a thing, or as the attitude of one thing towards another. To understand the concept of spiritual aptitude it is important to specify the relationships between the categories “activity” and “behavior”. The concept “activity” appears as a synonym of the concept “human behavior” (in a broad sense). At the same time, the concept of “behavior” has a specific meaning. Human behavior includes the attitude towards moral norms, as a determining moment (Рубинштейн, 1976). Thus, spiritual aptitudes are features of the individuality, which establish the qualitative specificity of behavior, while the spiritual behavior is beneficial and is conditioned by virtue of personality, its spiritual qualities. Proceeding from the aforementioned positions, the idea appears that spiritual aptitudes evolve as virtues of personality, while the virtue is related to morals and is oriented towards doing good.

Often, spiritual aptitudes are treated as synonymous with soul aptitudes. The etymology of the concept is explained by understanding aptitudes as qualities of spirit or soul. But soul aptitudes themselves appear as classical aptitudes of perception, memory, thinking, sensitivity, etc. Such a treatment of spiritual aptitudes is not appropriate, and, in this case, psychology need not address the concept of spirit and soul. Speaking of spiritual aptitudes, we must stay above the usual psychological research as particularities of the individual, which condition the execution and assimilation of the activity.

The idea that spiritual aptitudes are aptitudes of spiritual condition, which is formed based on the spiritual values of personality, is very important (Шадриков, 2004). In this context, James (2017) introduces the following theses: the worst thing that a psychologist can do is to start explaining the nature of personal conscience, depriving it of individual value. Thoughts are separated from each other by barrier of personality; the nature of the thought is not explained, the interdependence between physical and psychic condition being established. Several generations of psychologists will have to work in order to establish with a competent precision the hypothesis about the dependence of soul phenomena on physical ones; In a child, unlike in an animal, the formation of functional systems of the psychic activity is not completed at birth. The formation of the cephalic brain, as a functional system, occurs throughout life, under the influence of external cultural environment. And it can be argued, that the functional systems of brain, initially, are formed as cultured (Джемс, 2017).

Comparing these three theses, we note that human aptitudes are initially based on the feature of the cultured functional system; they do not exhaust along with the features
of the system itself; the decisive moment in their development is their determination by individual values. Spiritual aptitudes, therefore, are determined and regulated by spiritual values. Thus, we consider that: spiritual aptitudes are determined, first of all, by the inner character of spiritual conditions and the moral sense, which is manifested in the tendency towards activity in a certain direction. Spirituality occurs in unexpected creations, by the fact that reality is learnt not only rationally, but also emotionally, through experiences.

The aim of education is to form and develop spiritual skills. Music is predestined to hearing, and musical perception is the basis, the essence of any musical activity. The human sings to pass the song through the soul, to feel it, to live it, to perceive it. These ideas should be taken as basis for the educational process. In the music class an important role is given to the vocal-choral activity that aims to shape musical culture in students, which is a component of the spiritual culture. For many centuries the vocal-choral singing has been means of communication, which unites children, develops such musical qualities as musical hearing and voice, sense of rhythm, responsibility, reciprocity; it also develops such psychic processes as musical memory, musical thinking, imagination.

Also, the song renders certain mood, human emotions, joy and sadness, calmness and exaltation, tenderness and anger, which is a direct reflection of the influence of surrounding reality on the individual. There are numerous and varied means of expressing certain spiritual conditions in or by singing. For example: no musical sound is related to a certain meaning. We cannot say that a sound means the word “flower”, “sun”… But the song can generate absolutely concrete associations in the correlation of music and word. Without this symbiosis, the human could not find out what the composer’s intentions.

Thus, the pitch — that is frequency of vibration — can be mentioned first of all among the basic features of the musical sound. The ascending melodic movement can help express the increase of intensity, while the downward movement usually causes a sensation of peace, dimming. The pitch of the sound and nature of its change are very important and are used in music to express certain spiritual conditions. The song intoned by voice is not only an upward movement, but rather a combination of word with music. Speaking of vocal-choral singing, it should not be understood that the transformative force of music is directly included only in the music and words of a song. The nature of the songs itself and inner content are able to influence the spiritual condition of children, if their singing is truly sincere and warm. This will be an important step in the vocal-choral work within the musical education class, for the purpose of training/developing spiritual skills.

Reduced to the function of simple technique, the methodology of conscious intonation degenerates into a routine, in which at one point, the one who sings becomes bored. The person who learned to sing in a systematic and disciplined way will be able to alternate song with meditation on the music and experiences it produces on him. His investigation begins to give results only when the practice of intonation is continued in reflection (Balan, 1965).

To reflect on music does not mean to speculate intellectually on the studied pieces. It is about a reflection, which is in itself musical and vocal and continues the inner opera of sounds. Impregnated by music (singing) — not by the external one, but by the one that rooted in the individual, the reflection blends harmoniously with the discontinuous flow of ordinary thinking. The reflection rests on humming and feeds on it. It is a “melodious thinking” or a “meditative humming”. It has all virtues of classical reflection and,
moreover, the life adequate to the music. It is accompanied by gesture, which acts as a counterweight to the exhilarating influence of humming. When the need for singing is tempered, the desire is born to meditate in music atmosphere that continues to “hum” within the individual. Thus we approach the issues related to sound flow. The questions that arise at that moment reflect the stage reached in the perception of music (Cioran, 2016).

Music, particularly vocal music, becomes a spiritual master for students. Unlike their religions, doctrines and preachers, it does not act from outside, but from inside the singer. The peculiarity of vocal music as a spiritual master lies in the fact that it helps reach directly the deep self, however not through self-persuasion. Music did not reach a meditative attitude as a result of evolution: it began by being meditative. During the time when foundations of European musical language were laid, it was only meditative. The spiritual content of European music generated quiet, soft and luminous contemplation.

The purpose of the meditation process is to lead people to the Light within them and to enable them to see the Light. The evolution and refinement of the mental faculty, in the human, with his sharpness and ability to concentrate, now offers to the West the opportunity to test those theories. The new synthesis of mind and soul must have its origin in mind, on the peak of supreme intellectuality, which requires a clear understanding of three aspects on which the oriental position is based and which validate the effort of the person who studies the technique of meditation. These premises are the following:

First: There is a soul in every human and this soul uses the most inferior aspects of the human as vehicles or means of expression. The objective of the evolutionary process is to intensify and deepen the control of the soul over its instrument. When it is complete, we have to do with a divine incarnation.

Second: The sum of these inferior aspects, when they are developed and coordinated, is called personality. This unity comprises mental and emotional conditions of the human, of vital energy and physical response apparatus, which “disguise” or hide the soul. According to the oriental philosophy, these aspects develop successively and progressively and only after reaching a relatively high stage of development can the human coordinate them and later unify them in conscience with the immanent soul. Later comes control through the soul and an ever-increasing expression of the soul’s nature.

The experienced voice of the oriental wisdom suggests the means: meditation. If meditation is followed properly and perseverance is the dominant note of life, then contact with the soul will be gradually established. The results of this contact will translate into self-discipline, purification, aspiration life and service for the sake of others. Meditation is also prayer. Prayer, plus disciplined altruism, produces the mystic. Meditation differs from prayer in the fact that it is primarily an orientation of the mind, bringing about achievements and recognitions that become formulated knowledge. Ordinary people require what they wish to have: they knead in prayer to gain the desired virtues; they ask an obedient Divinity to appease their troubles; they disturb the high heavens for the goods — material or spiritual — which they consider essential to their happiness; they aspire to and want qualities, circumstances, and those conditional factors that will make their lives easier, or free them for what they think is most useful to them; they agonize in prayer, imploring the relief of suffering and disease, and seek to obtain from God an answer to their prayer for revelation.
Meditation carries the work in the mental field; the desire makes room for practical work of preparation for the knowledge of information. Music is meditative not by the logic of structures, it is profound as thought, because it expresses the generous openness of soul, the rise above all restlessness and contradiction; the serene and affectionate contemplation, the desire to love in the purest and most universal sense of the word. It is Love from which the true meditation draws its capacity to fly.

Meditative interiorization leads to the reestablishment of contact with the luminous depth. Loneliness is the older sister of meditation. Only in its climate does it become possible to look inward, in whose depths another image of our own ego reveals itself, shining over all the difficulties of life and inaccessible to them, our superior self, a kind of purified double of daily conscience, or rather, its pure prototype. We have established that the purpose of developing the spirituality of the little student through music (singing) is based on the idea that energy, soul, spirit lives in a body and gives the ego an opportunity to express itself in the physical world. The means of expression are the organs of sense perception, the brain and the larynx, respectively for perceiving, thinking and communicating. One of the goals of human evolution is the coordination between Will, Love, and Energy. At this point it can be asserted that the Vox Mentis theory consists in unifying all the physical parts of the body with the psychic under the control of mind-assisted conscience (Cegolea, 1995).

Balan (1965) considers that only music offers an idea of the essence of meditation. Meditation means immersing yourself in the silence of soul until inner music begins to be heard. During interiorization, the desire to listen to music and to sing is born in the soul, as a call coming from the depths (Bailey). The development of spiritual aptitudes is possible with the help of meditative singing, which generates profound experience of intoned sounds in the individual and leads to the development of spiritual aptitudes — spiritual ascending.

References


Music makes all ages smile!
Margré van Gestel

Zing En Doe Maar Mee (Netherlands)

Abstract
Making music, playing and singing together on a daily basis turns every retirement or old day in a joyful experience. Music is truly a celebration of life at its essence. The way I prefer to work with the elderly is music sessions in a family setting. When we bring together (great-) great-grandparents, grandparent, mother or/ father and young children, everyone contributes to the (musical) interaction in the group. Erikson (1971) has described this in his model of human development as generativity (transmission of life to the next generation). When we can see life in the full width, says Erikson, we can share what is of value to people by singing and making music together. So, we not only pass on life itself, but also the everyday actions, customs and habits and our norms and values.

Due to the aging population, the number of elderly (with dementia) will increase and the demand for meaningful and pleasant use of time will probably also increase. More musicians and music educators will be asked to work with the elderly. There are many different ways in which music can be part of the lives of elderly: listening to music from their early years together, moving/ dancing together to music, making contact with the elderly while improvising on your instrument. More creative methods will emerge in the future.

But so far, and not only for me but also for the children, the parents and the elderly with dementia, an early childhood music education class together with the elderly is something to look forward to.

Keywords: elderly, dementia, young children, music education, family context

“Great that you are all here, then we can start, and who are you?” "Yeah, I don't remember", is sometimes the answer of the elderly. They have already observed and enjoyed the toddlers who came to shake hands with hand puppet Kermit and Kermit also gets a hand from most of the elderly. Beautiful moments arise during the greeting ritual. A lady who has no words at her disposal any more responds by singing: "da, that, da, that, da". After my reaction in the same sound idiom she communicates with very imaginative ‘singing hymns’. At the same time she makes eye contact and her two hands hold my hand in a loving greeting. This is a lady with dementia who is constantly wandering around the home, and now stays close by the children during the music class, active involved and 'singing sounds' from the beginning to the end. She communicated, enjoyed and smiled!

Making music, playing and singing together on a daily basis turns every retirement or old day in a joyful experience. Music is truly a celebration of life at its essence. As Shakespeare already wrote: "Music of such a charm, to make bad good ..." (Measure for Measure, 4.1.14).
Music with elderly with dementia
Music with demented elderly people has been ‘in the picture’ lately. All kinds of articles and studies appear on the internet telling how wonderfully elderly people with Alzheimer's and dementia react to music.

The video/DVD ‘Alive Inside’ shows demented elderly people who enjoy listening to their favourite music from their younger years, with memories coming back. Organizations in England such as ‘Lost Chord’ and ‘Music for life’ work on a permanent basis in care homes and in this way they build a relationship with the elderly so that they increasingly participate in singing and music activities. In the Netherlands, the Lifelong Learning research group of the Prince Claus Conservatoire / Hanze University of Groningen, started some projects. The results show that practicing music promotes communication and well-being. Music is the central point here. Communication, participation and learning through action and response are central. While improvising, the clients are involved in making music together with the aim: ‘to make the person behind the dementia visible again’. (Smilde, 2004).

In all manifestations and stadia of dementia, the behaviour (and even the personality) of people changes. They are no longer the person they used to be. By music or by making music together you sometimes catch a glimpse of the person they used to be, instead the patient they became under the influence of dementia.

Making music in a family context
The way I prefer to work with the elderly is to organize music lessons in a kind of family setting. When we bring together (great-) great-grandparents, grandparent, mother or/ father and young children in one session, everyone contributes to the (musical) interaction in the group. In this way, a music session with several generations generates a beautiful dynamic between the different age groups.

Erikson (1971) has described this in his model of human development as generativity: transmission of life to the next generation. When we can see life in the full width, says Erikson, we can share what is of value to people by singing and making music together. So we not only pass on life itself, but also the everyday actions, customs and habits and our norms and values.

By singing our songs together, telling our stories and sharing our music, we create a shared positive identity. This reflects social norms, historical events, cultural assumptions and moral identity (Langelaar, 1982).

My preference for making music together in ‘family context’ has an effect on the objectives of the lesson, on the choice of activities, songs and material. In addition to communication skills, it also requires a thorough knowledge of both the (musical) development of the young child, and knowledge in the field of relationships between parent-child, parents-elderly and elderly-children. A combined music course in which the elderly actively participate requires a little more than placing the demented elderly in a spectator position and offering them a cup of coffee after the lesson. My choice is to activate and intensify the relationships between the different generations through music, by playing together, singing and making music, by touching and having fun together. In family music classes you invite all participants to make contact with each other. In addition, I address every participant in terms of their musical abilities.
**Solid structure**

A fixed structure, a rhythm in life, is important for many people. Both in lessons with young children and in lessons with elderly people with dementia, I add structure through a ritual with a fixed beginning and ending song. This ensures clarity, trust and safety for everyone. The participants respond because they know what is expected and what is to come. The ‘emotional availability’ of the teacher combined with personal attention is important for the self-awareness of all participants: I am here, I am welcome and I can do something. Waiting for your turn appeals to social development. Elderly with dementia often respond in the same way young children do. Being asked to do something, which sometimes is not that easy anymore, makes them feel excited and causes the stress level to rise. The respectful personal attention and being touched, physical and/or emotional, results in a feeling of being welcome, which results in participation.

Of course, there are incomprehensible moments working with music, young children and elderly. Nobody has the same character; nobody has experienced the same things in life. The type of dementia, the moment at which the disease manifests itself and the course of the disease process are also different for each patient.

*Just in time for the start of the third lesson, a caretaker brings Mrs. S. inside. Mrs. S. is sitting in her wheelchair, her upper body bent over, and her eyes only looking out at the blade of the wheelchair. Her wrists folded inwards at an angle and the hands clenched. “Well, this lady will probably not participate today. It wasn’t that pleasant this morning either“, is the message we get. The caregiver puts Mrs. S. next to me in the circle and leaves. I grab my hand puppet and the metamorphosis of Mrs. S. is remarkable. After the first notes of the Hello song, she sits up and there is a sparkle in her eyes. Her hands open to reach for the hand puppet and she touches him. The eye contact we have speaks volumes: interest and pleasure. She sings along when I greet the children, as she continues to sing all known songs throughout the lesson. She shakes the shaking eggs, strings a chain of large beads and enjoys.*

**Contact moments**

Touching activities in a lesson with the elderly are crucial. The skin develops during pregnancy as the first sense and functions until the end of life. Touching is and remains a necessity of life. Songs during which you massage the hands of the elderly, play songs where you hold each other’s hands crosswise and make sawing movements and play songs about the weather, with a kind of massage activities (pretending the warmth of the sun or the drops of the rain) on the back of the children or elderly, are ideal to make contact.

There is a step-by-step route for touch games for duos of child and elderly playing the musical activities together. The final form: the children and the elderly sing and play together. The steps in between: first give the example as a teacher: announce, ask permission (with body language, eye contact or through the spoken word), sing, touch with respect and take the time and repeat. The music teacher and an elderly, each mother with her child. Afterwards the children can get a different role: not playing the game with their own parent anymore, but with the teacher or with each other. Of course, you have to observe each child. Some children, for instance, prefer watching while their mother plays
the game with the elderly. The last step: ask the children if they want to play the game together with a grandfather or grandmother. In order to create as many contact moments as possible, we regularly choose a different partner. In this way we create space and give the opportunity to the children to choose a grandma or grandpa where they feel save with. This also gives the elderly the opportunity to make their choice and make contact. Carers or activity counsellors are sometimes present during classes and they can play a major role in making contact with the elderly. In my last course, I had an extra caregiver per two elderly people. They were sitting in between two elderly people. They actively participated and reassured the elderly when there were too many visual, auditory or emotional stimuli for them.

Development of the musical participation by the elderly

During a course of eight lessons, once a week for one hour, there is progress in the length of time elderly participate. An example: during my last course, four of the six elderly people fell asleep halfway through the second class. In the third lesson, there were only two elderly falling asleep. Their interest in the world and their ability to concentrate seemed to improve significantly during the course. Another observation: in lesson 1, the elderly sang along mainly parts of the songs of the culture. In lesson 4 I also heard fragments of the songs that were new to the elderly.

Elderly gain a lot of fun from the listening moments, especially when music from their teenager years sounds. Wonderful moments for example during the activity with ‘The Dice’, a song based on Sonata Opus 49 no 1 by Beethoven. The lyrics of the song indicate the action: after mentioning the colour of the dice you roll the dice. Then you count the dots. When a part of the piano sonata sounds while they are rolling the dice, you see the faces of the elderly light up: recognition!

With movement games, hands, laying on the lap in a fixed position most of the day, come back to life. Plenty of contact is made and smiles appear. After swaying with scarves we have to clean up the scarves: we put them with clothes pegs on a clothesline. For everyone an excellent fine motor exercise. At such a moment you can collect the most beautiful stories from the seniors. "Well, I can still do that, I've hanged much diapers on my clothesline in my life". I could write a book with beautiful, real life stories, recorded during or after the Early Childhood Music Education classes together with the elderly.

Evaluating after the classes or course is important. Take the opportunity to ask feedback from caregivers and family.

One of my memories: when I came by in the elderly home the week after the last music class, the elderly were just sitting at the table for coffee. I entered the room and one of the seniors saw me coming in, stood up, came towards me and opened her arms for a big hug. A flood of incomprehensible words accompanied her behaviour. I got a big hug and she didn't want to let me go. Her body language told me she recognized me, or perhaps she remembered what I meant to her during the music sessions the past eight weeks. A lot is happening ‘inside them’, and it is not easy for us to understand this. Probably because the elderly cannot express their thoughts and feelings clearly (anymore) or because we are not able to understand their way of communication. But the memory of the happy musical moments still exists.
Future
Due to the aging population, the number of elderly (with dementia) will increase and the demand for meaningful and pleasant use of time will probably also increase. More musicians and music educators will be asked to work with the elderly.

There are many different ways in which music can be part of the lives of elderly: listening to music from their early years together, moving/dancing together to music, making contact with the elderly while improvising on your instrument. More creative methods will emerge in the future.

But so far, and not only for me but also for the children, the parents and the elderly with dementia, an early childhood music education class together with the elderly is something to look forward to.

References

Source

The music literacy conundrum in South African schools: Entanglements of curricula, resources, environments and beliefs.

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Abstract:
A conundrum exists amongst a number of variables regarding the teaching of Music Literacy (MusLit) as prescribed in the South African Curriculum and Assessment Policy Statement (CAPS:2011) in South African Secondary Schools. These variables include available, but sometimes inadequate resources in the school education system, the individual circumstances of teachers and learners as well as ever-changing environments in schools – (both government and privately owned). In addition, music teachers have different points of view, as well as varying questions regarding the place and value of MusLit in the South African Music Education (MusEd) context. In the investigation and exploration of these variables, it becomes evident that the variables are interrelated and entangled, and are therefore depicted in this paper as a complex and multifaceted conundrum.

The variables regarding MusLit education, as described in recent research, (Yu & Leung, 2019; de Villiers, 2017; Rodger, 2014; Drummond, 2015; Chilisa, 2011; Vermeulen, 2009; Herbst et al., 2005, Klopper, 2005/4; Khulisa, 2002/3) are daunting, frustrating, and exhausting as well as promising and exciting. In this paper, the previously found variables will be explored and investigated, and presented systematically in Dr Kaoru Ishikawa’s Cause-and-Effect Diagram (1968), as adapted by Mirko et al. (2009) and Neyestani (2017). This Cause-and-Effect Diagram “is a prominent problem-solving tool” (Omachonu & Ross, 2004), that is often used to “investigate and analyse complex situations in a systematic way”. The rationale for this paper is to identify and understand these different variables, and to consequently structure it systematically in order to create a research instrument facilitating semi-structured interviews regarding MusLit Education.

The essence of this study, as per Creswell & Plano-Clark (2011), lies in the definition of an exploratory sequential design as a research method. Firstly, variables salient to the phenomenon under investigation have to be articulated, and secondly a theory of framework has to be worked towards, enabling the researcher to “explore a phenomenon in depth” as well as “measure the prevalence of its dimensions”. This led the researcher to explore and investigate the variables in the MusLit conundrum, and to structure it in a diagram that will be utilised in the subsequent research project: to study the prevalence of the dimensions of the MusLit conundrum through a narrative inquisitive research approach.

Keywords: Music Literacy, Music Education, Exploratory Sequential Research Design, Curriculum and Policy Statement South Africa (CAPS), Ishikawa Cause-and-Effect Diagram, Conundrum
Introduction

This study is rooted in my longstanding interest and passion for MusLit education in South African secondary schools, developing from an initial personal drive towards the efficient teaching of MusLit, and gradually growing into an ultimate passion for inclusive MusLit education. I have taught MusLit for thirty years, and in my experience, the variables influencing the successful implementation and teaching of MusLit curricula have been an always-present dilemma, an indescribable enigma and a complex conundrum.

The one literacy, which has been neglected in the study of democracy, according to Rampolla (2018), is MusLit: not because of its complex nature, but due to a lack of definition. He argues that MusLit “cannot be gained by only the people who want to make music, but also by those who enjoy listening to it”. MusLit as stated by The International Kodály society (2019) is: “the ability to read and write musical notation and to read notation at sight without the aid of an instrument. It also refers to a person’s knowledge of, and appreciation of, a wide range of musical examples and styles”. In the opinion of Choksy (1981:6) MusLit is “the ability to read, write, and think music”. In the context of the CAPS-syllabus (2011:12), the term MusLit revolves around the “reading, writing and understanding of music notation”, and therefore, for the purposes of this study that will be used as the definition.

In South African secondary schools MusLit is one of three broad topics in the elective subject: Music, in the Further Education and Training (FET) phase. The FET phase is the last phase (Gr. 10 – 12 learners), preparing learners for tertiary studies, or vocational studies at tertiary level. In Music as a subject, The South African National Department of Education (2011) seeks to “provide learners with a subject that creates opportunities to explore musical knowledge and how it is applied”.

The elective subject, Music, consists of three streams or options, known as Western Art Music (WAM), Indigenous African Music (IAM) or Jazz. Learners select one of these streams. The topics in all three the aforementioned streams are: Musical Literacy (MusLit); Musical Performance and Improvisation (MPI); and General Music Knowledge and Analysis (GMKA). The topic MusLit in this context is described as: Music theory and notation; Aural awareness of theory; Sight-Singing; and, Harmony and knowledge of music terminology.

In the CAPS document (2011:14), the prescribed teaching time-allocation for Music as a subject is four hours per week. This needs to be subdivided into two hours per week spent on Musical Performance and Improvisation (MPI), one hour on MusLit and one hour on General Music Knowledge and Analysis (GMKA). In total 25% of the allocated time should be spent on teaching MusLit in each of the aforementioned three streams (WAM, IAM and Jazz).

In the final assessments at the end of each year (Gr. 10 – 12), the weighting of the allocated marks is also 25% for MusLit compared to 50% for Musical Performance and Improvisation (MPI) and 25% for General Music Knowledge and Analysis (GMKA). In total 25% of the total year-end mark consists of MusLit, evident in all three streams (WAM, IAM and Jazz).

Drummond (2014:74) argues that the analysis of the three topics of Musical Performance and Improvisation (MPI), MusLit and General Music Knowledge and Analysis (GMKA), has shown that the CAPS (2011) has “attempted to organise the
curriculum in a way that addresses what might be regarded globally as good quality MusEd”. However, the general critique of the three streams of Music as a subject (WAM, IAM and Jazz) is that the elements are underspecified”.

The Western tradition of MusLit has been reproduced and applied to non-Western traditions in an effort to accommodate diversity in the curriculum (Drummond 2014). McConnachie (2016:ii) agrees with Drummond that there is thus a contradiction in the promises of change and the actual curriculum, especially with regard to MusLit in the three different streams in Music as a subject. McConnachie (2016:ii) claims that in specific assessments (in the WAM, IAM and Jazz streams in the CAPS FET curriculum 2011) realistic opportunities to engage and assess IAM and Jazz, do not exist. A fundamental flaw is the lack of specific assessment criteria and practical guidelines in the approach to practical assessment tasks in the three streams.

According to Drummond (2014:69) “an important distinction arises out of the two different approaches to assessment for WAM and IAM”. Vermeulen (2009:1-2) & Drummond (2014:69) posit that WAM is being treated as a “separate and complete entity” whilst IAM is being presented as an “integrated” entity within the overall strategy of organising the curriculum as a balance between developing “generic” and “specific” knowledge skills. Vermeulen, 2009 citing RNCS, 2002:4, believes that “underlying this distinction is the continuing recognition by policy makers of ‘discrete art forms’ such as WAM and ‘integrated learning experiences’ such as IAM”. Drummond (2014:69) proposes that “the posing of two such assessment strategies on teachers contributes to an impression of a lack of coherence in the music curriculum”.

Features of Indigenous African Music (IAM), like the tonic-solfa system, should form an integral part of MusLit education in South Africa for all the different streams. It forms the basis for the development of traditional African choral music and is part of the South African heritage, and the basis of all notated indigenous music. According to Onyeji (2005:20) there is, and should be, a difference in music notation between African and Western music. It should be a knowledge and skill acquired by all Music as a subject learners, as it is the vehicle through which different music “languages” can “communicate”. Prof Kwami (Herbst Ed. 2005:20&155) firmly believes that there is a distinct difference in the way of learning and teaching African indigenous music as compared to Western Art Music.

The link that exists between the new curriculum and the constitution indicates policy preference for a strong alliance between MusEd and social transformation, according to Drummond (2014:82). This aspect is reflected by the inclusion of WAM, IAM and Jazz, with the diverse repertoire and alternative notation allowed. These radical changes are exciting, but require teachers to incorporate diverse types of music into their lessons to reflect diversity as the central feature of a curriculum designed around democracy.

Drummond further posits that if change is going to be successful, teachers need to be supported with continuous professional development and access to resources, including the purchasing of African instruments, songbooks, musical arrangements, compositions and other relevant material. This creates an enormous burden on teachers, receiving limited structured professional assistance from the government. They are expected to be adaptable and innovative in the way that they respond to the ambitious curriculum demands.
In a case study conducted by Riley (2013), it was found that the teaching of class music in rural China was improved by: “changing their [the teachers’] view of MusEd from a method that sees the textbook as the only resource to a more constructive approach that places greater emphasis on hands-on and problem-solving activities. Teachers have to learn to take risks when making pedagogical changes. For instance, they may have to create music with the students in which no specific results are forecast. Music teachers may also have to develop their own teaching materials, rather than relying on existing textbooks that do not suit their specific context”. Mills (2007) maintains that “since teachers may not currently reflect on their own teaching when using others’ teaching” material, “further exposure to global MusEd literature might be required so that they can learn from their international peers”.

In these scenarios it is clear that a number of variables are playing juxtapositional roles in the successful teaching of MusLit, and are part and parcel of the MusLit Conundrum in South Africa. These variables influencing the MusLit conundrum have been difficult to pinpoint, although their presence was always tangible. From these tangible variables, reflecting either positively or negatively on MusEd and MusLit, the research questions were derived:

- Which variables contribute to the South African MusLit Conundrum?
- Why do these variables have a tangible influence on MusLit Education?
- How do we utilise this MusLit Conundrum?

Rationale

The rationale for this study is to understand the different variables in the MusLit conundrum, to structure it, and find workable research instruments. In unscrambling and logically ordering the variables in the conundrum, the South African MusLit teacher can be empowered in difficult circumstances and changing environments.

Aim and focus of the study

The aim of this study is firstly to expose gaps that exist amongst the successful execution of MusLit as stipulated in the CAPS curriculum (2011), available and sometimes inadequate resources, the environment, community, teachers, learners, beliefs and processes. These gaps and problems will be identified as variables. Secondly, to systematically organise these variables in the Ishikawa cause-and-effect diagram to be used in future research projects. In short, the aim of this study is to visually depict the MusLit conundrum into one diagram.

Method / Approach

I chose an exploratory sequential research design to discover ideas and insights, and to formulate a diagram / figure for more precise investigation to develop the working hypothesis from an operational viewpoint. There are numerous studies on the variables regarding MusEd as well as curriculum implementation and improvement. Only a small number of these studies offer any further insight into these variables, with positive or negative impact. Furthermore, there are a large number of studies emphasising the importance of MusEd, as well as the decline of MusLit in general.

Creswell & Plano-Clark (2011) define exploratory sequential designs as appropriate for studies seeking to:
(a) articulate variables that are salient to the phenomenon under investigation,
(b) work towards a theory or framework, and
(c) explore a phenomenon in depth and measure the prevalence of its dimensions.

The current stage of this research is therefore to articulate variables that are salient
to the phenomenon, (the MusLit Conundrum), under investigation. In this stage I am
using all the variables found in previous research papers regarding MusEd Curriculum
Implementation, and problems with regard to MusLit education and prescribed curricula.

The next stage is to work towards a theory or framework. I have chosen Mirko et
al’s (2009) and Neyestani’s (2017) adaptation of Ishikawa’s Cause-and-Effect Diagram
(1969) to develop a theory or framework. The next level of research will be to explore
the phenomenon of the MusLit conundrum in this theory of framework.

**Variables salient to the MusLit conundrum**
The Pan African Society for Musical Arts Education (PASMAE) initiated a research
project in 2002, enabling collaboration between Music educators throughout Africa. In
July 2003, this task force (Herbst 2005, Klopper 2004:140) documented problems
experienced with regard to MusEd in general. Four common problem areas were tabled:
- Curriculum issues, changes and policy;
- Lack of facilities and resources;
- Skills, training and methodology in schools and teacher training institutions; and
- Societal role of the Arts.

On another continent, more than 15 years after the African MusEd research project
was conducted, the following four main factors affecting the implementation of the new
MusEd curriculum in China were tabled (Yu & Leung 2019:190-191):
- Student’s ability and quality;
- School’s facilities and equipment;
- The extent to which music was prioritised within the school;
- The teacher’s ability and teaching philosophy.

Much research has been done to identify and document the variables that affect
music teaching, or the implementation thereof, in the curriculum. In Canada, during 1988,
a Alberta Education research group, according to Klopper (2004:2-38), researching the
impact of these variables on Music delivery in Arts and Culture in South Africa, and
Khulisa (2002) in a study of the variables affecting the then Outcomes-based Education
(OBE) curriculum, found the following collective variables, of which most was common
variables:
- Multiple guidelines (overload).
- Board (School Governing Body) and community support.
- Parental involvement.
- Time and line monitoring (information system).
- Clarity and need for change.
- Quality (and lack of) and availability of materials, resources and support.
- Principal’s role and support, school governance and leadership.
- Consultant role and support.
• Quality and amount of in-service assistance for teachers, inadequately trained, as well as inadequacy of orientation courses; difficulty in understanding new concepts; lacking in comprehensive musicianship and musical competencies.
• Teacher/teacher interaction.
• Availability and use of external resources
• Teaching and learning
• Language issues (in South Africa especially)
• Transforming syllabi
• School environment.
• Change management.
• School ethos.
• Financing music programmes at schools.
• General ignorance of the cultures of the different population groups.
• Large classes.
• Music educational approaches and methods.
• Curriculum development.

These variables are presented in a more concise manner in Table 1.
Table 1. Variables salient to the ML conundrum

<table>
<thead>
<tr>
<th>Resources</th>
<th>Teachers</th>
<th>Curriculum</th>
<th>Learners</th>
<th>Management</th>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate</td>
<td>Training of prospective teachers</td>
<td>Practical</td>
<td>Socioeconomic status</td>
<td>Status of ML</td>
<td>Infrastructure</td>
</tr>
<tr>
<td>Insufficient</td>
<td>Training of current teachers</td>
<td>Theoretical – ML</td>
<td>Career orientated</td>
<td>Deficient principles</td>
<td>Equipment</td>
</tr>
<tr>
<td>Unavailable</td>
<td>In-service training</td>
<td>WAM / IAM / Jazz</td>
<td>vision</td>
<td>Time-allocation on timetables</td>
<td>School conditions</td>
</tr>
<tr>
<td>Expensive</td>
<td>Content knowledge</td>
<td>differences</td>
<td>Change of schools / teachers</td>
<td>Communication between policy makers and school, management and teachers</td>
<td>Overcrowding</td>
</tr>
<tr>
<td>Limited Lifespan</td>
<td>Communication</td>
<td>Integration vs specialisation</td>
<td>Prior Knowledge</td>
<td></td>
<td>Equipment</td>
</tr>
<tr>
<td>Inconsistent standard</td>
<td>Generalists vs Specialists</td>
<td>Elements: Notation, form and aural skills</td>
<td>Perceptions</td>
<td>Support from department to improve the levels of MusEd</td>
<td>Venues / Classrooms</td>
</tr>
<tr>
<td>Lacks Audio examples</td>
<td>Qualified vs Unqualified</td>
<td>Performance, composing, arranging, improvisation, analysis, technology</td>
<td>Task Value of music against other subjects</td>
<td></td>
<td>Discouraging vs encouraging school environment</td>
</tr>
<tr>
<td>Incoherent progression</td>
<td>Motivated vs De-motivated</td>
<td></td>
<td></td>
<td></td>
<td>Community</td>
</tr>
<tr>
<td>Insufficient activities</td>
<td>Knowledge of WAM / IAM and Jazz</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vague descriptions</td>
<td>Continuous and relevant training</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>Characteristics / Traits: Critical</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Quality</td>
<td>Reflection</td>
<td>Coherence: Vertical and Horizontal</td>
<td></td>
<td></td>
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<tr>
<td>Number of exercises</td>
<td>Teaching methods</td>
<td>Horisontal</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Explanations</td>
<td>Integration</td>
<td>Hidden</td>
<td></td>
<td></td>
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<tr>
<td>Formal assessment</td>
<td>Different beliefs with regard to music</td>
<td>Teaching and learning</td>
<td></td>
<td></td>
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<tr>
<td>Informal assessment</td>
<td>education and music literacy</td>
<td>Assessment</td>
<td></td>
<td></td>
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<tr>
<td>Workbooks</td>
<td>Diverse background and experience</td>
<td>Criteria</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textbooks / Handbooks</td>
<td>Employment differences (salary, complexity)</td>
<td>Complex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manuals</td>
<td>Permanent / Governing Body</td>
<td>Indescriptive</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Curriculum content</td>
<td>Self-determination Theory (SDT)</td>
<td>OBE - CAPS</td>
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</table>

Variables impacting on the ML conundrum, organised into 6 different main categories, in order to draw up the Ishikawa Cause-and-Effect Diagram.
These previous research studies indicate that there are identical variables emerging time and time again. The focus is to define this ambiguous problem in more depth, gaining a better understanding of the variables impacting on the MusLit conundrum; proceeding to generate new ideas and solutions to improve these circumstances that teachers find themselves in. The solutions will be part of the next developed hypothesis. This initial stage is therefore analysing secondary information: quantitative and qualitative data that have been gathered in previously researched studies.

**The Ishikawa Cause-and-Effect Diagram: Theoretical Framework**

The advantages of the Ishikawa Cause-and-Effect Diagram are that it presents a compact and holistic visualisation and organisation of the variables, which deems useful in problem-solving. According to Omachonu and Ross (2004) this diagram can provide problem-solving by “gathering and organizing the possible causes, reaching a common understanding of the problem, exposing gaps in existing knowledge, ranking the most probable causes, and studying each cause”.

These are all relevant to this study as there are many variables having different impacts at different times and in different situations. It therefore needs a diagram that sorts all the variables in a clear and understandable visual manner. It will help to understand and relate to some of the interactions between the variables affecting the effective teaching of Music Literacy. Furthermore, it analyses existing problematic situations in order for corrective actions to be taken.

Project managers make use of the Cause-and-Effect Diagram, as one of seven basic quality control tools, to assist organisations in problem-solving and process improvements. Neyestani (2017:8) believes that all seven of these are necessary, for basic quality control.

For this study I will construct a preliminary Ishikawa Cause-and-Effect Diagram (figure 1) to provide a structured, pictorial display of the variables in relationship to the current effect provided by the data analysis of previous studies as displayed in table 1.

The research question forms the “spine” of the diagram. This is: what variables are impacting on the MusLit conundrum? Then the causes, or variables are added to the “spine”. The six main categories for variables impacting on MusLit education portrayed in figure 1 are:

1. Resources
2. Teachers
3. Curriculum
4. Learners
5. Management
6. Environment

This figure is a summary of previous research, illustrating the possible variables impacting on the MusLit Educational Conundrum.

The more important questions derived from this, however, are:

- Why do these variables have a tangible influence on MusLit Education?
- How do we utilise this MusLit Conundrum?

These questions are the starting point of the next step of this research study, namely: Investigating the Music Literacy Conundrum in South African Secondary Schools.
Discussion of possible solutions derived from the adaptation of the Ishikawa Cause-and-Effect Diagram as illustrated in Figure 1.

It is important at this time to remember that conundrums can be solved in multiple ways, thus making room for the researcher to find more than one answer, and present an argument for each possible answer. With explorative research the researcher needs to be open to find unexpected answers and solutions, and not the “at-that-time-obvious” and expected answers and solutions.

In the above adaptation of the Cause-and-Effect Diagram, possible improvements in the MusLit Education system in South African secondary schools can be investigated and experimented with. The complete research progress, starting with previous quantitative and qualitative research studies, is then repeated with the implementation of the possible improvements.

Conclusions, Implications and Future Directions

The results of this study will help to expose the gaps that exist amongst the successful execution of MusLit as stipulated in the CAPS curriculum (2011): the available and sometimes inadequate resources, the environment, community, teachers, learners, beliefs and processes. Secondly, it assists to organise these aforementioned gaps and problems as variables in the Ishikawa cause-and-effect diagram. Thirdly, to use this adapted layout of the diagram to table possible improvements to the MusLit conundrum.

These possible improvements are the starting point of the next step of this research study. The following will be investigated further:

- Improved Resources (Pliable, electronically available resources)
- Characteristics and traits of teachers to develop their own resources and planning from these electronically available resources. Critical reflection is one of the characteristics or traits of progressive music teachers that will be investigated. It is
believed that these characteristics have a positive impact through exploring and the developing solutions in the work environment.


References
Education to promote gender equality in education. Foundation in SGDs and policy makers

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Abstract
Our hypothesis is based on an unfortunate and serious situation regarding gender diversity, which has been increasing in recent times in educational settings, although society has advanced a lot, certain issues are still present, also in education. Our objective is, on the one hand, to know briefly the repertoire used in the training of future primary teachers, and on the other hand, what should be the political responsibilities regarding compliance with the SDGs (Sustainable Development Goals). Since ancient times, the songs have been used for different learning, numerical, poetic, geographical, or gender. The making of a song book, was already a proposal that allowed to assimilate theoretical musical content, now we want to go further and pay attention to the lyrics, their meaning, the roles they can mark. This leads us to an interdisciplinarity, from the need to meet the different competences that are demanded in education, both from students and teachers. Music, an element that lives and coexist with people of all ages, being part of their lives, also becomes a way of understanding life, values or emotions. In this sense, we believe that education must also acquire social commitment, as a fundamental key in teacher training, and responsibility in the knowledge, attitudes and skills that are developed in the school. We are still listening to predominantly masculine repertoires, which usually send a message, away from the new approaches to gender equality. On the one hand, we propose a brief review of the teaching programs of teacher training, and, on the other hand, a proposal to provide musical composition tools in the classroom, from some recommendations in the repertoire, as well as recommendations for policy makers. How we choose music and songs is important, and also to have resources that allow future teachers to use music education as tool to acquire values. We believe that a good way to educate on gender diversity from music is to encourage the creation of the own projects. This tactic will allow the future teacher a certain freedom to adapt their methodology, approaching the reality of his students. It will also allow the acquisition of skills and abilities other than music, in addition to knowledge of cultural diversity and heritage, which is, for example, the popular folklore of a territory. Our proposal also connects with most of the 17 SDGs and provides information for policy makers.

Keywords: music education, gender equality, ODS, teacher training, primary school,

Introduction
In our work we start from the hypothesis that music education can be an important educational tool to address gender diversity in the classroom. We currently have an unfortunate and serious situation regarding gender diversity, which is increasing in recent times in educational settings. Although society has advanced a lot, certain sexist issues are still present, also in education. Our goal takes the songs that future teachers learn. Since ancient times, the songs have been used for different learning, numerical, poetic,
geographical, or gender. On the other hand, we consider that the artistic projects proposed and carried out by the students, develop the necessary skills for musical education in the classroom, encompassing both musical knowledge and values, attitudes and behaviors. Therefore, our proposal is committed to offering tools to students, to create their own projects, taking as a backbone the transversal messages such as gender diversity, sexist violence, bullying and even workplace bullying (mobbing).

We will make a brief review of the study programs (teaching guides) in the training of future primary teachers, in relation to music education. the themes that can improve music and a small questionnaire for future students of primary school teachers of the third year of the Jaume I University (Castellón, Spain).

In addition, we take as a reference for our work the Sustainable Development Goals (SDGs), and how we can bring them closer to future teachers, through music and artistic projects.

Based on the information collected, we will develop a proposal to implement in the classrooms. This proposal, open and flexible, it will be developed at any educational level, it should simply be considered the maturation of students, to adapt the proposals/projects.

**Theoretical framework**

Education is the tool, in our view, that can change the world, promoting values, inclusion, respect, nonviolence, and many others that relate directly to the SDGs. The school and the teachers, have a great responsibility that goes far beyond scientific knowledge, because today a quality of life is not guaranteed with the acquisition of “hard skills”, because above these are the “soft skills” that will allow an improved adaptation to the circumstances, family, professional and employability.

“The teacher training of the primary teacher should be considered one of the most distinguished, relevant and with equal or greater requirements than other formations considered fundamental for society” (Vernia, 2015, p.70). According to this author, “the inclusion in the programming of the composition of a work songbook implies the significant learning that will lead the child to understand knowledge from a more direct perception”, adding that, teachers must be involved and commit to their learning, but we also consider that they must be aware of the impact that their decisions will have, simply by choosing a music, or getting involved in an artistic project.

The music that teenagers and young people listen to today is loaded with sexual connotations, where in many arguments, the woman is treated as an object.

**Music and gender diversity**

In the history of music, gender issues have been appreciated, but have not been addressed until the 21st century, in a more relevant way. Although the musical genre has nothing to do with the distinction made between men and women, we can say that women were linked to certain disciplines or instruments. As Hernández Romero (2011) explains already in the nineteenth century the subjects associated with the female sex were solfeo, piano, song and harp and exceptionally the violin, although they could also attend composition classes. In the regulations of the Royal Superior Conservatories of Music of Madrid, this author says that female students could only study history and literature of dramatic art and music, singing, declamation, Italian language, general and preparatory
music for singing, piano, harp, elementary and superior accompaniment. On the other hand, the number of teachers was much higher in men than women.

The terminology has also affected gender diversity, because as Lozaiga (2005) says, in the Musical Language we find terms with sexist connotations such as female cadences or imperfect terminations.

As Vernia-Carrasco (2019) explains, Musical Education can be a tool that educates on gender equality, influencing the reduction of sex differences and promoting learning. Although the woman has had a relevant presence in music, says this author, her visibility has been poor, and, on the other hand, we can still find certain patterns of performance and behavior that show us the deficiencies we still have in musical education environments. In addition to the choice of a musical instrument, Vernia-Carrasco (2019) says there is the sexist behavior, so the teaching guides or educational programs, must also attend to this need for changes, through activities aimed at co-education.

The following figure shows some of the actions and activities that Vernia-Carrasco (2019) proposes to include to gender equality in teacher training:

![Figure 1: actions and activities, to promote gender equality](source: Vernia-Carrasco (2019))

### SDGs and policy makers
Educational policies and decisions of policy makers cannot and should not distance themselves from UNESCO’s approaches, in this sense, the Sustainable Development Goals (SDGs) clearly show the work that is needed today, not only in Europe. Complying with all the SDGs is today a political, social and educational task, where music is constituted as a conciliatory, vertebrate, socializing, educating and political element. In our proposals, we can link the SDGs 3rd, 4th, 5th, 8th, 10th, 11th, 12th, 16th and 17th. The following figure details each of the 17 SDGs:
The situation regarding education and musical training in Spain is very well described by Narejos and de León (2018, p.1), in the Spain National Overview report, which clearly states that:

Music is part of the curriculum in general education, but in recent years its presence has been reduced. Today, music is not a compulsory subject in any case. Music is offered as an elective in all courses of primary school, within the subject of artistic education, and there is only one course in which music can be chosen in secondary education.

Given this situation on the one hand and the need for an educational quality that goes beyond scientific knowledge to influence human values, on the other hand. We believe that it is necessary to recover a greater presence of the arts, especially of music in official educational programs, and to opt for a greater relevance of music in teacher training. As Rodríguez-Quiles explains (2017), in the Declaration of Granada, for a live music education in compulsory education and a high-level initial training for music teachers in Spain and Europe, policy makers are demanded a quality music education at all educational levels. We share the words of this author, and we also consider that music education must go far beyond music itself, to influence society, the quality of life and the well-being of people. That is why we understand that it is essential that policy makers consider music education as a common good for Europe. In this sense, artistic projects can be a tool to bring the SDGs to school, in a practical way.

Methodological framework
For our proposal, we have chosen different data collection techniques, on the one hand, an open-ended questionnaire and on the other hand a focus group, in addition to the search for bibliography related to the subject of work. It should be said that the focus group is a qualitative technique that is often used in the social sciences. As Álvarez and
Jurgenson (2009) explain, the focus group is considered an artificial group, because it does not exist before or after the conversation session, but is born at the moment the dialogue begins. These authors value the validity and reliability of an investigation based on the technique of triangulation, a postulate that we support and continue in our work, as we have already announced.

Regarding the focus groups, they are based on qualitative epistemology, and therefore, it is convenient to mark some differences between the qualitative and quantitative approach. The focus groups are carried out within the framework of research protocols and include a specific theme, research questions posed (Hamui-Sutton and Varela-Ruiz, 2013).

Following the instructions of the previous authors, we will design some research questions for the focus groups that will be organized from our participating students.

**Results**

We believe that the results respond to the objectives set, although we are already aware that, in the programming of the teaching guides, there are a greater number of male composers than female composers, we only see small specific actions that change with this reality.

On the other hand, we hope that the focus group with the students brings us reflections and new paths of action to improve gender equality and musical educational proposals that allow the assessment of women as a musician and teacher.

We also hope that students become aware of the current problems that society is experiencing, both in terms of education and sustainable development, and know how to understand that education is in their hands, and they have a great responsibility for both scientific knowledge and for the attitudes they teach. This also means the responsibility and ethics that the teacher needs to teach all subjects, and especially music, because it is a specialized language. Also, to recognize the potential of art to educate.

**Conclusions and prospective in music education**

Music education can act for the benefit of gender equality from different paths:
- Raise awareness in the educational community of the importance of music education and how it can place women in a valued position regarding music, as an interpreter, teacher, student, etc.
- Musical projects at school can prevent gender violence and raise awareness among the educational community of the importance of working on values, especially gender equality to prevent violence.
- Music education and training can transform educational policies from artistic projects, interdisciplinarity and attention to the SDGs.
- The policy makers, responsible for education, should attend to music as a form of culture and heritage capable of promoting educational inclusion and gender equality for the improvement of educational and social quality.

**References**


The pedagogical potential in the collectivity of Brazilian music bands

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Abstract

We present a discussion of a fundamental base for the research we have been conducting on teaching in Brazilian music bands. We assume a perspective of music teaching by the diversity of discourses present in active musical making (Silvia Cordeiro Nassif Schroeder, 2005), thus, we consider bands as a potential space for the teaching of music based on diversity and equity (Cruz, 2019). We consider that access to music learning in Brazil has occurred in three major ways, public schools, specialized schools and social projects. The teaching of music in Brazilian public schools has become submissive to the multipurpose teaching practice of teaching the different artistic languages with fragile methodological support. Music schools, on the other hand, have a smaller number of institutions that cannot be present in all cities, and, when yes, they serve a small portion of the population (Penna, 2013). Music bands, understood as a modality of social project, are historically linked to a profuse performance in the local customs of each community in which they are mainly inserted in small and medium-sized Brazilian interior cities (Benedito, 2011; Duprat, 2009; Lange, 1997; Pereira, 1999). Compared to public schools and specialized schools, Brazilians music bands build their pedagogical potential in the gap between a certain methodological indeterminacy present in public schools and the formalities of traditional specialized education. By engaging without exclusivity with western tradition music the band maintains its traditions in the execution of tonal music with demarcated intentionality of teaching practice. However, being profuse in different social realities of different interior cities, the band ends up still getting involved with the music of the daily life of the communities, thus creating a bond of mutual belonging, and making room for different discourses and musical perspectives (Cruz, 2019). This dynamic of continuous reconstruction of realities allowed us to observe that the potentialities of musical learning in bands go beyond classes and rehearsals. In addition to these moments endowed with pedagogical intention, we observed significant musical experiences in moments of rest through games and conversations, in addition to the intersection of such interactions outside the band's environment. Moreover, the point at which our research is found is to seek greater immersion in these moments that go beyond classes and rehearsals, also transposing the fact of the adoption of the daily repertoire of students in the band environment to unveil the dynamics of how students interact and experience their musical preferences, and how such dynamics can enhance the teaching of music in bands.

Keywords: Teaching, Music Band, Pedagogical Potentialities, Musical Discourse.

Introduction

We start from the general context of Brazilian music education. According to the Brazilian Federal Constitution, in articles five and six, education is the duty of the State and the family, and in official establishments education must be free (Brasil,
Discussions about Brazilian Music Education are usually linked to teaching (or lack thereof) in public schools. In addition, there is a recurrent counterpoint between public education and that of specialized schools according to the discussion conducted by Silvia Cordeiro Nassif Schroeder & Schroeder (2011).

Public schools are present in a wide Brazilian territorial scope, which enables a wide reach in the promotion of democratic music education. Music teaching, on the other hand, underlies general arts education, which appears as a more comprehensive area. Even linked to an education project aimed at the integral development of the student, there is no clarity as to the role of music education in the teaching of arts and/or in the integral development of children (Penna, 2004a, 2004b). Thus, public schools cannot gather teachers with adequate training for the teaching of each artistic language, which occurs, in most cases, is the multipurpose performance submissive to a small grid of classes. In specialized schools, teaching is mainly aimed at vocational training of high-performance instrumentalist musicians. These institutions are more present in large cities and metropolises, with a shy presence in the small cities of the interior of the country. Furthermore, specialized schools bring together, in most cases, high-performance musicians, almost always without training for pedagogical performance, such as teachers (Silvia Cordeiro Nassif Schroeder, 2005).

Thus, we highlight the challenge of a broad offer of a democratic musical education, which is available to all and that serves different objectives of involvement with musical language, which also takes into account the different regional cultural realities throughout the country.

In this work, we will present the Brazilian music band as a possible way to transpose these challenges. To this end, we will present below a brief exposition of the research that supports this text, we continue with the reading we make of how the music band, as a Brazilian cultural manifestation, have been building its identification with Brazilian society. Next, we will make an exhibition of how we understand the emergence of the pedagogical potentialities of the Brazilian music band. In the final considerations we will try to state where we are currently at our point of investigation.

The basic search
The research from which we cut this text was a case study of a traditional band living in the city of Itu do Estado de São Paulo, Brazil. It was held in 2017 and 2018. Our main objective was to investigate how the band was identified with the communities in an apparent process of continuous musical development of the groups.

Our theoretical basis stems from the philosophy of language, specifically from the Russian philosopher Mikhail Bakhtin (2017) and from the application of his theory in music by Schroeder (2005). Briefly, the conception of music as a language constructed by Silvia Cordeiro Nassif Schroeder (2005) from Bakhtin’s reading (2017) leads to the fact that musical meaning occurs through musical discourses given in social contexts immediately common between speakers and interlocutors. Thus, each musical discourse is, concomitantly, responding and being answered by another discourse. In these dialogues, musical discourses are transformed into each discursive situation. Thus, the meanings of musical discourses are constructed continuously and historically through social interactions (Silvia Cordeiro Nassif Schroeder, 2005; Volóchinov & Bakhtin, 2017). The conception presented also served us to understand the dynamics of the very
identification of the music band in front of the community in which it was inserted. From prolific dialogue with the historical literature of bands, we noticed that several dynamics observed in field work had been repeated in continuous movement of reconstruction, and that, some of these dynamics, seemed to support the musical development of the groups (Cruz, 2019).

Bands as a space for musical formation
Brazil has been fertile ground for various cultural manifestations and social projects that promote informal music teaching. We highlight those of music bands with intense performance, especially in small cities in the interior (Pereira, 1999). They have been developing a strong sense of belonging in a large Brazilian territory since the end of the 18th century (Duprat, 2009). Strongly driven from the 19th century on, bands are appointed with relevant performances as a cultural and entertainment practice (Binder, 2006; Lange, 1997; Schwarcz, 1998), in addition, a wide range of studies focus on the pedagogical character with wide and free access (Barbosa, 1996; Benedito, 2011; Pereira, 1999).

Barbosa (1996 & 2009) presents a historical resumption of the development of music teaching in bands and presents two major trends. In general, there is a recurrent practice of traditional music teaching, very close to the practices that occur in specialized music schools. With the great promotion of the American repertoire and collective methods in Brazil, traditional teaching has been giving way to collective education since the beginning of the 20th century. It is worth mentioning that these collective teaching methods are closely related to teaching methodologies focused on the idea of a musical education that contributes to the integral formation of the student. We can mention the very Method Da Capo of the author Joel Barbosa published in the 1990s, part of the methodological foundation of this method takes the spiral model of development of Swanwick (1979).

It is in this transition that we have been acting and researching about the teaching of music in bands. What we observe is that in many situations there is a hybrid practice of pedagogical procedures. That is, even immersed in teaching by collective methods with strong traces of proximity and methodological foundation linked to active methods in music education (Fonterrada, 2008), as is the case of the Da Capo method based on Swanwick's spiral development model (1979), there is no abandonment of practices related to traditional teaching such as the use of scores and the need for reading for participation (with instrumental execution) in groups. Thus, we can affirm that Brazilian music bands carry characteristics of approximation with both sides in the counterpoint between public schools and specialized schools (Cruz, 2019).

However, this statement we make is still based on other factors related to the cultural identification of bands with communities and a continuous process of musical development of groups. In this discussion, what seem to us even more promising are the interactions of the band and its components in the face of the conditions in which the group operates. In them, we noticed several situations that seemed to us to enhance the learning of music in the band environment. These "Pedagogical Potentialities" were discussed regarding the conditions of the "collectivity", the "fertile social interactions", the "diversity of instrumental execution" and the "diversity of musical genres" in the formation of the repertoire of the groups. Just for the record, among the general
conditions of performance of the music band, we also observed some that are more challenging than potentiating for musical learning from the perspective we adopt. These more challenging conditions are not the target of this text, however, it is worth highlighting its existence linked, above all, to instrumental execution with reading of scores.

**The reconstruction of the music band**

The bands appear, gain space in Brazilian society, and are historically nourished as cultural manifestations profuse in environments traditionally immersed by rigid customs, in greater emphasis we highlight militarism (Binder, 2006). In addition, they develop from a strong connection with the repertoire of Western tradition (Lange, 1997). In practice, that is, in performance the band ended up serving other purposes such as the processions of religious festivals, civic celebrations, animation of sporting events, carnivals, dances, etc. (Schwarcz, 1998). Thus, the repertoire of Brazilian music bands has been built by influences of military music, western tradition, religious, in addition to music of strong popular appeal and / or music of the mass industry.

These historical musical dialogues promoted constant transformations that have been observed as striking characteristics of their identifications as cultural manifestations (Cruz, 2019). It is in this plurality of performance that studies point to greater mastery of different techniques and musical languages by the members of the bands (Duprat, 2009; Pereira, 1999). By moving through different fields of human activities the band and its components began to dialogue with different musical genres conditioning their own identification of musical discourse to these constant transformations. Here lies substantial relevance of our observations, from the diversity of everyday realities historically present in the environments of the bands, we perceive open space for a wide diversity of musical discourses in their constant dialogues.

The music band we studied in a recent master's research (Cruz, 2019) was also profuse in this plural reality with performance linked to the execution of repertoire of a wide variety of musical genres. Above all, we emphasize that part of the repertoire was nourished even coming from interaction with the community, with new communication technologies, suggestions and musical preferences of its students. Similarly, the intentional teaching of music started from traditionalist bases and also used collective teaching methods, which eventually made room for different readings and pedagogical practices based on local conditions of action. It is from this plural reality of repertoires and teaching practices that we have seen the realities of moments of relaxation and daily life emerge as pedagogical potentialities in the music band environment.

Always permeated by the musical repertoire, the interactions that occur in the music band put in contact different generations, conceptions and musical preferences. In such interactions we have seen experiences of rich musical meanings occur in a relaxed, fluid and unintentional way. We also observed that, in addition to promoting significant experiences of musical learning, these dynamics also influenced the intentional moments of music teaching, in the formation of the repertoire and in the identification of the group enhancing learning in a democratic, broad and contextualized way of the reality of its components. Since it may slightly permeate any of the conditions that enhance learning in the bands, we present below a discussion focused on collectivity as pedagogical potentiality.
The collectivity enhancing teaching in the bands

Among the conditions of performance of the music band, the collectivity is printed even in the conception of the existence of the group (Pereira, 1999). In addition, its historical development was also linked to its performance as a group, collective, in different situations and, likewise, interacting with different fields of human activities (Cruz, 2019).

The collectivity was also observed as a factor of potentiation of musical learning at different times. We highlight the situations outside the classes in which the students interacted by playing excerpts from the repertoire, talking about the arrangements and etc. In them, the univocity of traditional teaching between teachers and students was already broken. The musical meaning now has different discourses and perceptions shared within the same immediate social context. In the same way that Bakhtin (2017) understands the meaning of language through dialogues in socially shared contexts and Schroeder (2005) points to a diversity of possibilities of meaning of musical language in the band's environment, the group's musical discourses are meant and understood by their components through this plot of internal everyday voices and discourses. This dynamic becomes even more promising when it moves from moments of relaxation to classes and rehearsals where there is intentionality of music teaching. Especially when considering the development of creativity as we discussed in (Cruz & Cruz, 2018).

As for the moments of classes and rehearsals we will bring some examples. One of them was recurrent in situations in which it was necessary for the band's conductor to pay more attention to one or another student, and in this short interval we observed students talking to each other, taking questions, experiencing different ways of understanding certain excerpts that had not been "resolved" during the exercises. At this moment, the collectivity subsidizes the musical meaning, extrapolates the unofficial moments and interpenetrate the class activity itself. That is, these experiences of musical learning have moved from moments of relaxation and uncompromising musical experience to the moments of intentional classes. In many moments it was possible to observe that by perceiving these interactions in these short intervals, the band's conductor did not rebuke or avoid such situations, it was still possible to ascertain that the conductor realized that these interactions were collaborating with the learning process. We also highlight that the interaction between the students occurred through its own dynamics. more formalities in relation to the interactions of the students with the conductor.

Another situation occurred in the moments before the band's rehearsal, a student was playing the excerpt of a theme song from a series broadcast by internet streaming services. The conductor approached this student and promoted a brief dialogue with him. The conductor decided to insert the music that the student was playing in the band's repertoire. We see another movement of a playful musical experience in moments of relaxation being taken to the moments of intentional activities and participating in the elaboration of the band's discourse as a group, collective. Although the band's environment is profuse in traditional teaching procedures very close to those practiced in specialized schools, and historically linked to the repertoire of Western tradition (Barbosa, 1996; Pereira, 1999) the attitude of the conductor is an indication of the opening of this space to the multiple musical discursive possibilities. This type of interaction is, for us, one of the ways in which we perceive the repertoire of the music band to be built by a great diversity of musical genres. Finally, we highlight this situation
the openness to a process of musical teaching contextualized to the musical reality of students, therefore, significant within a social context that integrates speaker and interlocutor, aligned with the conception of music as a language constructed from the reading of Bakhtin (2017) and Schroeder (2005).

We also observed other games in moments of relaxation in which the students tried different instruments. Although we are entering instrumental diversity as pedagogical potentiality, we consider that this is a condition of action underlying the group's own collectivity. These experiences and games of experiment of different instrument were mediated by the students themselves. A student who had a greater affinity with the saxophone, for example, made some quick explanations so that another student, a trombonist, could try the saxophone. It showed how to handle and execute the instrument. However, this mediation did not seem to be limited to the task of instrumental execution, while the students tried new instruments, made comments that the music they were trying to play seemed different played on that instrument. The fact is that these students already played such songs on the instruments they already knew. Thus, the perspective of perception and meaning of the music they tried to play were permeated by the explanations of other students, and also by the sensation experienced in different instruments.

In one last episode we report an essay in which the conductor made some comments to explain certain excerpts of the song giving references of musical instruments. To create the intention of greater intensity, the conductor alluded to everyone imagining the passage played by a military box. He also exemplified an excerpt that should sound graceful with the timbre of the transverse flute, or, a melodious passage with the saxophone. We can’t know the subjective intentions of conductor’s comments, nor how they were perceived by the students. The strategy used seemed to fulfill its role, because the conductor was satisfied with the performance of the band. As for the students, it is possible that such strategies have pointed to experiences lived previously experimenting with different instruments.

Final considerations
The collectivity is the performance condition of the music bands that seems to us more promising to enhance the teaching of music in the bands. Both for the possibility of echoing the diversity of discourses about musical making, as well as for its consequences in the diversity of musical genres present in the group's repertoire, and also for the possibility of diversity in instrumental execution. Thus, the collective points to a reading of the music band as an open space for democratic, altered and diverse teaching.

As we observed, some relationships that we established between the situations that seemed to us to potentiate musical learning, however promising they seem to us, lack practical, intentional experimentations. As in the case of the diversity of execution and instrumental experimentation, it is possible that this is in fact a potentiator of musical learning, however it is necessary to structure a pedagogical action organized from this perspective and apply it to verify the results.

The above discussions come from recent master's research, we are currently conducting doctoral research in pursuit of them. We are at the point of new reflections of the pedagogical potentialities and organization of activities that prove them or not in practice. The challenging conditions for musical development in the bands (instrumental
execution with reading scores) serve as problematic for the current research. Thus, we seek to put the challenges for the musical learning of the bands in view of the pedagogical potentialities existing in this same space.

The contradictory reality of the music band is unveiled from the context of Brazilian music education, it is a possible balance point of contradictions between public schools and specialized schools. The recurring reason is its diverse reality, present in a vast territory, composed in an environment open to different cultures, discourses and teaching methodologies, but still profuse in procedures and musical conceptions of specialized teaching.

Finally, we understand teaching by pedagogical potentialities dependent on an educational posture immersed in otherness and democratic. It should consider the musical discourses of the students openly, and the dynamics of their interaction with such repertoire. The band can be a possible way to transpose the challenges of Brazilian music education while considering its plural reality present in its repertoire, history, performance, public, students and ways of interacting as potentiators of teaching.

References


Embracing diverse pedagogies in music teaching and learning
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Abstract
The genre of music commonly called Western art music is often considered the standard for all school music programs. A cycle of privileging Western “art” music in school music programs is perpetuated by music teacher training programs that focus mainly on the music and methods of instruction valued in Western music. Entrance requirements that are designed to support such programs limit the opportunities for musicians who are proficient in a vast array of musics to enter post-secondary music teacher training programs, thereby limiting their ability to become certified teachers and impact the lives of the diverse student body our field has been working for decades to reach. I argue that by stressing the importance of and pedagogies used in Western music, we promote Eurocentric norms and impede preservice teachers’ ability to meaningfully engage in diverse musics, thereby making it more difficult for them to lead musical experiences in ways that reflect the diverse musical backgrounds of today’s students. The purpose of this paper is to examine how the (near) exclusion of non-Western pedagogies in higher education works against our field-wide goals of diversity and equity in the recruitment and training of music teachers. This hinders our efforts to achieve diversity and equity in P-12 music teaching and learning. This paper addresses historical influences on the current status of equity and diversity in music teaching and learning, issues of “methodolatry,” and the lack of diverse pedagogies in music teaching and learning.

Keywords: pedagogy, diversity, equity

Choosing to recognize our students’ strengths requires an openness to culturally specific ways of learning and knowing within our classrooms...as their music teachers, we must strive to tailor the educational experiences we provide to meet these needs.

- Kate Fitzpatrick-Harnish, 2015

Introduction
In a small Afro-Brazilian community, preparations are underway at the community’s cultural center for the annual São João festival. Adults chat merrily, the smell of characteristic holiday dishes permeates the outdoor community, and children of various ages run through the groups of people at the gathering, playing various games. In a room, separate from the preparation for the festivities, a 5-year-old boy spontaneously begins to play complex rhythms on a large drum and his friends join in with tambourines and dance. As the ear tunes in to their playing, one notices the high level of skill required to engage in this musical activity and how they appear to engage in it with ease. In an African American church, 2 girls, aged 10 and 12, sing a personalized arrangement of a familiar hymn with strong vocal timbres and such expression that the congregation shouts affirmative interjections and is moved to tears. On a street corner in New Orleans, three pre-teen boys perform for change. One has attached bottle caps to the soles of his shoes,
and dances rhythmically for the crowd, while the other two provide improvised rhythms by clapping and beating the underside of a bucket. How can these children perform music that is normally considered well beyond the ability of children their age? Are these musical experiences valuable in the field music education?

Such musicality, encouraged and nurtured in school settings, might encourage lifelong participation in musical activities and lead to school music programs that develop close connections with the community. Unfortunately, in music education, musicality that is not dependent on a written score is often valued less than the ability to read Western notation. If, according to Christopher Small (1998), “the fundamental nature and meaning of music lie not in objects, not in musical works at all, but in action, in what people do,” then why is the “action” in music considered legitimate only if it goes through the “object,” in this case Western notation? After all, where does music originate, in sounds and experience or in sheet music?

The genre of music commonly called Western art music is often considered standard for all school music programs. A cycle of privileging Western “art” music in school music programs is perpetuated by music teacher training programs that focus mainly on the music of and methods of instruction valued in Western music. Entrance requirements that are designed to support such programs limit the opportunities for musicians who are proficient in a vast array of musics to enter post-secondary music teacher training programs, thereby limiting their ability to become certified teachers and impact the lives of the diverse student body our field has been working for decades to reach. I argue that by stressing the importance of and pedagogies used in Western music, we promote Eurocentric norms and impede preservice teachers’ ability to meaningfully engage in a variety of musics, thereby making it more difficult for them to lead musical experiences in ways that reflect the diverse musical backgrounds of today’s students. The purpose of this paper is to examine how the (near) exclusion of non-Western pedagogies in higher education works against our field-wide goals of diversity and equity in the recruitment and training of music teachers. This hinders our efforts to achieve diversity and equity in P-12 music teaching and learning.

An Historical Glance

The Tanglewood Symposium of 1967, a meeting of music educators, musicians, and stakeholders outside of the field of music, was “a major self-evaluation of the profession and its goals for music in the schools through the year 2000” (Volk, 1997). Mark (1999) suggested that school reform, the Civil Rights movement, and technology served as catalysts for organizing the symposium. The Tanglewood Declaration, a list of 8 agreements of the Symposium, emphasize the inclusion of diverse musics. It does not address diverse pedagogies that might be used to teach diverse musics, but the 7th agreement urges the profession to “contribute its skills, proficiencies, and insights toward assisting in the solution of urgent social problems as in the ‘inner city’ or other areas with culturally deprived individuals.” This language speaks to a cultural deficit view of the population to whom they are referring, making it unlikely that any pedagogies valued by such communities would be given much consideration by the writers of the agreements.

Thirty-two years later, the Housewright Symposium brought together leading figures in music education to develop a vision for the field’s next 20 years and produced a list of 12 declarations to guide that effort. The 8th declaration articulated the need to
have teachers from diverse backgrounds however, 5 years shy of the 2020 mark, Elpus (2015) found that the music teacher candidate pool was still overwhelmingly white. It would appear that methods for increasing the music teacher candidate pool are nonexistent at worst and ineffective at best. This paper proposes reasons for the lack of ethnic diversity in the music teacher candidate pool and addresses some ways to combat this issue.

Banks (2014) described five dimensions of multicultural education: content integration, the knowledge construction process, prejudice reduction, an equity pedagogy, and an empowering school culture. Historically, music education has embraced content integration through multicultural music education with the hope that it will contribute to prejudice reduction and an empowering school culture. We have also begun to embrace an equity pedagogy through culturally responsive pedagogy, which focuses on “using the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them” (Gay, 2010). More thoughtful approaches to content integration and directly addressing the knowledge construction process, prejudice reduction, and an empowering school culture would move us further in attaining our visions for equity and diversity in music teaching and learning. In this paper I focus on pedagogy, as I feel it is crucial to understanding why we have yet to attain these visions in music teacher training programs and in school music programs.

Interest in diversity, equity, inclusivity and access in music education in the United States increased significantly in 2016 following a blog post which revealed the Executive Director and CEO of the National Association for Music Education (NAfME) made disparaging comments about the musical aptitude of Blacks and Latinos (McCord, 2016). The year following his resignation, NAfME funded two 2-year research projects on diversity, equity, and inclusion in music education (NAfME Association, 2017). The organization also released a position statement on Inclusivity and Diversity (Inclusivity and Diversity, 2017) and a second position statement on Equity and Access (Equity and Access, 2017). The 2018 annual teacher inservice conference in November included a strand of sessions on “Engaging Diversity in Music-Making and Teaching” (Amplify: Involvement, 2018) and the theme of the music teaching and research conference was Diversity, Inclusion, Equity and Access in Music Teaching and Learning (Wilcox, 2018), which included four panels of 3 persons who addressed these four areas.

Other organizations responded as well. In the midst of the controversy, the American Choral Directors Association solicited members of the organization to participate on their Diversity Initiatives National Standing Committee (Sharp, 2016). A week after the CEO’s resignation, the president of the Organization of American Kodály Educators posted a special bulletin regarding diversity on the organization’s website (Epstein, 2016). Later that year, the president of the American Orff-Schulwerk Association released a statement outlining the recent work of the organization in the area of diversity (Stansbury, 2016). The field of music education appeared ready to embrace the proposal of alternative pedagogies, however specific incidences that are beyond the scope of this paper have demonstrated that many are committed to the idea of diversity, but an engagement in more specific conversations produces a level of discomfort that tends to shut down communication before transformative practices can be developed.
The Problem of Methodolatry

Abril (2016) distinguishes between method (small “m”) and Method (capital “M”) in music education. Method (capital “M”) can be defined as “a codified system for teaching and learning that has been described in great detail and practiced by many, based on some guiding principles, beliefs, or theories about music, learning, and/or teaching” while method refers to the “deliberate pattern of behaviors a teacher employs, based on knowledge and experience, to guide students from one point to another over the short and long term” (Abril, 2016). The field of music education does not lack a variety of Methods for various types and levels of music instruction. In elementary general music, the most popular Methods for teaching music are Kodály, Orff, Dalcroze and Gordon Music Learning Theory. Beyond elementary years, most school music programs include band, choir, and/or orchestra, each with accepted norms and often revered Methods on how instruction should be approached. Method (capital “M”) can prove very useful for teachers who are looking to provide their students with sequenced instruction that has proven effective in certain contexts, however the field often relies too heavily on Method with insufficient consideration of the philosophies, theories, and contexts that led to the development of said Methods. The blind adoption of and unwavering allegiance to a Method, what Regelski calls “methodolatry,” without consideration of a student population’s cultural assets is the antithesis of culturally responsive pedagogy, which emphasizes the importance of culture when devising appropriate methods for teaching.

Schippers (2010) noted that processes of teaching and learning music not only “help sustain musical repertoire and techniques but also deeply influence values and attitudes toward music and therefore the reception and development of music itself.” If this is true, how then can we claim to value a variety of musics while centering Western methods and Methods in the majority of our musical encounters? It is time for us to critically reflect on the epistemological foundations of music education and how we as a whole are not meeting the needs of all students. The greatest threat to diversity and equity may not be in the musical content of our courses or in the lack of access to our school music programs, but rather in how we further marginalize students of marginalized groups by diminishing the importance of their culturally specific ways of learning and sharing music.

Music Teacher Training

A fundamental barrier to achieving equity and diversity in music education is the structure of music teacher training programs. In addition to knowledge of Methods, students should also have the knowledge, skills, and dispositions to examine, reflect upon and re-examine goals, objectives, and methods of instruction in their unique music teaching and learning contexts. In using processes of music teaching and learning that do not conform to Eurocentric models, the onus is on Western trained teachers to lead musical experiences for students with whom they may share little or no musical background. They may even be navigating these issues while leading musical experiences in genres that are unfamiliar to them. It is imperative that we address the need for diverse musical repertoire as well as diverse pedagogies in our efforts to be culturally responsive educators. Until our music teacher training programs are structured to value and support the use of diverse pedagogies, we will continue to fail to have a more diverse and equitable system of music education.
Fortunately, it appears that change may be on the horizon. This year, mariachi became a fully sanctioned event of the University Interscholastic League (UIL) in the state of Texas (Smith, 2019). In an effort to increase student participation in the school music programs of Nashville, Tennessee, Metro Nashville Public Schools, the Mayor’s Office, and the Nashville music community developed a partnership to support the development of programs that reflect the population of students within each school (Music Makes Us, 2016). Some music teacher training programs have even reworked their entrance requirements and programs of study to attract and support strong musicians who are not trained in Western music. However, these examples are the minority and not the norm. In order to realize equity and diversity in music education, this sprinkling of examples must become standard.

Our schools of music are currently structured to accept students who are proficient in Western “art” music. We train these students in this one area with perhaps a slight nod to other musics and then send them into P-12 schools to develop the same type of musicianship in students who then apply for admission to music teacher training programs, perpetuating the same cycle. I am not suggesting we throw out the proverbial baby with the bath water. There are many excellent things happening in our current system of music education. Yet our system is problematic in that it centers the experiences of some students and ignores the experiences of others. We should stop trying to define inclusivity by how well we can include diverse students into our existing programs and instead determine how to restructure our programs to prioritize the rich musicality a diverse group of students will bring to our programs.

Conclusion
If we truly seek diverse perspectives and experiences along with diverse bodies, we must embrace the reality of a multitude of pedagogical approaches that are not centered around Western “art” music. We must support the development of a variety of ways of transmitting musical knowledge without privileging those that are Western, especially in communities whose histories and experiences do not reflect Western ways of knowing. In order to effectively do any of this, we must reformat our programs of study in higher education to embrace musicians whose musical strengths may not lie in how well they are able to perform Western “art” music. If we do not truly value diversity and equity in our field, then the points I have posed in this paper can be ignored. However, if we do value equity and diversity but do not address the challenges I have articulated here, we will find ourselves reconvening in another 20 years to inquire, once again, about the lack of diversity and equity in our field.

References


A content analysis of the International Journal of Music Education, 2002-2016
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Abstract
The purpose of this study was to review and analyze research articles \((N = 175)\) in the International Journal of Music Education from 2002 through 2016. Studies were coded to determine: (a) sex of authors; (b) geographical region of authors; (c) research methodologies of articles; (d) primary topics within participants’ educational level/age/types. Results indicated that 57.4% of authors were female researchers; 42.6% were males; 44.1% of authors were from North America; 49.1% of studies employed the quantitative method to research; 36.4% of research focused on the college/university.

Keywords: Content analysis, International Journal of Music Education, International Society for Music Education

Formation of the International Journal of Music Education
The International Society for Music Education founded in Brussels at a conference convened by the United Nations Educational, Scientific, and Cultural Organization in 1953 (Callaway, 1979). International Society for Music Education dedicated to “represent an international, interdisciplinary, intercultural network of professionals who strive to understand and promote music learning across the lifespan” (International Society for Music Education, n.d.). In the early years of the International Society for Music Education, leaders realized that the establishment of international presence and identity required to establish a journal to disseminate information about the activities of the International Society for Music Education and to stimulate thinking and activity throughout the world (McCarthy, 2013). In 1960, the International Society for Music Education published the first issue of the International Music Educator, edited by Egon Kraus (McCarthy, 2013). However, International Music Educator seems could not feel satisfied with the development of the Society. International Society for Music Education decided to cease publishing the International Music Educator in 1972 and started establishing a new journal - International Music Education Yearbook in 1973 (McCarthy, 2013). The role of this new journal was a forum for the publication of articles, and conference and seminar papers (McCarthy, 2013).

On July 28, 1982, the 15th International Society for Music Education Conference in Bristol, England, decided to publish an International Journal of Music Education (Callaway, 1983). The International Society for Music Education published the first issue International Journal of Music Education in May 1983. Frank Callaway (Gallusser, 2003), a New Zealand conductor and educationist, became the first editor of the International Journal of Music Education. He also served as the president of the International Society for Music Education between 1968 and 1982 (Gallusser, 2003). In the first issue of the International Journal of Music Education, Barry Brook, the President of the International Music Council, introduced that the International Journal of
Music Education will bring international music educators together and benefit to practitioners, students, and teachers of the art of music (Brook, 1983).

**Growth and Change of the International Journal of Music Education**

The first volume of the *International Journal of Music Education*, edited by Frank Callaway, was published in May 1983. The first issue published 16 articles, which was from different countries such as France, England, the United States, Nigeria, Brazil, Australia, and Denmark. Most articles reported the situation of Music Education in their countries. From 1983 to 2001, the *International Journal of Music Education* was published in May and November, respectively. Having each year, the *International Journal of Music Education* had two volumes, and each volume only had one issue. The journal published research and practice articles in the same issue.

The *International Journal of Music Education* seemingly experienced significant change in a big evolution in 2002. The International Society for Music Education published two professional journals: *International Journal of Music Education* and *Music Education International*. *International Journal of Music Education* remained to publish research articles, including quantitative and qualitative research studies, summarize bodies of research, present theories, models, or philosophical positions (Sims, 2001). *Music Education International* was established at the same time, which would publish practice articles and teaching materials related to music teaching and learning (Sims, 2001). Wendy Sims, the editor of the *International Journal of Music Education*, served in 2000 and 2001, was the guest editor of the *Music Education International* in 2002 and 2003 (Sims, 2001). Therefore, the *International Journal of Music Education* was only published one volume respectively in 2002 and 2003. Each volume still had one issue. However, the *International Journal of Music Education* and the *Music Education International* merged back to one journal in 2004.

Moreover, the volume numbering system had changed in the same year. The International Society for Music Education published its journal one volume with three issues between 2004 and 2007. Each issue has a subtitle: *Research* in April, *Showcase* in August and *Practice* in December (Johnson, 2004). In 2008, the *Showcase* edition became a second research issue. The *International Journal of Music Education* began to move from three to four issues one year from that time on, including two Research in February and August, and two Practical issues in May and November.

Even though the *International Journal of Music Education* continued to be published four issues each year until now, editors abandoned the label the subtitle of “Research” or “Practice” in the journal. In November 2014, editors decided to make each issue a combination of Research and Practice papers (Brittin & Leung, 2014). They explained that the re-organization has two reasons, including the number of papers submitted and the topics covered (Brittin & Leung, 2014). Initially, the *International Journal of Music Education* still made a little label above the article, although much smaller like “Research Article” and “Practice Article” above the title of each paper in the combination issues between 2014 and 2016. Since 2017, the editorial board stopped labeling all articles in the *International Journal of Music Education* and merged “Research” and “Practice” editorial boards. They also officially announced that papers submitted after January 1st, 2016, have not been subdivided under “Research” and “Practice” (Brittin, 2015). The editor RuthBrittin (2015) indicated that they devote
International Journal of Music Education entirely to publish empirical papers because they believed that all authors, whether they are “pure researchers” or “practitioner slants,” are all empirical music education scholars who will emphasize the importance of the findings for music educators.

**Literature Review**

Content analysis is the study of cultural artifacts that humans have created, including magazine articles, books, meeting minutes, web pages, and song lyrics (Abbott & McKinney, 2013, p. 316). Also, content analysis is a prevalent research design in Music Education that examines the profession’s textbooks and academic journals for patterns in scholarship and research.

Previous content analyses research in music education has focused on the *Journal of Research in Music Education*. These researchers investigated topics such as content analyses of articles (Yarbrough, 1984, 2002); cited quantitative research in journals (Schmidt & Zdinski, 1993); cited foundational sources in qualitative research (Lane, 2011); theoretical frameworks (Miksza & Johnson, 2012); characteristics of samples (Ebie, 2002; Kratus, 1992); editorial committees (Humphreys & Stauffer, 2000); and author characteristics (Lane, 2011).

Yarbrough (1984, 2002) was an earlier research to study methodologies. She had divided the methodologies of the research into historical, philosophical, experimental, descriptive, behavioral, qualitative, and other (Yarbrough, 1984, 2002). Although Yarbrough (1984, 2002) did not mention mixed method, some researchers (Butler, 2001; Johnson & Onwuegbuzie, 2004) indicated that incorporating data from both quantitative and qualitative sources would lessen the weaknesses of either method. Yarbrough (2002) reported that the dominant methodology was quantitative; an increase was qualitative research; and the decrease was in the number of historical, philosophical, and “other” research. Lane (2011) confirmed that qualitative research was growing between 1983 and 2008.

Ebie (2002) examined the characteristics of research samples in the *Journal of Research in Music Education* during the years 1953-2002. He categorized samples by level in school, whether they were studying music, sample-specific to gender, race, or ability/disability, size, and geographic location. Ebie (2002) found that college samples were majority participants. This finding confirmed Kratus’ (1992) and Yarbrough’s conclusion (1984), which reported that college/university students were the most subjects in samples of the *Journal of Research in Music Education* between 1953 and 1990.

**Method**

The purpose of this study was to review and analyze “Research” articles (*N* = 175) in the *International Journal of Music Education* from 2002 through 2016. These studies were analyzed to determine numbers of the following variables and their levels:

1. Sex of authors (male, female)
2. Geographical regions of authors (Africa, Asia, Central America, Europe, North America, Oceania, South America)
3. Research methodologies of articles (philosophical, historical, qualitative, quantitative, mixed, literature review)
4. Primary topics within participants’ educational level/age/types (college/university, secondary school, elementary school, pre-school, infancy, various age, music teacher, adult, special needs population, and private lesson)

The author only examined the “Research” issues in the *International Journal of Music Education* between 2002 and 2016, because the journal published research articles in the separate issues or labeled the articles as “research” by editorial board during this period. Additionally, the author eliminated last issues in Volume 33 and Volume 34 in 2015 and 2016 because the editors did not designate “Research” or “Practice” in these two issues.

**Validity and Reliability**

An additional rater for this research was a doctoral student in the same program. She was given 25 articles, which is a standard of 15% of the original sample, to code the four variables: 1) sex of authors; 2) research methodologies of articles; 3) participants’ educational level/age/types and 4) primary topics.

To determine a simple interrater reliability, my original codes were compared to that of the additional rater through Cronbach’s Alpha Reliability Test in SPSS 25. The results showed that the alpha coefficient of sex of authors for the original and additional rater is 1.000, suggesting that the items have complete consistency. The alpha coefficient of research methodologies of articles for the original and additional rater is .971, suggesting that the items have relatively high internal consistency. The alpha coefficient of participants’ educational level/age/types is .823, and the alpha coefficient of primary topics is .867, which have less consistency but a reliability coefficient of .700 or higher is considered “acceptable” in most social science research situations (Cronbach, 1951).

**Findings**

The author examined the total articles ($N = 175$), including the sex of authors, geographical workplace, research methodologies, and primary topics. There were 15 volumes, including 28 issues to be reviewed. Table 1 presents the frequency and percentage of articles between 2002 and 2016. Observing the frequency of published articles in *the International Journal of Music Education*, the author found that the number of articles published has been increasing in these 15 years.

**Sex of Authors**

There were 264 authors’ names shown throughout the research issues of the *International Journal of Music Education* from 2002 to 2016. All authors who published in the journal counted as either female or male determining their biological sex by their names and biographies published in the journal. Additionally, some authors of the current study searched for photographs and biographies on the internet. Female researchers ($N = 151, 57.4\%$) published articles 186 times, and the male researchers ($N = 113, 42.6\%$) published 138 times. Some authors ($N = 46, 17.5\%$) have published more than two articles. Jane Davidson and Susan Hallam have published four articles.
<table>
<thead>
<tr>
<th>Stage</th>
<th>Years</th>
<th>Volume</th>
<th>Issues</th>
<th>Number of Articles</th>
<th>Percent</th>
<th>Cumulative Percent</th>
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</thead>
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<td>3.4</td>
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<td>6</td>
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<td>6.9</td>
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<td>6.3</td>
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<td>2</td>
<td>12</td>
<td>6.9</td>
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<td>17</td>
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<td>65.7</td>
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<td>3*</td>
<td>18</td>
<td>10.3</td>
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<tr>
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<td>2016</td>
<td>34</td>
<td>3*</td>
<td>19</td>
<td>10.9</td>
<td>100.0</td>
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<tr>
<td>Total</td>
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<td>28</td>
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<td>100.0</td>
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</table>

*Exclude last issue of Vol. 33 and Vol. 44

Table 1. International Journal of Music Education, Research Issues, 2002-2016

Geographical Region of Authors
Authors from 32 different regions of the world published research articles in the International Journal of Music Education issues between 2002 and 2016. These regions organized by continents, including Africa, Asia, Central America, North America, South America, Europe, and Oceania. North America (N = 143, 44.1%) was the largest group of authors. Comparing to other regions, Central America (N = 1, 0.3%) and Africa (N = 2, 0.6%) were the least presented.

For the variable of sex, female and male scholars’ contributions in Asia and North America were almost equal. However, in Europe, Oceania, and South America, female authors published more than males, especially in South America, where female scholars published 90% of the articles (N = 9), and eight of the nine female authors were from Brazil.
Research methodologies of articles
Data demonstrate that a large percentage ($N = 86, 49.1\%$) of studies were quantitative methodology, including 22 (12.6\%) experimental design, 15 (8.6\%) descriptive design, and 1 (0.6\%) data mining. The second-largest percentage ($N = 52, 29.7\%$) of studies were qualitative methodology. There were 23 (13.1\%) case study articles to be classified as qualitative. There were 16 studies (9.1\%) presented that they applied both qualitative and quantitative methods to research procedures. These articles classified as mixed methodology. Even though the total of quantitative research was more than qualitative between 2002 and 2016 in “Research” issues, the percentage of qualitative research increased 12.1\%, while quantitative research decreased 3.2\% between 2002 and 2016. Besides, few philosophical studies ($N = 7, 4.0\%$) have published. Historical studies ($N = 11, 6.3\%$) also have less published. The lowest percentage ($N = 3, 1.7\%$) of studies were literature review articles. Historical research articles ($N = 11, 6.3\%$) discussed various regions. Scholars preferred to study their local history or compare two different regions as their topic of historical research. Data showed that the history of music education in the United Kingdom was more than in other areas.

Primary topics within participants’ educational level/age/types
The scholars paid attention to the diverse topics (see Table 2) and involve a wide range of ages in the *International Journal of Music Education*. Qualitative, quantitative, and mixed method research all attached importance to the college/university ($N = 56$), especially the topic of the pre-service music teacher education ($N = 15$). Another focused topic was music teachers ($N = 17$). Researchers studied music teachers’ health, in-service teacher training, and musical partnership.

<table>
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<tr>
<th>Age/Grade Level</th>
<th>Topics</th>
<th>Quantitative</th>
<th>Qualitative</th>
<th>Mixed Method</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
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<td>College/University</td>
<td>Pre-service teacher education</td>
<td>31</td>
<td>16</td>
<td>9</td>
<td>56</td>
<td>36.4%</td>
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<td>1</td>
<td>0</td>
<td>4</td>
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<td>4</td>
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<td>1</td>
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<td>4</td>
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<td>Health and wellness</td>
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<tr>
<td>In-service teacher education</td>
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<td>2</td>
<td></td>
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<tr>
<td>Music Partnership</td>
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<td>0</td>
<td>1</td>
<td></td>
<td></td>
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<td>1</td>
<td>0</td>
<td>4</td>
<td></td>
<td></td>
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<td><strong>Infancy</strong></td>
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<td><strong>2</strong></td>
<td><strong>6</strong></td>
<td>3.9%</td>
<td></td>
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<tr>
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Discussion

The purpose of this study was to review and count representation of specific variables across all the “Research” articles ($N = 175$) in the *International Journal of Music Education* from 2002 to 2016. Although several previous researchers (Fox & Mohapatra, 2007; Hartley & Dobele, 2009; Kennedy et al., 2009) found that female faculty members published less than their male counterparts, findings of this study revealed that female authors who published articles in the *International Journal of Music Education* more than males. Additionally, scholars who were from Europe, Oceania, and South America that women published more than men. While, in North America and Asia, the number of publications by male and female scholars was almost the same. These findings suggest that the research and publications contributions of women scholars, at least for this journal in music education may have gradually increased.

North American scholars were the largest group for publishing in the “Research” issues, with the majority being from the United States. This finding was like Tracey’s observation (2005) that North Americans dominated research articles in the *International Journal of Music Education*. Although European scholars were the second largest group for publishing in the study, the research findings did not agree with Tracey (2005) in that Britain was not as prolific as previously reported. Australian researchers have published more research articles than the British in the *International Journal of Music Education*.

Quantitative research was the most used methodology in the “Research” articles, and qualitative research was the second. These findings are consistent with Yarborough's investigation (1984, 2002) of the articles published in the *Journal of Research in Music Education*. The author also identified that qualitative research slightly increased, which confirmed the reports by Yarborough (2002) and Lane (2011). The reason for similar results in the *International Journal of Music Education* may be that the North American researchers were significantly higher than those elsewhere.

Lastly, the author found that music education scholars in the *International Journal of Music Education* focused on a wide variety of research topics, which brought great challenges to the topic variable classification of this study. These authors whomever chose applying quantitative, qualitative, or mixed research method preferred to discuss the topic of college/university music education. The result support that college/university students accounted for the largest number of samples studied during the years 1953-1984 (Yarborough, 1984), 1961-1990 (Kratus, 1992), and 1953-2002 (Ebie, 2002). The reason might be that the authors are mostly from universities or colleges. They could find corresponding participants and obtain data easily in universities and colleges (Kratus,

### Table 2. Frequency and Percentage of Topics in Different Age/Grade Level

<table>
<thead>
<tr>
<th>Topic</th>
<th>Adults</th>
<th>Professional Musicians</th>
<th>Private Lesson</th>
<th>Pre-school</th>
<th>Special Need Populations</th>
<th>Total</th>
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<td>0</td>
<td>1</td>
<td></td>
<td>3</td>
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</tbody>
</table>

| Adults | 86 | 52 | 16 | 154 | 100% |

Table 2. Frequency and Percentage of Topics in Different Age/Grade Level
Moreover, scholars attached more attention to preservice music teacher education in the studies of college/university music education. The possible consideration is that the priority of music education professors is to train the new generation of music educators.

References


