

International Society for Music Education

ISME



**Proceedings of the 25th International Seminar of the
ISME Commission on Research**

Federal University of Paraíba, João Pessoa, Paraíba, Brazil

14-18 July 2014

Editors

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National Library of Australia Cataloguing-in-Publication
Author: ISME Commission on Research International Seminar
(25th: 2014: João Pessoa, Brazil)
Title: Proceedings of the 25th International Seminar of the ISME Commission on Research, João
Pessoa, Brazil [electronic resource]

ISBN: 978-0-9942055-2-0 (eBook)
Notes: Includes bibliographical references.
Subjects: Music--Congresses.
Music in education--Congresses.

ISME Commission on Research
Dewey Number: 780.7

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Acknowledgments

The first draft of each paper submitted was independently reviewed by three research commissioners and the selected contributions were included in the pre-seminar Proceedings. Papers for this eBook were updated taking into account the questions posed during the seminar. We take this opportunity to thank David Forrest for his guidance on format, Adrian Mulgrew for his editorial assistance, and all the ISME members with whom we have come in contact during the process from paper submission to publication. We especially thank the Federal University of Paraíba and ISME for their sponsorship. Our sincere appreciation is expressed to our hosts Luis Queiroz and Vanildo Marinho who made the seminar possible. Most of all, we are grateful to the authors for their patience and hard work in preparing their contributions. This was truly a team endeavour and we hope that the authors agree that it was worth the effort.

Oscar Odena and Sérgio Figueiredo, November 2014

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Multicultural Perspectives in Teaching Traditional Brazilian *Choro* Music Abroad through Class Instruction using Comprehensive Musicianship Concepts

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Abstract

The purpose of the study was to foster multicultural perspectives in teaching traditional Brazilian *Choro* music through class instruction to a particular group of American university music students. The theoretical and pedagogical foundations for the development of the study relied upon concepts of comprehensive musicianship, educational objectives and practices, modes of musical knowledge, and aesthetic cultural meaning and relevance of *Choro* music presented to music students outside Brazil. Research methodology was designed using a qualitative phenomenological approach with descriptive method techniques and procedures. Data were collected through participant-observational and action research practices for a period of five weeks during the Fall semester of 2012. Students were grouped into three different classes with distinct instructional objectives. A jury of 12 members evaluated students live performances on *Choro*. Results evidenced a hierarchy on three different instructional strategies. Conclusions of the study supported the inclusion of multicultural practices using *Choro* music experiences overseas with recommendations for further research in other institutions and nations.

Keywords: *Choro*, class instruction, comprehensive musicianship, multicultural perspectives, global music education.

Introduction

The article describes the experience of teaching traditional *Choro* music to one American university in the Fall semester of 2012 through class instruction using comprehensive musicianship concepts. The report is organized into the following sections: (a) theoretical and pedagogical background; (b) purpose of the study; (c) methodology approaches; (d) results; and (e) conclusions.

Theoretical and Pedagogical Background

This section presents the foundations of the study and is divided into six segments: (a) Brazilian *Choro* and American Jazz; (b) comprehensive musicianship; (c) educational objectives; (d) educational practices; (e) knowledge; and (f) music and culture.

Brazilian *Choro* and American Jazz

Choro may be considered the earliest independent style of Brazilian music developed during the last quarter of the 19th century (Alvarenga, 1982; Andrade, 1962; Béhague, 1980; Hodel, 1988; Stigberg, 1986), and it has been incorporated into both art music and popular genres since then. It reflects the virtuosic, contrapuntal, and improvisatory character of Brazilian music and its

survival in the contemporary hot-house musical environment of Brazil is a unique case of unity in diversity nationwide. (Álvares, 1999)

Carvalho (1972) states that *Choro* is the typical Brazilian music par excellence, and it is the Brazilian counterpart of American Jazz. Nevertheless, Aratanha (1996) maintains that *Choro* can not be considered Brazilian Jazz because the former appeared before rather than the latter.

Schreiner (1993) indicates some similarities: (a) small mobile ensembles; (b) one or two melodic instruments playing over harmonies and walking bass lines; (c) collective performance and improvisation; (d) use of double/half rhythms patterns (eight notes in Jazz and sixteen notes in *Choro*); (e) outstanding musicians from genre's early period are still held in high esteem; and (f) Euro-African influences are strongly present in the music (pp. 85-101).

During the process of teaching *Choro* to American students, comparisons were inevitable. In this research, students came from different background, some were familiar with Brazilian music, but none had heard much about *Choro*.

Class Instruction

In Brazil, class instruction in music education can be traced from early 20th century through the educational project of Heitor Villa-Lobos (1897-1859) known as *canto orfeônico*¹, which ranged from 1931 until 1961. At the turn of the 21st century, it seems that there is a revival of collective music education through class instruction with emphasis on instrumental music (Cruvinel, 2005; Barbosa, 2012).

¹ Often translated as orpheonic singing, group sing, school singing, choral singing, etc.

In the United States, class instruction in music education can be traced, as well, from early 20th century through the works of Albert Mitchell (1882-1959), starting in Boston schools from 1910's and later spreading across the country (Abeles, 1994). Jazz education can be traced as early as 1944 in New York school system (Baker, 1979).

Teaching Brazilian *Choro* music in an American classroom that includes a diversity of instruments and students from different background was an optimum opportunity to use comprehensive musicianship concepts to promote “the development of competencies in creating music, performing music, and critical listening and analysis” (Willoughby, 1990, p. 39).

Comprehensive Musicianship

Several music educators emphasize the importance of comprehensive musicianship in educational programs (Abeles, 1968; Ball, 1969; Mitchell, 1969; Schawdron, 1965; Trotter, 1967). Comprehensive musicianship premises addresses important issues such as: (a) student oriented *versus* teacher oriented; (b) discovery learning (heuristics) *versus* receptive learning (algorithms); (c) Gestalt psychology (historical antecedent of cognitive psychology) *versus* behaviorist psychology; (d) cyclical sequence and spiral curriculum; (e) self actualization and humanistic motivation; and (f) process *versus* product.

In traditional music curricula, courses such as history, theory and performance are taught separately and often by different instructors. Because they are studied as distinct areas of music, the integration of knowledge from one course to another is often rare. Therefore, students tend to

have a fragmented knowledge of music that prevents them from developing a comprehensive musical understanding (Mark, 1986). Findings from research support the inclusion of the comprehensive approach in the music curricula from lower to higher educational levels (Costanza and Russell, 1992; Garofalo and Whaley, 1979; Madhosingh, 1984; Parker, 1974; Whitener, 1983; Woods, 1973).

The concept of comprehensive musicianship as it applied to the study of music from elementary schools through the university [...] assumed the role of a catalyst for reassessment regarding the nature of music and the use of musical processes in teaching and learning (Willoughby, 1990, p. 44).

Educational Objectives

In mid-20th century, Bloom (1956) and his associates recognized that learning is not a simple unitary process. Three domains of educational activities were then identified: (a) cognitive, emphasizing thinking and other intellectual processes; (b) psychomotor, focusing on physical skills and techniques; and (c) affective, concerning feelings, attitude and appreciation. Each of these domains were structured from simplest to most complex and called the taxonomy of educational objectives.

Classifying different types of learning into separated domains may facilitate analysis, study, and lesson planning. Nevertheless, this separation appears somewhat artificial, and none of these taxonomies seems to reach the true essence of learning when isolated from each other. With this

caution in mind, the study intends to promote an interrelationship among these three kinds of learning experiences as proposed by Labuta (1974, p. 48) and illustrated in figure 1.



Figure 1. Interrelated domains of learning.

Educational Practices

By the end of the military dictatorship period in Brazil (1964-1985), works of post-Freire (1967) Brazilian scholars reflected upon social issues in Brazilian educational system (Cury, 1979; Libâneo, 1984; Mello, 1982; Saviani). These reflections brought up the concept that educational practices are not restricted to school or family. They do occur under various contexts of human existence, whether individual or social, whether institutionalized or not.

Libâneo (1998) identifies three types of educational practices: (a) informal; (b) non-formal; and (c) formal. Informal education occurs in a diffuse and scattered manner, where the process of knowledge acquisition is not intentional and not institutionalized. Non-formal education is undertaken with some level of intentional and systematic procedures, taking place at non-conventional institutions such as professional organizations, media venues, or trainings agencies. Formal education occurs with high degrees of intentionality and organization, taking place in schools, colleges, universities, or other educational institution.

The current study explores the possibilities of including informal and non-formal educational practices into these multicultural perspectives of teaching traditional Brazilian *Choro* to American university music students, likewise promoting a combined setting of educational practices available.

Knowledge

According to Fenstermacher (1986), education, regardless of its practice, relies on two principal foundations: accumulation and transmission of knowledge. Different conceptions of knowledge and how humans come to know affect the way educational practices are approached. Reimer et al (1985) e Rideout (1987) alert for the importance of developing a comprehensive understanding of what knowledge is, how it is acquired, and the ways in which music and knowledge may be connected. Music may be experienced from the perspectives of the listener, performer, and composer, considering either an isolated or an integrated approach.

Álvares (2006) distinguishes two modes of knowledge: (a) propositional; and (b) non-propositional. From Ancient Greece to early-20th century, it was common to define Western knowledge by representing the possession of specific information that could be expressed through verbal or written words related to beliefs, thoughts, or deductions (rationalism). Another common definition was associated with the capacity of perform certain tasks either under defined circumstances (empiricism) or under mutating environments (pragmatism). These traditional modes, called propositional knowledge, are based upon consensual credibility and validity depending on time and place of a certain society.

Epistemological developments throughout the 20th century departed from concerning of knowing *what* towards a search for understanding the representations of knowledge made by human minds, emotions, and procedures (Berlyne, 1974; Durkin and Crowther, 1982; Eisner, 1979; Elliot, 1995; Heller and Campbell, 1976; Kant, 1951; Langer, 1942, 1953; Meyer; 1956, 1967; Nettl, 1983; Perkins, 1977; Scruton, 1983, Serafine, 1988; Wittgenstein, 1966). This non-propositional mode of knowledge gave birth to concepts such as constructivism, semiology, phenomenology, and expressionism. The current study takes into consideration all the available modes of knowledge as material to expand the possibilities for teaching and learning *Choro* outside of Brazil in the dawning of the 21st century.

Music and Culture

Scholars regard music as an integral part or culture in society (Hamm, Nettl, and Byrnside, 1975; Blacking, 1973; Farnsworth, 1954; Lomax, 1968; Lundin, 1967). Cassirer (1944) states that “art may be defined as a symbolic language” (p. 168), while Merriam (1964) writes that the symbolic meaning in music “cannot be derived from properties intrinsic in its physical form; rather, it is the human attribution of abstract meaning” (p. 231) and that “the product is the result of behavior which is shaped by the society and culture of men who produce it” (p. 25). Furthermore, Geertz (1977) affirms that culture “denotes an historically transmitted pattern of meanings embodied in symbols, a systems of inherited conceptions expressed in symbolic forms, by means of which men communicate, perpetuate, and develop their knowledge about and attitudes towards life” (p. 89).

Music is “significant form,” and its significance is that of a symbol, a highly articulated, sensuous object, which by virtue of its dynamic structure can express the forms of vital experience which language is peculiarly unfit to convey. Feeling, life, motion and emotion constitute its import (Langer, 1953, p. 32).

The concepts above strengthen the potential of music to promote a non-propositional mode of knowledge development. According to Gaston (1968), if we as humans are less exposed to stimuli we would be less complete in terms of human development. Presenting multicultural perspectives to teach traditional Brazilian *Choro* music to American university music students could broaden the scope of learning experiences for such group of students bringing up some unexpected educational pathways as illustrated in figure 2. “To each musical experience is brought the sum of an individual’s attitudes, beliefs, prejudices, conditionings in terms of time and place in which he has lived” (Gaston, 1957, p. 26).

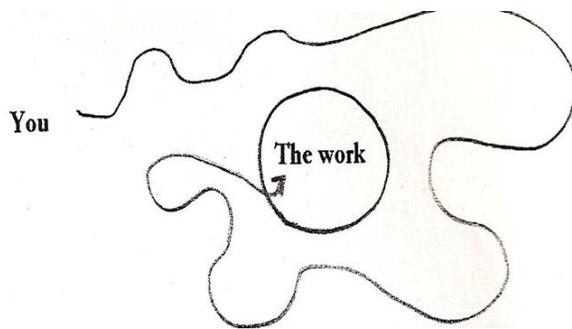


Figure 2. Educational pathways

Purpose of the Study

The purpose of the study was to foster multicultural perspectives in the processes that underlie the environment of teaching and learning *Choro* through class instruction in one specific American university group of music students, using concepts of comprehensive musicianship and launching a transdisciplinary² approach in disciplines related to: (a) performance; (b) theory and improvisation; and (c) history, literature, and socio-cultural issues inherent to Brazilian music.

Methodology Approaches

This section presents the methodology approaches and is divided into three segments: (a) research design; (b) subjects; and (c) data analysis.

Research Design

The study used a qualitative phenomenological approach with the purpose to describe a *lived experience* of a phenomenon. In the current case, the traditional Brazilian *Choro* music is the phenomenon, and the incorporation of multicultural perspectives through class instruction into one specific American university group of music students is the *lived experience*. According to Bresler and Stake (1992), “the aim of qualitative research is not to discover reality, for by phenomenological reasoning this is impossible. The aim is to construct a clearer experiential memory and try to help people obtain a more sophisticated account of things” (p. 76). Experience is

² *Transdisciplinarity* is a term used to signify a unity of knowledge beyond disciplines (Nicolescu, 1996).

the source of all knowing and the basis of behavior. Experience, what we are aware of at any point in time, is the foundation of our knowledge of ourselves, of other people, and the world in general. Without human experience there would be no human world. (Becker, 1992, p. 11)

According to Gonzo (1992), “descriptive research is devoted to collecting information about prevailing conditions or situations for the purpose of description and interpretation” (p. 220). Following this concept, the author designed a descriptive research model underlying two major modes: (a) an observational research, “characterized by data gathering through observation of the behaviors of others” (Casey, 1992, p. 120); and (b) an action research, characterized by “doing research and working on solving a problem at the same time” (Cormack, 1991, p. 155). In the former, the author served as participant and observer, taking a double role as teacher and researcher in a foreign classroom. In the latter, the author proposed an action or a planned activity, which was the incorporation of multicultural perspectives to a group of American university music students.

Subjects

The group of students was divided in three classes (A, B, and C) that students have registered according to their preference of day and time. Classes met once a week for one hour during five weeks. Each class was given a different educational approach.

Class A was taught by the author and included a monitor from the Jazz Pedagogy program that served as a regular student. The author taught this class using comprehensive musicianship

concepts as explained above, but without saying it clearly to the students. No differential teaching attention was given to the student-monitor, which learned basically by modeling just like the others.

Class B was taught by the student-monitor and used the same repertoire presented by the author in Class A. No specific instruction was given the student-monitor, so he basically tried to imitate the methodology that he experienced as a students in Class A, which used the comprehensive musicianship concepts plus the theoretical and pedagogical background as presented above.

Class C was kind of a control group, where the students were provided only with a recording of *Choro* and were asked to prepare one tune for performance. Class C was supervised by a music faculty, but students were asked to study *Choro* music mostly on their own. They were encouraged to transcribe this tune, but were free to look for printed scores in books, on the web, or through any other means including friends.

Data Analysis

After five weeks, a live recording tape was made from each class. Each tape was listened randomly by a jury of 12 members: six American music faculty; plus six Brazilian exchange music students. All jury members were quite familiar with *Choro* music. Each class was evaluated as a group rather than by individuals.

There were three criteria for evaluating the performances: (a) rhythmic feel; (b) melodic and harmonic fluency; and (c) stylist interpretation. The jury evaluated these criteria on a four-point

Likert (1932) scale type, ranging from 0 to 10: (a) very bad; (b) bad; (c) good; and (d) very good. The analysis of jury's responses was made using frequency responses. An open-end format was added as an option so each jury member could express free comments regarding the performances as they wish.

Results

As a whole, the jury agreed on the following ranking, from top to bottom: (a) Class A; (b) Class B; and (c) Class C. However, it was noticeable that students were more critical on their evaluation as shown on table 1 and table 2.

Faculty	Class A	Class B	Class C
Rhythmic Feel	8,4	6,7	5,5
Melody / Harmony	7,2	6,7	2,2
Stylist Interpretation	6,1	6,7	3,9
Total	7,2	6,7	3,9

Table 1: Faculty evaluation

Students	Class A	Class B	Class C
Rhythmic Feel	7,3	5,5	3,3
Melody / Harmony	7,2	5,0	2,8
Stylist Interpretation	5,5	4,4	3,3
Total	6,7	5,0	3,1

Table 2: Students evaluation

Regarding the open-end format option, there were few responses, but all of them mentioned either the close relation of *Choro* and Jazz or how much improvising and playing variations on the main theme or on the accompaniment would enhance the performance.

Conclusions

The teaching of traditional Brazilian *Choro* music abroad can bring out some multicultural perspectives in the contemporary music education scenario. Class instruction can be definitely enhanced using strategies that include: (a) comprehensive musicianship concepts mingling with educational objectives; (b) informal and non-formal educational practices associated with non-propositional knowledge concepts; and (c) contemporary issues on music and culture in a fast growing global environment. Traditional music from the late 19th century in the Americas has survived and it looks like a spontaneous and gorgeous material to present for the upcoming generation of music student throughout the world. Therefore, it is strongly recommended to further undertake research in other institutions and nations to broaden the knowledge of the current phenomenon explored.

Atualmente, numa sociedade urbana e industrial, onde a difusão da cultura é muito mais intensa, rápida e diversificada do que em outros momentos e outros espaços, está a princípio à disposição dos indivíduos um universo musical extremamente amplo e rico, formado pela música de diversas épocas de diferentes formas e estilos. (Penna, 2008, p. 34).

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Should They Hear What I Like? Adults' Perceptions of Musical Styles Needed in the School Curriculum

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Abstract

Adults' perceptions of musical styles most appropriate for the school music curriculum were examined through two means: a survey inspired by the National Endowment for the Art's datasets on public participation in the arts, conducted in 2002 and 2008, and preferences for excerpts of recordings across a range of styles. The listening samples were designed to examine the role of race/ethnicity in the reactions to four pop pieces performed in different languages. Responses of community college students enrolled in jazz history courses ($n = 128$) were studied for effects of music education experience on omnivorousness, and the link between personal omnivorism and an omnivoristic attitude towards school curricula was examined. With this sample, there was no significant correlation between music education experience, defined as the total number of music classes/lessons, music appreciation courses, and private lesson experiences reported, and omnivoristic views towards the school curriculum. However, there were small but significant relationships between personal omnivorism and omnivoristic curriculum views. Preferences and attitudes for school inclusion of 13 styles showed adults discriminated between

the two, relative to the style; certain styles were more highly advised even if not personally preferred, particularly jazz and classical music, and other favorites were not as highly advised for the curriculum, particularly rap and certain rock styles. Concerning adults' reactions to pop songs presented in different languages, there were significant effects for race and ethnicity, but the language of presentation was not found to have significant effects, for songs counterbalanced in Spanish and English, nor for songs counterbalanced for English and Korean/Mandarin. This was true for both personal preference responses and for advice on the suitability of songs for the school curriculum. Discussion relates to understanding adults' attitudes in order to better understand the role of music education per community members' and parents' values.

Keywords: preference, styles, parent, attitudes, affective, education.

Introduction

There is a long line of research in music education investigating music listeners' stylistic preferences, and recent study has explored the concept of musical omnivorism and its link to music education experiences. Cultural omnivorousness is described as a general positive disposition towards consuming a broad range of cultural products (Graham, 2009, p. 283), from elite high culture to popular culture. Omnivores partake of more cultures, and more genres within a culture, compared to univores, and omnivorousness has become a form of desirable cultural capital, a valuable attribute leading to increased access and opportunity in contemporary society. This study is based in part on Graham's work on omnivorism, which utilized the National Endowment for the Arts' 2002 survey of US adults regarding their patronage of the arts, as well as the NEA's more recent Survey of Participation in the Arts (2008).

Graham (2009) found evidence that music education experiences in school (defined in his study as music appreciation classes) positively affected musical omnivorism. Brittin (in press) looked at this issue with pre-teens and found that children who reported their parents listening to more styles of music at home also responded more positively to a range of musical styles when listening to selected excerpts. Omnivorism may be related to the “open earedness” studied by LeBlanc, and may relate to studies investigating taste for “high-art” and “low-art” (North and Hargreaves, 2007).

Ultimately, teachers are responsible for the music curriculum within their music classrooms as they consider the cultural norms of their community. The teacher may at times need to promote tradition and at other times may push for change, and this leads to choices as to which styles or genres are most appropriate for the classroom. Culture, race and ethnicity play an important role in music preference (Geringer and Guerra, 2002; McCrary, 2000), so educators are eager to understand the role culture plays in their curricular decisions.

Indeed, Graham found that Hispanic respondents were the only cultural group in the NEA 2002 dataset that seemed to be negatively impacted by formal music education experiences, in regards to their omnivorism; he advocated further study of this phenomenon in order to understand how formal music education experiences function for Hispanic children. While researchers have explored adults’ musical preferences extensively, few if any have examined adults’ thoughts on suitability for the school curriculum in light of their musical experiences and personal preferences.

Children's responses can be influenced by the language of presentation (Abril and Flowers, 2007; Abril, 2002); recent research (Brittin, in press) shows that children do not respond in a linear, predictable fashion to pop songs performed in different languages. Hispanic students responded more positively to some but not all pop songs performed in Spanish, and the same was found for Asian students responding to Korean or Mandarin vs. English presentations of the songs. It is not known whether adults might respond similarly to children, nor whether adults have strong feelings regarding the suitability of songs in particular languages in the US school curriculum.

This study is designed to look at the link between adults' music preferences for a range of styles, their attitudes towards those styles' inclusion in the school curriculum, and effects of race/ethnicity on reactions to songs presented in different languages. Discussion will relate to omnivorousness, using the dependent measure used by Graham (2009) but also using other measures in the NEA surveys that Graham did not analyze. This will yield information regarding parental/community expectations on music education experiences for youth of various cultural groups, and will help in preparing teachers in regards to those views.

Method

The population for this study ($n = 128$) was adults from two sections of a jazz history course at a large community college on the US West Coast, and made up of students working towards an undergraduate degree, vocational students, and community members. They completed a survey, using the same wording as the last Survey of Public Participation in the Arts (2008). Respondents showed which of 13 styles they preferred, using the question "Which of the following types of

music do you like to listen to?” These 13 styles replaced the 21 styles used in the 2002 version of the SPPA. Per Graham’s method (2009), the more styles a person marked, the more musically omnivorous the person was considered to be. Participants could add other styles they liked to the list; the number out of 13 plus any other styles added represented the total number of styles preferred. Participants were also asked to consider which of these 13 styles should be included in the school curriculum by marking “yes” or “no” for each, the total representing the number of styles they felt should be included at school.

As in the most recent SPPA (2008), respondents reported patronage of arts events over the previous year (prior to beginning their music course), including performance events (Jazz; Latin/Spanish/Salsa music; Classical music such as symphony/chamber/choral music; Opera; Musical stage play; Non-Musical stage play; Ballet; Dance other than ballet, e.g. modern, folk, tap, or Broadway; Outdoor festival featuring performing artists), other institutions featuring arts and entertainment (Art museum/gallery /Amusement park; Movies; Sports events – not youth sports; Arts/crafts fairs/Visual arts festivals; Historical park/ monument/ neighborhood), and youth events featuring the arts (using the same categories as performance events). As well, participants outlined their own arts education, including classes/lessons in instrumental or vocal music, music appreciation classes, and private lessons, at these age levels: under 12, 12-18, 18-24, and 24 plus.

Participants also listened to the 10 excerpts used by Brittin (in press) with pre-teen students. Using Brittin’s protocol, two versions of the stimuli counterbalanced language of presentation for four of the pop songs (Spanish vs. English and an Asian language vs. English). Responses were

compared to see possible parallels between reported listening and performance attendance behavior and reactions to sound stimuli, with particular attention to cultural effects.

Results

Of the 128 adult respondents indicating their age ($n = 108$), 70 were ages 18-20, 26 were 21-25, five were ages 25-30, and seven were ages 31-62. Males were 57% of the pool. Regarding race, 27% considered themselves of European descent, 20% African-American, 11% Asian, and 3% mixed (40% did not respond). For ethnicity, 60% were non-Hispanic and 38% Hispanic (2% no response), matching the county's diversity well (Hispanic residents = 39% as of 2011). All but 14 respondents indicated they had children, siblings under age 18, or close friends/family with children.

The first objective was to analyze the relationship between music education experiences and preferences for various styles. For music education experiences, a respondent indicating classes/lessons at the elementary level but no further would receive a "1", while someone who indicated elementary classes/lessons, private lessons, and secondary music appreciation class would receive a "3". Coded in this way, experience ran from 0 to a high of 7 (classes/lessons and music appreciation at elementary, secondary, and post-secondary levels, plus private lessons).

There were moderate, significant relationships (Pearson correlations used throughout) between music education experience and both the number of musical styles preferred ($r = .26, p = .004$) and the performance events attended over the previous year ($r = .26, p = .004$). However, the correlation between music education experience and youth performance events attended was not

significant ($r = .14, p = .07$), and there was no significant correlation between music education experience and the mean preference rating for the 10 excerpts heard ($r = .16, p = .09$). The responses to the 10 excerpts are shown in Table 1, and the percentage of respondents who reported listening to the 13 styles (with a “yes/no” response) are shown in Figure 1.

Regarding respondents’ reactions to the styles that should be part of the school music curriculum, there was a strong, significant relationship between the mean for preference for the 10 excerpts and the mean for the appropriateness of children hearing those 10 styles at school ($r = .69, p < .001$); correlations per tune are shown in Table 1. Similarly, there was a moderate, significant relationship between number of styles advised for the curriculum (from the list of 13 styles from the SPPA) and total number of styles listened to ($r = .43, p < .001$); Figure 1 illustrates the percentage of respondents who indicated they listened to a style and how many felt it should be in the school curriculum. There were no significant relationships between music education experience and number of styles advised for the school curriculum ($r = .04, p = .64$), or the mean for school appropriateness of the 10 excerpts ($r = .11, p = .27$.)

In looking at consistency of the preference indicators (13 musical styles and 10 listening excerpts), there was a moderate relationship between number of styles advised (from the 13 styles) and the appropriateness mean of the 10 excerpts ($r = .58, p < .001$). The correlation between number of styles listened to and the mean preferences for the 10 excerpts was moderate ($r = .47, p < .001$), and the relationship between number of styles listened to and patronage of arts events was significant, $r = .34, p < .001$.

Finally, this study examined responses to four pop songs, counterbalanced to test different language presentations. Hispanics' and non-Hispanics' responses to tunes in Spanish and English (by Shakira and Frankie J.) were compared with analysis of variance repeated measures, and effects of race were analyzed similarly for tunes in Korean or Mandarin and English (by Tae Yang and Wonder Girls). Adults' self-preference for Shakira and Frankie J. showed significant main effects for ethnicity, $F(1, 119) = 6.2, p = .02, \text{partial } \eta^2 = .86$, and the repeated measure of the two tunes, $F(1, 1, 119) = 20.6, p < .001, \text{partial } \eta^2 = .15$. However, there were no significant interactions between ethnicity, the tunes, and order. Therefore, Hispanic listeners (Shakira mean = 3.8, $sd = 1.8$; Frankie J. mean = 4.3, $sd = 1.9$) preferred the selections compared to non-Hispanic listeners (Shakira mean = 2.7, $sd = 1.7$; Frankie J. mean = 4.0, $sd = 1.8$) and language of presentation had no effect on preference.

The same type of analysis was used to investigate attitudes towards these selections' inclusion in the curriculum. There were no significant effects attributable to ethnicity, the two tunes, the order (languages) of presentation, or any interactions between these variables.

Similar analyses were done for the two tunes counterbalanced for Asian language vs. English presentation. Racial groups included, African-American, Asian, European, mixed and those who did not indicate their race. There was a significant difference in means for preference attributable to race, $F(4, 116) = 3.0, p = .02, \text{partial } \eta^2 = .09$, and to the repeated measure of the two tunes $F(1, 116) = 4.0, p = .045, \text{partial } \eta^2 = .03$, but there were no significant interactions involving race, tunes, or order. Post-hoc analysis showed Asian respondents (mean = 4.4) significantly preferred these two excerpts to all other groups (means = 2.8 to 3.3). Tae Yang's excerpt was preferred

(mean = 3.6, $sd = 2.0$) to Wonder Girls (mean = 3.2, $sd = 1.7$). Respondents indicated whether Tae Yang and Wonder Girl's excerpts should be played in school. There were no significant main effects for race, order, or the repeated measure of the two tunes.

Discussion

This study presents evidence that music education experience (based on amount of music classes/lessons, music appreciation classes, and private lessons) was related to personal omnivorism in a small but significant way, in regards to reported listening preference and to patronage of arts events. This supports Graham's work (2009), which concentrated on music appreciation classes and reported listening.

It appears there was a moderate link between personal omnivorism and an omnivoristic view towards the school music curriculum. However, respondents showed no relationship between music education experience and an omnivoristic view when asked which styles of music should be included in the school music curriculum for children. Thus it appears music education experience may be related to personal omnivorism but not necessarily to a similar attitude towards school music. In the future, closer scrutiny of the specific music education experiences (private lessons versus performance classes/lessons versus music appreciation classes) might yield more nuanced results in regards to attitudes about children's music education. Possibly certain experiences, such as performance-oriented classes or lessons, might contribute to a more narrow or elitist view of music, contrasting the omnivoristic attitude enhanced by music appreciation experiences (Graham, 2009). Further study should investigate this possibility.

This study was designed to tease out adults' preferences and attitudes of suitability for school with listening examples presented in different languages. Brittin (in press) found that culture affected children's responses to pop songs presented in different languages; however, the children's responses seemed more dependent on musical style than on language. Here, the adults' race/ethnicity reflected the diversity of the community at large. For the four targeted pop songs, preferences were swayed by race/ethnicity, but the language of presentation did not appear to have an effect. For example, Hispanic listeners preferred Shakira and Frankie J. compared to non-Hispanics, but whether excerpts were heard in Spanish or English had no effect. Similarly, respondents felt equally warm towards the four pop songs being presented in English or another language in the school curriculum. Understanding community members' attitudes towards language of presentation is important, as past research (Abril and Flower, 2007; Abril, 202) has shown there may be variations in how respondents from different sub-cultures respond to music presented in different languages.

This study examined attitudes towards including various styles of music in the school music curriculum; the vast majority of the respondents were young adults. Most had siblings or close friends and family with children, and a few had children of their own. Jazz and classical were the styles most often advised for the school curriculum. There was skepticism about including certain styles at school, especially rock styles, rap, and country, even when they were personal favorites. There seemed to be consistencies in opinions expressed by saying "yes" or "no" to a style's merit to the curriculum and opinions exhibited through the listening task. For example, respondents tended to advise Classical music for the curriculum even when it was not a style they listened to, and the excerpts representing Classical music (John Barnes Chance wind ensemble piece and the

orchestra excerpt, Espana Cani) both received higher ratings for inclusion in the school curriculum than for personal listening preference. The four pop songs previously discussed were rated more highly for personal preference than for school use.

This study builds on research into musical omnivorism and the affective responses of individuals from different cultures, with particular attention to values of those who will be parents and community members, served by our schools over the next two decades. The role of various music education experiences should continue to be explored in relation to omnivorism in general and attitudes towards the music curriculum in particular.

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Table 1. Means, Standard Deviations, and Correlations per Listening Excerpt: Preference and Suitability for School Curriculum

Excerpt	Preference	Suitability	Correlation
1 Oscar Peterson <i>Moten Swing</i>	4.6 (1.3)	4.9 (1.4)	.54
2 Shakira <i>Ojo Asi</i> (CD 1)/ <i>Eyes Like Yours</i> (CD 2)	3.2 (1.8)	2.7 (1.9)	.51
3 Playing for Change <i>Stand by Me</i>	4.1 (1.6)	3.9 (1.8)	.71
4 English Chamber Orchestra <i>Espana Cani</i>	3.4 (1.7)	4.0 (1.6)	.60
5 Allison Krauss & Union Station <i>Every Time You Say Goodbye</i>	3.5 (1.7)	3.4 (1.7)	.60
6 Chance <i>Variations on a Korean Folk Song</i> (II – <i>Vivace</i>)	3.3 (1.7)	3.9 (1.7)	.58
7 Frankie J. <i>Obsession</i> (CD 1)/ <i>No Es Amor</i> (CD 2)	4.1 (1.8)	2.9 (1.8)	.56
8 Pancho Sanchez <i>Together</i>	4.4 (1.5)	4.5 (1.5)	.74
9 Taeyang <i>Wedding Dress</i> (CD 1 Korean/ CD 2 English)	3.6 (2.0)	2.7 (1.8)	.63
10 Wonder Girls <i>2 Different Tears</i> (CD 1 English/ CD 2 Mandarin)	2.8 (1.7)	2.4 (1.7)	.65

Individual Preferences ("I Like") and Advice for Schools ("Yes")

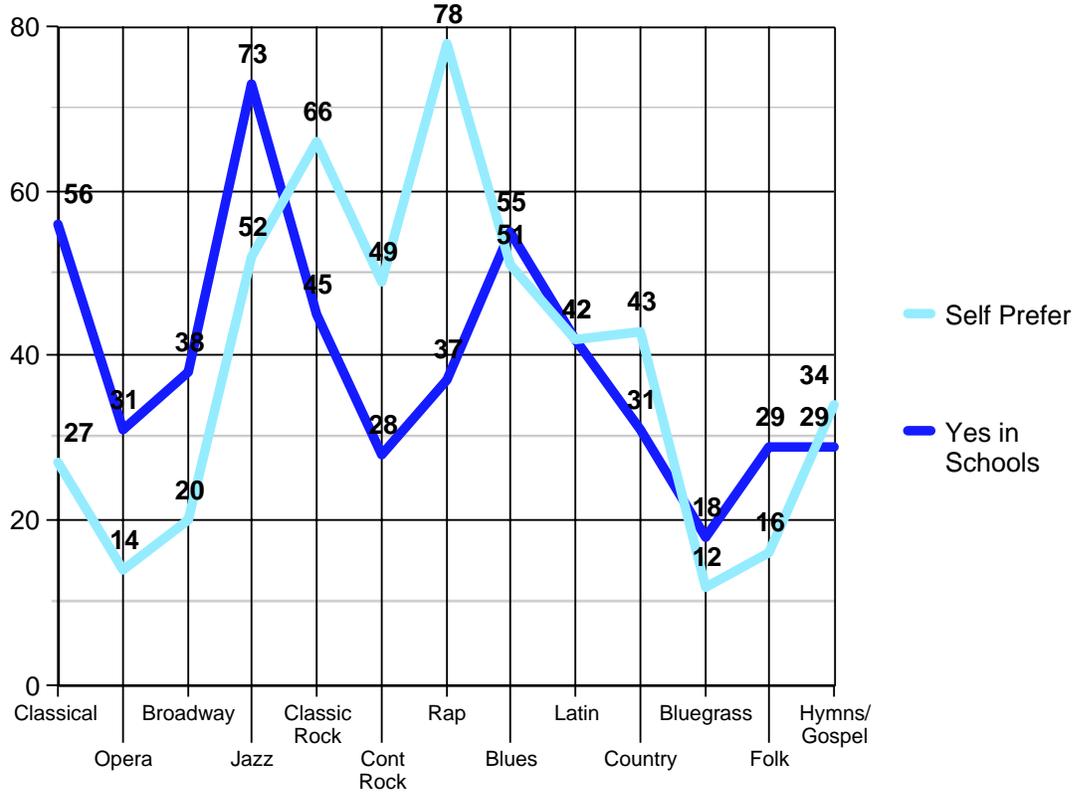


Figure
1.

Preference and Advice for 13 Styles

Musical Collaboration:
Interactions Between Formally and Informally Trained Musicians
Engaged in Popular Music Rehearsals

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Abstract

Five pop bands comprised of a mix of formally (“classical”) and informally (“vernacular”) trained musicians ($n = 22$, 18 men and 4 women aged 21-31 years) recorded three consecutive rehearsals, each at least one hour long. Verbal interactions from the first hour of each rehearsal were analyzed. Key verbal elements were identified *a priori*: *Business*, *Discussion Related to Rehearsal*, *Discussion Unrelated to Rehearsal*, *Rehearsal Methods*, and *Evaluation*. Later, specific areas of focus were identified as subcategories. Ideas for improvement came from suggestions, discussion, questions, directives, instructions, and demonstration. Interactions were overwhelmingly informal. The aural process was the primary means for musical development and listening the impetus for most interactions concerning music making. Groups collaboratively

developed skills through performance, demonstration, and listening. Groups engaged in free social and academic discourse and activities based upon organized, productive, and cooperative systems. Findings suggest that certain structures and practices fitting for informal music learning settings allow for musical growth and development among its participants.

Keywords: popular music, informal, verbal strategies.

Introduction

Informal music learning has been a recent focus in education and research (Jenkins, 2011). Interest may stem from growing globalization, an increasing desire by music educators to understand and reach school-aged students who do not participate in school music offerings, or the need to find methods for greater understanding of and appreciation for art music. Informal learning has been described as non-prescriptive, most often occurring outside of school without formal authority figures (Green, 2002; Hargreaves, 2011; Jaffurs, 2006). It is self- (musician) directed, highly cooperative, and intensely interactive when it occurs in a group (Folkestad, 2006; Green, 2002). Perhaps because of this and its highly social nature, informal music learners often approach music making with enthusiasm and tenacity.

Although school music experiences can be motivating for students, formal school music education reaches a relatively small proportion of secondary school aged children. Though well-established institutions characterizing our profession (school band, orchestra, and choir) thrive, the participation gap between school music and non-school music persists. NAMM (National Association of Music Merchants) (2011) reported that while Americans have a positive attitude

towards music and music education, band and orchestra instrument sales declined while sales of products more associated with informal music learning (percussion, guitars, keyboards) rose.

Technological advancements increasingly make music more accessible. In a world progressively becoming more interconnected, music enjoys incredible cross-cultural participation. People continue to experience music in venues often perceived as more relevant than school. There is a divide between formal (systematic, instructor-led music instruction focused on re-creating through notation) and informal music learning practices (democratic, social processes of collaborative music instruction focused on creating and re-creating through aural/oral processes) (Jaffurs, 2006). Understanding differences and similarities between learning modes may help educators better serve informal learners and provide more options for formal learners.

Certain formalized structures may be present in both types of learning circumstances. If educators view music learning through a formally (“classically”) trained lens, processes of informal learners that are distant from formal methods may incorrectly be considered inferior, unorganized, or haphazard. Consider the possibility that what music educators label “informal” might be regarded as “other”, learning in an *other* way (Folkestad, 2006). Given the multitude of informally trained musicians, music educators will benefit from understanding these processes to widen our scope of appropriate and valid methods.

Informal music learning relies heavily upon aural/oral processes. Transmission of information is often executed through listening, verbal interaction, and collaborative instruction that often includes discussion and modeling (Campbell, 1995; Jaffurs, 2006). Informal music learners may have greater opportunities to develop acute aural skills because notation is absent. Likewise,

formally or classically trained musicians who use methods reliant on the visual demanded by notation may have a less-focused experience in aural skills development.

Learning settings are micro-cultures defined by purpose, context, and structure. School music settings are guided by curricular goals (designed towards intentional teaching and learning) often attained with autocratic methods and may include active or more passive forms of learner participation. Informal music learning settings are often guided by emerging performance goals developed through democratic interactions and bolstered by social relationship in which the event is usually experiential and learning is nearly always incidental (Allsup, 2003; Jenkins, 2011). Those fortunate enough to have both types of experiences may have more learning tools at their disposal.

If formally and informally trained musicians collaborate, would processes meld or would balance shift as one dominates? Working with formally trained musicians placed in an informal learning setting, Rodriguez (2009) found that they defaulted to formal methods (including notational and practice abilities), and in so doing, shifted the balance of learning style. This study may help music educators to understand the practices of nearly 80% of the music-making population, many who have never entered formal music classrooms. With increased understanding of practices of the vernacular musician, educators may develop a broader view of valid practices in music study. This study concentrates on communication through verbal interactions between formally (“classical”) and informally (“vernacular”) trained musicians during contemporary band rehearsals.

Procedures

Five bands (Table 1) that perform popular music styles in social music settings in the Greater Philadelphia/North New Jersey/New York areas were identified. Bands are comprised of a mix of formally and informally trained musicians ($n = 22$). Band participants totaled 18 men and 4 women with an age range of 21—31. Bands rehearse regularly.

Table 1. Participant Bands

Band	Description
A	NJ-based cover band (classic rock, modern, pop, electronic, top 40, alternative), 4 members (guitar, bass, drums, vocals), 1 formally trained
B	PA-based indie band (alternative, pop, rock), 3 members (bass, guitar, drums, vocals), 1 formally trained
C	NJ-based cover band (pop, modern and classic rock, dance, hip hop), 4 members (guitar, bass, drums, vocals), 1 formally trained
D	NJ-based cover band (pop hits of the 70s, 80s, and 90s) 6 members (guitars, bass, drums, keyboards, vocals), 4 formally trained
E	PA-based indie band (pop, folk, funk), 5 members (guitar, bass, drums, keyboard, electric violin, vocals), 2 formally trained

Bands audio recorded three consecutive rehearsals, each at least 60 minutes. Bands identified themselves by name and role (i.e., “Hi. This is Jim. I play bass and do backup vocals.”) to allow accurate identification during transcription. Recorders ran continuously throughout rehearsals. Investigators and their assistants transcribed verbal interactions expressed during collaborative music rehearsals. Verbal data from the first hour of each rehearsal was targeted for analysis. Discourse was our primary focus, suggesting protocol analysis (Chi, 1997); key verbal elements and operators characterizing five overarching categories of verbal discourse were identified *a priori*. Repeated listening to audio recordings (Seddon & Biasutti, 2009) reinforced identification

and organization of five categories. Recurrent communication topics were: *Business, Discussion Related to Rehearsal, Discussion Unrelated to Rehearsal, Rehearsal Methods, and Evaluation.*

We catalogued interaction type and frequency. Subsequent verbalization analyses were compared to the predetermined taxonomy; specific areas of focus were identified as subcategories (Table 2). Following subcategory identification, rehearsal transcriptions were reviewed again to classify utterances. Where appropriate, verbal utterances were classified as specific or general.

Table 2. *Verbal Categories and Subcategories*

Business
Equipment (<i>needs, placement, specs, check</i>)
Booking performances/contract
Gig (<i>dress, logistics, set length, fans, behavior/responsibility</i>)
Money
Set list
Cover music
Recording
Stage style/band style/genre
Discussion – Unrelated to Practice
Social
Other bands/styles
Motivation
Discussion – Related to Practice
Bands they are covering
Elements (<i>form, key, harmony, melody, style, rhythm, tempo, arrangement, vocals, lyrics, texture</i>)
Music learning (<i>individual, tune development</i>)
Music difficulty
Performance (<i>performance, preparation, quality</i>)
Rehearsal plan
Rehearsal time/effort
Equipment
Technology
Rehearsal
Comments (<i>arrangement, listening, lyrics, rehearsal plan, tempo</i>)
Demonstration (<i>instrumental and vocal models</i>)
Description (<i>cover music, dynamics, expression, form, harmony, phrasing, reference to another band, rhythm, style, vocals, texture, tempo, arrangement – general and specific</i>)

Directive (*expression, form, arrangement, meter, perform, style – general and specific*)
Instruction (*harmony, key, dynamics, form, melody, phrasing, rhythm, style, texture, vocals, arrangement, ensemble, tempo, execution*)
Question (*arrangement, blend, dynamics, expression, form, lyrics, melody, execution, rehearsal plan, rhythm, style, tempo, texture, harmony, key, vocals, equipment - general and specific*)
Response (*arrangement, blend, dynamics, expression, form, lyrics, melody, execution, rehearsal plan, rhythm, style, tempo, texture, harmony, key, vocals, equipment - general and specific*)
Suggestion (*arrangement, dynamics, ensemble, expression, form, phrasing, execution, recording, rhythm, style, texture, vocals, harmony, key, tempo, listening - general and specific*)

Evaluation

Feedback (*positive and negative - specific and general*)

Topical (*self, sound, style, texture, equipment, expression, tempo, compare to other bands, melody, harmony, other artists, performance error, performance future, performance general, personal ability, previous performance – specific and general*)

Response (*agreement, disagreement, question, self*)

Results

Variations in interaction totals (Band A—1979, Band B—1142, Band C—915, Band D—742, Band E—934 ($M = 1142.4$, $SD = 488.71$)) might be attributed to primary rehearsal focus and group membership. In rehearsals centering on imminent performance, more time was spent performing than verbalizing. Rehearsals centered on initial stages of music development featured more verbalization. In groups with more members, more interaction would be expected. Therefore, verbal data are referred to by percentage of total.

Distribution of utterance percentages within *Business, Discussion Related to Rehearsal, Discussion Unrelated to Rehearsal, Rehearsal Methods, and Evaluation* (Table 3) shows cover bands A, C, and D talked more about band business (gigs, equipment, money) compared to indie bands B and E who talked more about rehearsal issues. All groups discussed things unrelated to rehearsal task, a defining factor distinguishing vernacular music rehearsals from formal. Discussions not directly related to rehearsal were infused with positive social interactions that included joking, encouragement, and laughter.

Table 3. *Distribution of Verbal Utterances in Principal Categories*

Category	Band				
	A	B	C	D	E
Business	28.7	6.57	32.02	12.67	1.18
Evaluation	6.53	16.29	21.64	21.16	19.27
Discussion - Related to Rehearsal	18.04	3.33	13.88	8.63	10.6
Discussion - Unrelated to Rehearsal	27.19	15.32	10.93	19.27	4.28
Rehearsal Methods	19.54	58.49	21.55	38.28	64.77

Discussion – Related to Rehearsal referred to future performance, preparation, or works in progress while *Rehearsal Methods* referred to teaching and learning issues related to something specific in the rehearsal. Band E engaged in discussions the least, perhaps as a function of rehearsal objectives (initial development of original compositions). Interactions related to rehearsal activities were greatest in the indie groups who dissected performance and offered improvement techniques. Other groups were more apt to talk in broader terms about music performance prior to performing. Processes in Bands B and E consisted of cyclic start-stop behavior: rehearsal methods shared, music segment performed, review, further discussion, repeat performance. The other groups more often engaged in discussion prior to performing a whole work, sometimes followed by general evaluative remarks.

While some suggest that evaluation is generally absent from informal music practices (Green, 2002; Jaffurs, 2004), it is an important factor and a sign of musical maturation (Campbell, 1995). All engaged in evaluation directly related to rehearsal performance; evaluation was often general.

All engaged in evaluation directly related to rehearsal performance; evaluation was often general. Statements such as “Cool!”, “It seemed weak”, “I don’t like that”, or “I love it” were common. *Unspecified* or general remarks comprised the largest proportion of evaluations (Figure 1).

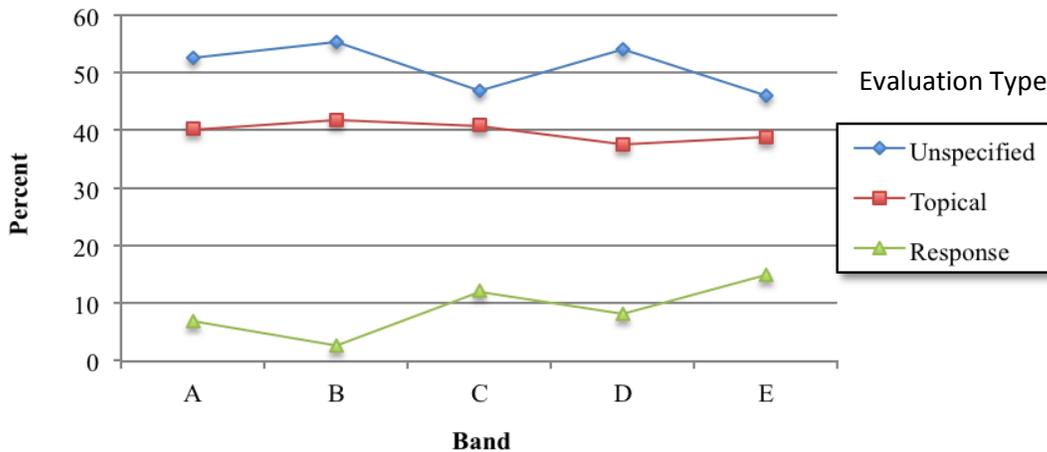


Figure 1. Distribution of verbal utterances within evaluation subcategories among bands.

Though most were *Unspecified*, they were often followed with specific, *Topical* remarks (e.g., “I felt like it got a little faster”, “I played the wrong chord”, “You missed the hits in the middle”).

Although fewer than general evaluative statements, the proportion was notable; comments assisted performance development. *Responses* to evaluations were rare; rehearsals would generally continue with a *Rehearsal Method* rather than a direct response to evaluation.

Proportions of evaluation statement types were consistent among participating bands.

All bands evaluated future and past performances (e.g., “we’re gonna kill it”, “it’s gonna be kick-ass”, “I feel like this song is gonna bomb”, and “it will be huge”) and recent gigs (e.g., “I forgot a lot of things on that”, “that show was a disaster”, “it kinda flopped”, and “my guitar was too loud”). Positive remarks were more frequent than negative (Figure 2), perhaps indicating the social and motivating nature of these experiences.

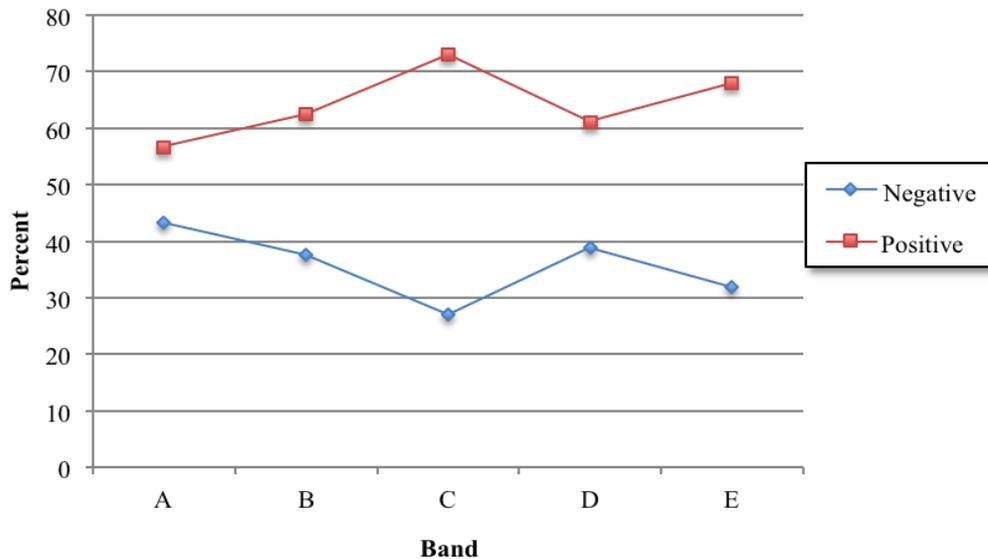


Figure 2. Distribution of positive and negative evaluation utterances among bands

Verbalization in *Rehearsal Methods* and *Discussion Related to Rehearsal* (Table 4) varied widely ($M = 55.92$; $SD = 15.03$): Band A—46.73%, Band B—73.81%, Band C—32.48%, Band D—57.55%, Band E—69.05%. Use of specific formal music terminology was limited: Band A—4.43%, Band B—7.00%, Band C—8.75%, Band D—3.51%, Band E—14.13% ($M = 7.58$, $SD = 3.77$). Band members most often used vernacular in discussing, teaching, and learning.

Table 4. *Examples of Descriptive Vernacular Terminology*

Musical Element	Descriptive Terminology
Dynamics	Louder, softer, big, full blast, rhythm volume, intensity, contrast, musical oblivion, going away
Texture	Crunch, chaotic, short and cool, stark, layer, full
Phrasing, Form	Ringing, decay, fade, drop, passes, roadmap
Expression, Style	Melancholy, vulnerable, driving, more definite than dreaming, more like a Coldplay feel, empty, sedate, chunk, dirty pop, go crazy, heavy, peaceful, falling asleep, wild, chugging
Rhythm and Tempo	Self-driving, stagger the beat, reasonable, disco beat, less “criticize-y”, push it, groove

Percentages of verbal utterances in *Rehearsal Methods* subcategories were determined based on the subcategory frequency compared to large category totals (Figure 3). *Modeling* was frequently used by all groups. Band C relied more heavily on *Modeling* and *Directives* compared to the others, although they engaged in much *Instruction* and *Questions*. If *Questions* had a response, it was often a model. Their verbal interaction, overall, was more heavily weighted in *Business*, *Evaluation*, and *Discussion* compared to verbalization in *Rehearsals Methods*. Suggestions for improvement or performance practice were nearly non-existent except for Band E whose suggestions constituted 18.05% of *Rehearsal Methods*. They used *Description* nearly as often (19.7%) along with *Questions* (19.21%) and *Responses* (21.19%). Utterances in these subcategories totaled 78.15% of *Rehearsal Method*. This group was the most democratic and cooperative given the amount of interaction in these subcategories and fewer instances of *Directives* and *Instruction* from leader-figures.

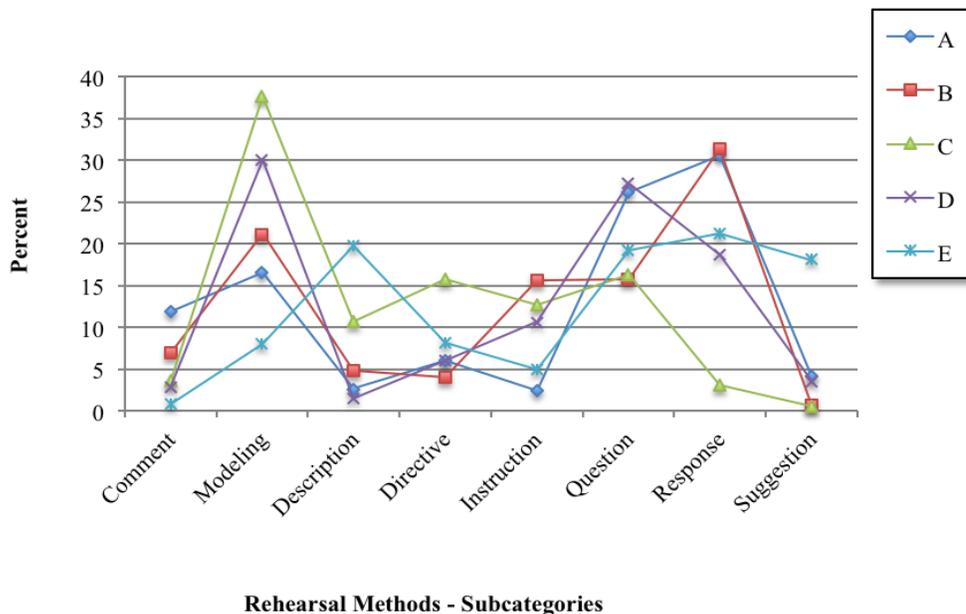


Figure 3. Distribution of verbal utterances within rehearsal method subcategories among bands

Modeling, Questions, and Responses were key methods by which most of these groups transmitted ideas and developed performance skills (Figure 3), suggesting cooperative practices characterized by group members engaging in active, democratic, and shared participation. While we did not specifically examine leadership styles, verbal data indicated which member served as leader-figure who was more apt to give directives, keep momentum, and shape rehearsals. Still, all band members contributed enormously to each rehearsal.

Discussion

It might be surmised that informal and formal music learners are too disparate to easily unite towards common musical goals or those schooled in autocratic, prescriptive, and highly structured school rehearsal contexts would struggle in democratic, interactive, and seemingly-unstructured informal learning rehearsal contexts. Our data show such assumptions would be incorrect. What of balance between the use of formal and informal terminology, teaching, and explanation considering each group included formal and informal learners? What made interactions successful and communication effective? While formal verbal data typifying band, orchestra, and choir rehearsals were evident, interactions were overwhelmingly informal. Musicians used broad and descriptive vernacular more often than the more formal, classical music language. Formal specific methods, though rare, fortified rehearsals.

Perhaps informal language is more readily grasped and inclusive. Contrasting Rodriguez (2009), it is possible formal learners may opt for informal language to expedite learning. They surely have had experiences in which musical goals were described in general, vernacular terms. Alternately, the informally trained musicians *may not* have had experiences in which musical

goals were described using specific, formal music terminology. If vernacular is common ground, it makes sense to speak that language. The aural process was the primary means for musical development; listening, the impetus for most interactions. Musicians collaborated to develop skills through performance, demonstration, listening, and responses. Whereas school music settings are heavily reliant upon students becoming notation-savvy (Waldron & Veblen, 2009), each of these rehearsals focused heavily on the ear. Musicians listened to modeling and performance for subsequent analysis and modification. Listening was also included in discussion as a statement of intent for work done outside of rehearsal. This type of listening, documented by Campbell (1995), was particular to cover band members who needed to acquire information about covers intended for performance.

Each group engaged in social and academic discourse and activities based upon organized, productive, collaborative, and cooperative systems. Mans (2009) suggests that behavioral conventions are evident in any music making event; educators base instruction on structures effective in formal settings. These data suggest that structures fitting for informal music learning allow for musical growth and development among learners (Sawyer, 2008). Music educators often lead from the front of a classroom or a podium that raises us to a place of importance and control. Interactions between formal and informal music learners showed no evidence of “podium behavior”. While certain musicians took leader-figure roles, none held autonomous control; all group members enjoyed equal status.

It is appropriate to consider the function of the genre and its bearing on interactions between members. These groups are small and without designated leaders, a departure from the large

group with a designated leader typical of school band, orchestra, and choir settings. It would be interesting to investigate if interaction processes in small but formal groups (e.g., chamber group, jazz combo) would have more in common with groups of this study. How much of this democratic process is due to group size and shared responsibilities; how much is due to the nature of the music?

Although this study addressed adult musicians, lessons are applicable to school music education. Musicians of disparate backgrounds interacted effectively towards music performance goals. They were focused, motivated, willing participants, and enjoyed these peer-driven, interactive music-making sessions. They are supportive and work cooperatively. Perhaps these data can help music educators to be more open to what constitutes valid music teaching and learning. If these processes are introduced into school settings, teachers must be willing to take on a more peripheral, guiding role and trust that students will be able to collaborate and communicate musical ideas to each other effectively.

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The Orquestra Geração - Unveiling its Complexity

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Abstract

In this paper we present some preliminary results of a wide ranging research project¹ addressing *Orquestra Geração* (OG), a *Sistema* like project, created in Portugal in 2007. *Orquestra Geração* intends to promote social inclusion and social mobility of children and teenagers in educational and social vulnerability, through collective musical practice. The collected data include semi-

¹ Project funded by the Foundation for Science and Technology (FCT) from the Portuguese Ministry of Education - programme PTDC/CPE-CED/120596/2010

structured interviews with two OG mentors, one of which is currently the OG director, the OG sub-director, the ex-national coordinators and the current national coordinator, as well as observations of music classes, orchestra rehearsals and summer intensive internships. The creation of OG is briefly described, the organization's identity is grasped, and the music teachers' profile is explored, in a narrative highlighted by the actors' words. Finally OG is interpreted through the lenses of two very different, and yet somehow complementary, conceptual frameworks: Mintzberg's organizational typology, and Cultural-historical Activity Theory, as expanded and applied by Engeström. Conclusions point out to the need of pursuing a more in-depth analysis of the data, in order to meet the full complexity of this project.

Keywords: *El Sistema*, *Orquestra Geração*, social inclusion, music education, organizational analysis.

Introduction

Orquestra Geração (OG) is a Portuguese *Sistema* like project created in 2007. It has nowadays fifteen nuclei (twelve of which are located in Lisbon's metropolitan area) and includes almost eight hundred children and teenagers from social and educational vulnerable communities in a music education project with social inclusive purposes.

In this paper we present preliminary results of a wide ranging research project that aims at the construction of systematic and critical knowledge about OG. The collected data was used here to clarify some characteristics of OG: its identity, the music teachers' profile, its organizational structure and configuration. This data include semi-structured interviews with OG mentors,

members of the direction and coordinators as well as observations of music classes, orchestra rehearsals and summer intensive internships.

Taking into account the subjective and complex nature of an organization like OG, and the necessity to unveil the meanings behind the actions and discourses of its actors, we have adopted a qualitative methodology. Content analysis was used in the sense of a weighing-machine, balancing two weights: the rigor of objectivity and the fecundity of subjectivity (Bardin, 2003; Denzin & Lincoln, 2008). Finally, OG was interpreted through the lenses of two complementary conceptual frameworks. To better understand the different parts, roles and global configuration of the organization, Mintzberg's organizational typology (1979; 1989) was used. Activity Theory, as expanded and applied by Engeström (2001; Welch, 2007; Mota & Abreu, 2014), contributed to highlight ambiguities and contradictions, while critical points were inferred regarding the expansive transformation's potential of the project.

Discovering *Orquestra Geração*

OG was created in 2007, as a joint initiative of diverse public and private institutional partners. Its target beneficiaries were since the beginning the younger layers of the population, attending primary and secondary schools in underprivileged socio-economic surroundings and so living in familiar, educative and social vulnerability. Absenteeism, school dropouts, conflict and complex multicultural contexts are strong realities in these schools. According to its direction, through collective musical practice, OG intends to provide to these populations the development of social, personal and musical skills, and the improvement of their scholar and social integrations, thus fostering alternative pathways that may contribute for a desired social mobility.

This close connection between musical and social experiences is referred by the sociologist Tia DeNora, who defends that music is not about or caused by social, but part of a wider social creation – a “constitutive ingredient of social life” (2003, p. 151). The musical meaning is projected far beyond its mere cognitive and emotional function, it “remains equally important as a means of communication and as a form of sociability” (Frith, 2003, p. 100) and, consequently, as “a powerful medium of social order” (DeNora, 2000, p. 163).

The curriculum design adopted by the project includes: instrumental classes, section rehearsals, orchestra rehearsals and music theory/ear training/choir classes, in a global timetable of seven hours *per week*. In this curriculum structure the collective musical practice – the orchestra – constitutes the central focus of learning and, therefore, a promoter of all the artistic activity. In each one of the schools where a nucleus of OG is implemented, differentiated technical and artistic developments lead to the establishment of different orchestra levels.

Nowadays OG involves approximately eight hundred students and about ninety teachers spread over fifteen nuclei. The attendance of OG is totally free, and the project is supported by public and private funding.

The (re)construction of an identity

To the construction of its identity, OG is guided by the principles of the *Venezuelan Youth and Children Orchestra National System (El Sistema)*. It has also established contacts with similar European projects, through the association *Sistema Europe*.

In order to operationalize the transference of pedagogical, social and artistic know-how, OG engages Venezuelan musicians trained in the *El Sistema*. They have been cooperating with OG from the start in teacher training, coordination and supervision of teaching and orchestral activity, and adaptation of the pedagogical materials.

It should be underlined that *El Sistema* is present – not only as a pedagogical *praxis*², but also as a model to attain – in the speeches of the actors, mainly at the direction and coordination's levels, as evidenced in these words of the national coordinator:

We have had meetings where the video about Venezuela is shown [to the teachers] so they see the reality and start to understand how it works. (...)

We have a handbook where everything is very well prepared (...) organized by levels; (...) the music pieces are chosen so that one can start a group music class from scratch.

The strongest evidences of the influence of *El Sistema* in the construction of OG are: the use of *El Sistema*'s adopted repertoire; the selection of musicians trained in *El Sistema* as pedagogical coordinators; the choice of Venezuelan musicians and directors to train the Portuguese teachers and sometimes to guide the summer internships; and the organization of a trip to Venezuela so

² By pedagogical *praxis* we comprehend the set of practices through which the project is implemented in the field from the orchestra centered' curriculum to the teaching practices in the classroom, and not a specific *El Sistema*'s methodology.

that Portuguese coordinators can personally contact with *El Sistema*. On the other hand, there is a latent conflict between *El Sistema*'s influence and the real conditions of the Portuguese project: limited funding; a more reduced timetable; dispersion and little interaction between nuclei; minor number of students *per* nucleus; music teachers with different levels of commitment – and with different learning and teaching experiences – which brings about a divergence of pedagogical *praxis* (see Fig. 1).

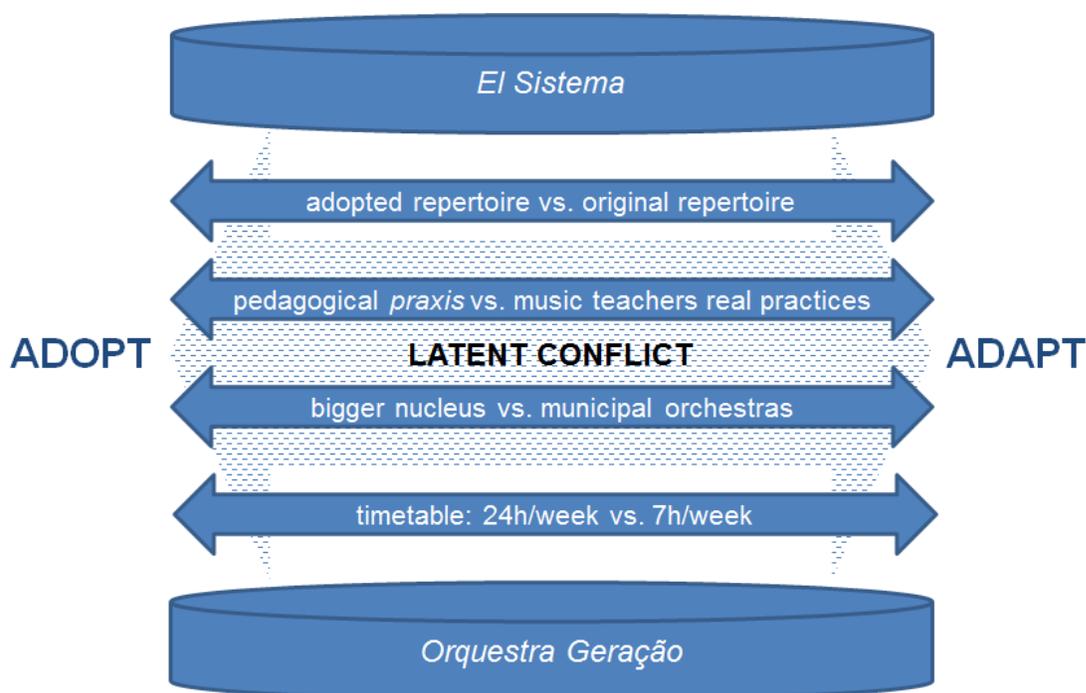


Figure 1. Latent conflict between *El Sistema*'s influence and the real conditions of the Portuguese project

For those who see *El Sistema* as a reality to attain, the project OG lacks intensity in pedagogical work, and dimension of the orchestral nuclei. Both of these elements – intensity and dimension –

are seen as essential to generate and nourish the motivation of the children. A good example of this point of view is the opinion of one of the national coordinators:

Obviously many things that I said were done there [in Venezuela] couldn't be done here [in Portugal] (...) It was a very big struggle to make it more intense here. (...) Our nucleus [in *El Sistema*] is made in such a way that all students gather there, and it becomes a very big nucleus. Here the nuclei are in the schools and sometimes have only twenty-five to thirty students (...). *El Sistema* shows that the number – the orchestral dimension – is where the ambition starts.

The approach followed in Portugal seems to look for some adaptation to the Portuguese reality and to the contexts of the different nuclei, as one can assess through the words of the OG's Director: "we have flexibility... to analyse the situation of the school and the necessities of the kids. Instead of starting with the traditional curriculum layout, we can adapt it to the situation". In this sense, the direction of the project has tried to introduce some changes in the pedagogical *praxis*: the introduction of some musical pieces of Portuguese composers; the inclusion of drama classes in the curriculum, during the academic year of 2012–2013; the creation of a jazz band in one of the oldest nuclei; the formation of choirs in some nuclei; the organization of teacher's trainings in improvisation, creativity, direction and group classes; the creation of municipal orchestras that bring together children from different nucleus to address the lack of intensity and dimension.

Between adoption and adaptation of *El Sistema*'s pedagogical *praxis*, some guidelines are common to all nuclei, enabling the cohesion of the project OG: the use of the same orchestral repertoire and the promotion of annual intensive internships where teachers and students from different nuclei work together to prepare the final concerts. On this matter one of the national coordinators says:

We work together, keep the same program and that's important, (...) to feel that there is this network, this same methodology in all schools. (...) When we join for the internships we must have a result, we must have a working routine. That is the most important: to create a model, a common strategy.

The pursuit of a pedagogical profile

To develop a teamwork's dynamic the OG calls upon young teachers, recently graduated and with little experience, a joint option of the direction and the pedagogical coordination: "we have the advantage of hiring very young people, that have just finished their graduations and are open minded" (OG's Director). Despite this effort, not all the hired teachers have a suitable profile for the social and methodological characteristics of the project. In this regard the sub-director states that these young teachers "aren't minimally prepared to teach group classes but, in OG, they have to assume the role of a conductor. Many things are being learned through experience." Further, the direction provides several training opportunities for the teachers. According to the direction, the music teachers' team is reaching some stabilization which they actively promote hiring teachers with experience in the project.

One of the National Coordinators outlines the ideal profile of an OG's music teacher, greatly inspired by *El Sistema*. This ideal teacher, in his opinion, must have multiple skills:

We must know how to conduct a rehearsal, how to lead a team, how to speak, how to make decisions (...). The ideal is that the teacher is an orchestra conductor, a section teacher, a violin teacher, and a music theory/ear training teacher. If you have that in a teacher you will have a fantastic teacher.

Orquestra Geração: In search of its structural organization

As we analyse the organization's structure (see Fig. 2 and Fig. 3) we can identify its six basic parts, as defined by Mintzberg (1979; 1989), and try to understand the way they achieve coordination among them. The operating core of an organization, "encompasses those members – the operators – who perform the basic work related directly to the production of products and services" (Mintzberg, 1979, p. 24). In this part of OG's structure we identify the music teachers that operate in the nuclei dealing directly with students, families and community. The strategic apex of the organization "is charged with ensuring that the organization serves its mission in an effective way" (*id.*, p. 25). Here we can find the person with overall responsibility for OG, the director. Connecting the strategic apex with the operating core there is a "chain of middle-line managers with formal authority" (*id.*, p. 26). In this middle-line we have the sub-director, which reports directly to the director; the nuclei coordinators that report to the sub-director and supervise the music teachers; and the orchestra supervisors that report to the sub-director and cooperate with the nuclei coordinators to supervise the work of each orchestra. Together they promote the operationalization of the strategic apex guidelines. A forth basic part is the

technostructure, constituted by analysts “removed from the operating work flow” that assist the organization “by affecting the work of others” through the implementation of standardization (*id.*, pp. 29–30). In OG this analysts are the national coordinators, whose main functions are the pedagogical and artistic coordination and the supervision of the music teaching activities. They also take responsibility in teacher training, and have an advisory role, reporting to the direction. The support staff comprises a “number of units, all specialized, that exist to provide support to the organization outside the operating workflow” (*id.*, p. 31). In the case of OG these units are: administrative support, juridical support, media consulting and production team. Finally, we have ideology, which “encompasses the traditions and beliefs of an organization that distinguish it from other organizations and infuse a certain life into the skeleton of its structure” (Mintzberg, 1989, p. 98). The strong influence of *El Sistema*’s identity and the systematic presence of tangible Venezuelan elements (methodology, repertoire, orchestra directors, pedagogical advisors, etc...) constitute the most relevant feature of the organizational culture in OG.

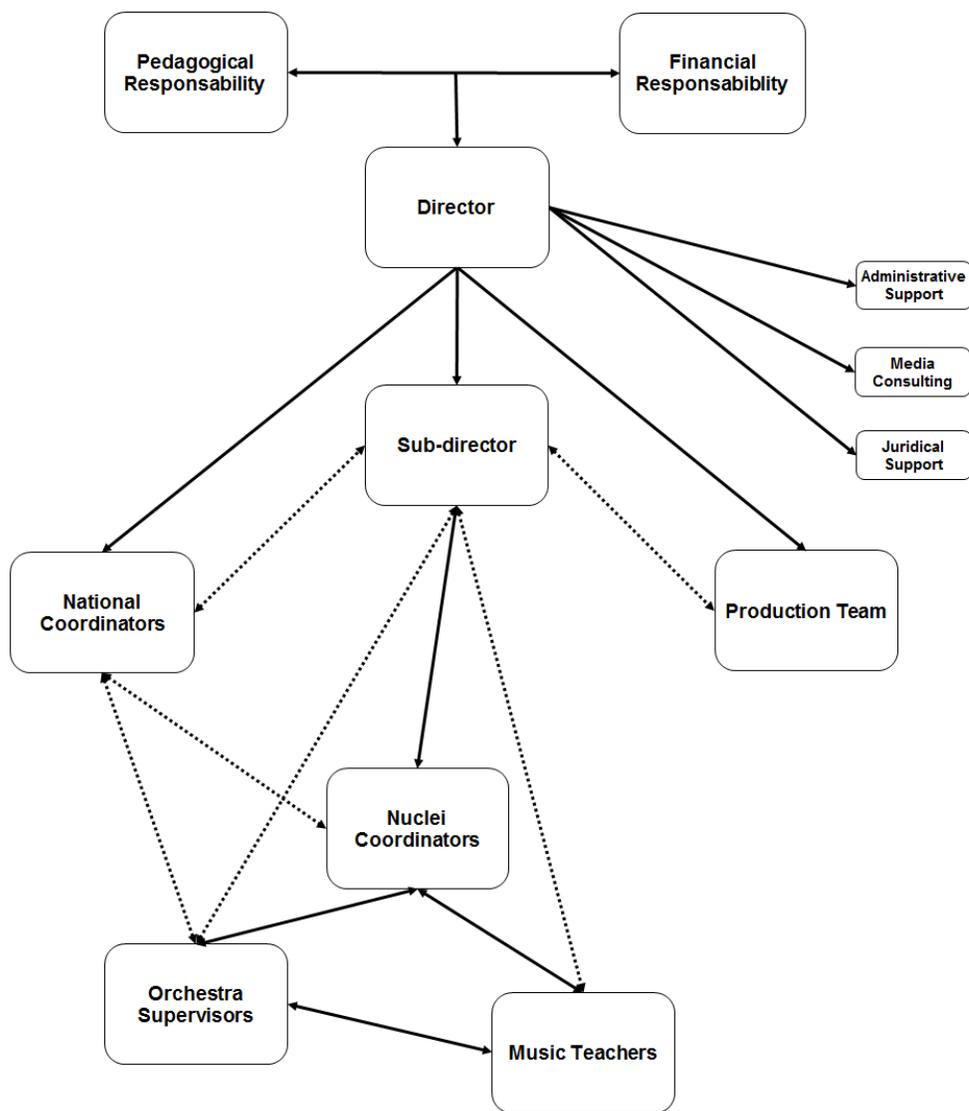


Figure 2. Organizational chart of *Orquestra Geração*

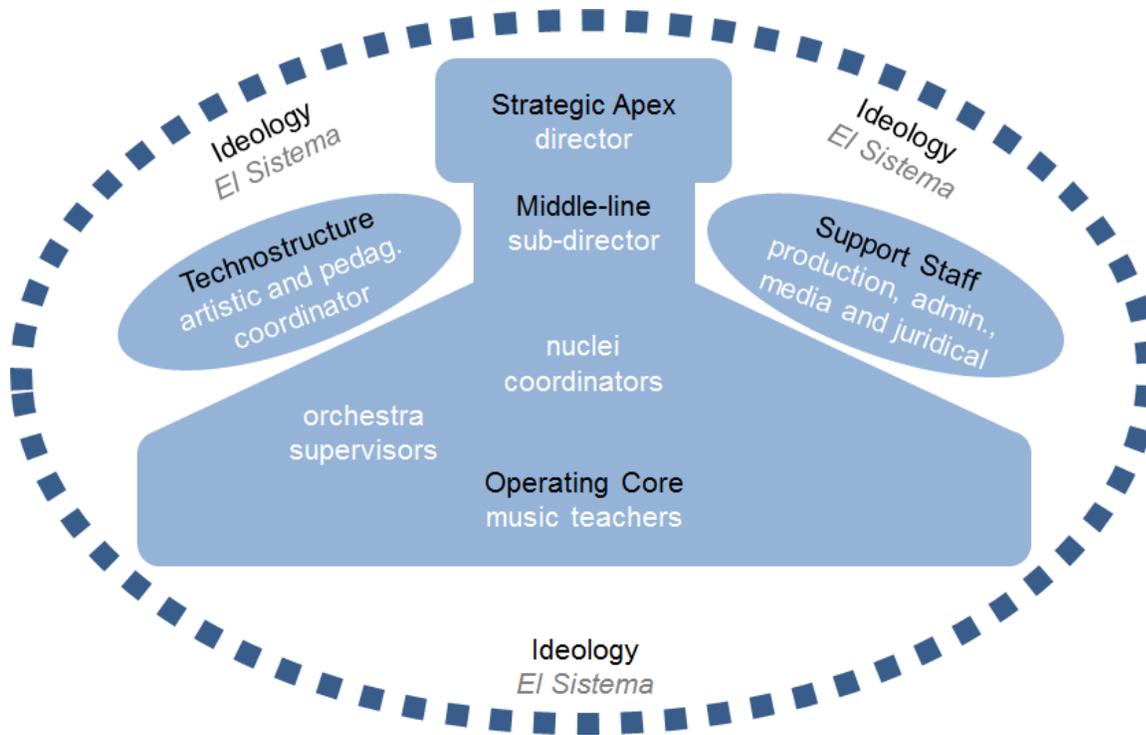


Figure 3. Organization Configuration of *Orquestra Geração* (adapted from Mintzberg, 1989, p. 99)

The implementation of OG in various nuclei seems to empower the middle-line managers (sub-director and nuclei coordinators) as they perform closer to each nucleus context, which strongly influences the project’s local development. Each nucleus acquires a relative autonomy with the nuclei coordinators concentrating power in their own units, and producing a limited vertical decentralization.³

³ Vertical decentralization refers to the “delegation of formal power down the hierarchy to line managers” (Mintzberg, 1989, p. 105). In divisionalized organizations each division/unit may acquire some operating autonomy. The managers of each unit “are delegated the power to control most of the decisions concerning their line units” (*ibid.*). In this kind of structure the decision-making power remains still concentrated in a small group of people, therefore “divisionalization constitutes a rather limited form of vertical decentralization” (Mintzberg, 1979, p. 192).

On the other hand the artistic and pedagogical coordinator (tecnstructure) has been gradually assuming increasing responsibilities, being nowadays responsible for advising the direction, supervising the music teacher's work and coordinating the internships and teacher's training. He has recently promoted a restructuration process with the reduction of the number of orchestral levels and the creation of a new position: the orchestra supervisors – music teachers with direction and supervision responsibilities. The organization tends to control the performance of each nucleus through the standardization of outputs (the same repertoire for each orchestra level) and, recently, through the intent to standardize work processes suggested by the increasing influence of the tecnstructure – in the person of the artistic and pedagogical coordinator – reinforced by the creation of the orchestra supervisors (one for each orchestra).

We suggest that OG, given the identification of middle-line and tecnstructure as key parts of the organization, the existence of a limited vertical and horizontal decentralization of the power control, and the standardization of outputs and work as favoured coordinating mechanisms, may be considered as oscillating between two configurations: Diversified and Machine organization (Mintzberg, 1989).

Orquestra Geração as an activity system

Activity theory evolved through three generations of research. It has been initiated by Lev Vygotsky (1978), and further expanded by Engeström (2001). What follows is an analysis of OG through the lenses of the contemporary applications of cultural-historical activity theory, crossing Engeström's five principles in order to find answers to the four essential questions to any theory of learning:

(1) Who are the subjects of learning, how are they defined and located?; (2) Why do they learn, what makes them make the effort?; (3) What do they learn, what are the contents and outcomes of learning?; and (4) How do they learn, what are the key actions or processes of learning? (Engeström, 2001, p. 133)

First Principle – Prime unity of analysis

The activity system taken as a “prime unit of analysis” (Engeström, 2001, p. 136) is OG, where music is the artefact mediating the following outcomes: social inclusion and mobility, personal and musical development of children and teenagers (the subject) in educational and social vulnerability, through collective musical practice (the object). This collective musical practice is developed in a large community (teachers, coordinators, families, etc.), through explicit and implicit rules (musical curriculum, internships, performances), and a specific division of labour (different roles within the orchestra) – see Fig. 4.

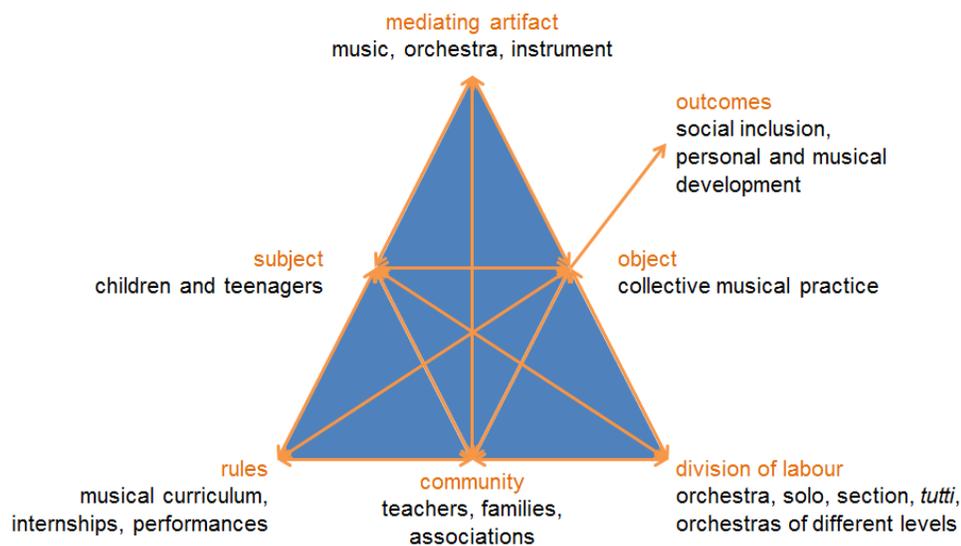


Figure 4. Activity System that frames social inclusion, personal and musical development of children and teenagers in *Orquestra Geração* (adapted from Engeström, 2001 & Welch, 2007)

We can identify different levels of artefacts (Wartofsky, 1979). At a primary level we have the musical instrument, whose presence in children's lives and houses promotes new interactions with their peers and family members. The orchestra is a secondary artefact that, with its norms, rituals and hierarchy, slowly modulates children's behaviours. Musical pieces and music itself are tertiary artefacts.

Second Principle – Multi-voicedness

OG is a multi-voiced activity system (with its directors, national coordinators, nuclei coordinators, teachers, students, families, etc.) and a multi-layered community where the division of labour creates different positions and roles for the participants. Moreover the diversity of the teachers' profiles, as referred before, emphasizes the multi-voicedness of the organization.

Third Principle – Historicity

As OG is a recent project, it doesn't have its own historicity, but it borrows from *El Sistema*'s 38 years of history, with its methodology and its tangible achievements, for "*El Sistema* and its offspring would not have sustained the world's scrutiny without its convincing artistic achievements" (Majno, 2012, p. 58).

Fourth Principle – Contradictions

In OG we can identify various contradictions, which can be possible "sources of change and development" (Engeström, 2001, p. 137): the diversity of the teachers' pedagogical practices referred before in the second principle; the latent conflict between *El Sistema*'s influence and

adaptation to the real conditions of the Portuguese project; the ambivalence between the two main goals: social inclusion, and musical excellence; and, finally, the multicultural diversity and social adversity of the communities, where the nuclei are rooted, requiring sensitive approaches.

Fifth Principle – Expansive transformation

The expansive transformation potential of OG is in the appropriation of the identified contradictions to re-conceptualize “the object and the motive of the activity” (Engeström, 2001, p. 137). Some attempts are already present. Regarding the diversity of teacher’s profiles the coordination’s approach has been to promote workshops and other training opportunities. Other possible approaches, present in the words of the actors but not fully implemented, include improving communication between teachers and direction/coordination, fostering pedagogical innovation and individual teacher’s initiative. Concerning *El Sistema*’s influence an adaptation to the national and local contexts seems essential to promote effective multicultural diversity and integration.

Conclusion

In this paper we have identified the main characteristics and the functional mechanisms of OG as a social inclusive project where music education, through collective musical practice, has a relevant role. The following issues still remain to be addressed in more depth: i) the latent conflict between *El Sistema*’s influence and adaptation to the real conditions of the Portuguese project; ii) the commitment with the construction of a specific socio-professional music teacher’s profile; iii) the organizational characteristics that, right now, seem to be oscillating between two configurations: Diversified and Machine organization.

There are still many facets of OG that remain ambiguous or unclear and need clarification in the context of this research. This preliminary conclusions point out to the need of a more systematic and focused approach in the process of further data collection, in order to construct a more grounded interpretation of such a complex reality.

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El Sistema and Sistema-Inspired Programmes: Principles and Practices

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Abstract

This paper summarizes our global review of literature concerned with El Sistema, Venezuela's National System of Youth and Children's Orchestras and Choirs, and Sistema-inspired

programmes around the world. Our aim in this summary is to identify the core principles that underpin what might be called the ‘Sistema ideology’, and to map the existing evidence against those principles, highlighting areas for future research and issues that have been the focus of critical debate. Research and evaluations concerned with programmes that self-identified as ‘El Sistema’ or ‘Sistema-inspired’ were included in the literature review. In addition we included papers that theorized and critiqued El Sistema. The review included documents that were written in English, Spanish, Portuguese, Italian, French and a limited number in German. In total, we included 85 research and evaluation papers, representing 44 Sistema or Sistema-inspired programmes in 19 countries. Five overarching core principles are identified and examples from the literature review are provided to illustrate the evidence and debates relating to each. Overall, our key finding is that El Sistema has fostered a remarkable renewal of interest in the transformative potential of music education, generating important dialogue and debate about effective practice. We point to the need for teacher professional development, particularly relating to an inclusive pedagogy that will support the social and personal development to which Sistema programmes aspire.

Keywords: El Sistema, social development, personal development, principles, pedagogy.

Introduction

El Sistema, Venezuela’s National System of Youth and Children’s Orchestras and Choirs, and Sistema-inspired programmes around the world use music education as a vehicle for social action. A core aim of Sistema programmes is to effect social change through the provision of musical opportunities for young people from communities who would not otherwise access such

experiences. Sistema programmes are founded on principles characterized by trust, support for self-esteem, empathy, a team-based approach, commitment, structure and discipline. Teachers are charged with supporting their students' holistic development, including musical, cognitive, social and creative. Many positive stories demonstrating musical, social and emotional development, have been documented through El Sistema performances, media and anecdotal reports as well as a growing body of formal evaluation and research. The Sistema movement has also sparked many debates relating to the ideology, principles and practices that underpin this approach to music education.

This paper summarizes our recent review of research focusing on Sistema programmes, funded by Sistema Global. We identify the fundamental principles that are said to characterize Sistema programmes and map the key findings from the literature against these principles, pointing to areas for further research and highlighting some critical debates.

The literature review: methodology

In assembling relevant literature, we searched the British Education Index, Australian Education Index, ERIC, Web of Science, Arts and Humanities Citation Index, JSTOR and Dissertations Direct. We also appealed for research and evaluation reports via stakeholder networks. Additional literature was collected via direct contact with programmes and programme website searches.

Research and evaluations concerned with programmes that self-identified as 'El Sistema' or 'Sistema-inspired' were included in the review. In addition we included papers that theorized El Sistema and a number of documents relating to critical debates around El Sistema. The review

included documents that were written in English, Spanish, Portuguese, Italian, French and a limited number in German.

In total, we included 85 research and evaluation papers, representing 44 Sistema or Sistema-inspired programmes in 19 countries. Amongst the research designs there were:

- Cross-sectional surveys
- Longitudinal designs with pre and post measures
- Quasi-experimental designs
- Case study designs
- Ethnographies

Research methods represented in the papers reviewed included:

- In-depth interviews with children, parents, teachers, leaders, stakeholders
- Non-participant and participant observations
- Document analysis
- Children's drawings
- Sentence completion tasks
- Rating scales
- Value-for-money calculations
- Qualitative and quantitative surveys

Sample sizes ranged from just two to nearly 2000, with most studies comprising samples of between 50 and 300. Many studies were student dissertations undertaken by sole researchers with limited resources. For the most part, research was undertaken in programmes that could be considered as being in the 'pilot' or 'initiation' stage. Indeed, this was to be expected as nearly

half of the programmes represented in the review of evaluation and research evidence had been established as recently as 2010.

Research questions addressed a range of issues, including questions relating to best practice, organizational principles, leadership, community engagement as well as outcomes relating to individuals, families and communities. A wide range of measures have been used in addressing these questions, including qualitative interview schedules as well as validated and non-validated quantitative measures.

Each document was read by one team member who extracted key information with regard to the context, the programme aims, the research or evaluation objectives, research question, methods, sample and key findings.

Principles

El Sistema is founded on the premise that social transformation can be brought about through intensive music education (Bernstein & Tunstall, 2013; Booth, 2009; Govias, 2010; Tunstall, 2012). Silberman (2013, p. 71), who carried out 10 in-depth interviews with key informants within the international Sistema community, reported general agreement that ‘an El Sistema- inspired programme is one that uses the collective practice of music to affect the social development goals of the community being served by the programme.’ This emphasis on music for social change is the first of five fundamental principles identified by Govias (2011), with the remaining four being: learning through ensemble, accessibility, frequency, and connectivity. The framework was grounded in Govias’ personal immersion in El Sistema, involving ‘firsthand observation and practical hands-on experience ... within multiple núcleos across a broad geographic distribution’ (Govias, 2011, p. 21).

Orchestra and choir are seen as the structures through which social change can be fostered at the level of the individual child, family, and community. Key tenets are that Sistema programmes should be inclusive and accessible, offering ‘immersion’ in music, with daily participation in ensembles. Intensive ensemble activities are seen as a rich opportunity for nurturing positive citizenship skills (Majno, 2012). Alongside frequency and intensity of contact, programmes aspire to offer consistent, dependable social and musical experiences, regardless of what may be happening outside of the núcleo (music centre) (Uy, 2012).

Bernstein and Tunstall (2013) include ‘joy’, ‘peer learning’ and ‘ridiculous ambition’ in their own framework of El Sistema principles. The focus on joyful music-making is enshrined in the core principles proposed for Sistema Europe (Marcus, 2012a), whereby music is ‘to be used as an agent of joyful expression – passion first, refinement second – and joy to be one of the core energies of the process.’

El Sistema pedagogy is centred on ensemble. The concept of interdependence, according to Billaux (2011), is key to understanding personal and social development within Sistema ensembles. From this view, interdependence fosters solidarity, responsibility and self-esteem, in turn underpinning the development of social skills, sensitivity, leadership, and cooperative learning amongst the children. From this perspective, interdependence fosters a positive group identity and motivation for striving towards shared goals.

Alongside the strong group ethos, Booth (2011) observes that opportunities for private instruction are highly valued. This, according to Booth, is linked to a spirit of continual improvement and exploration. Opportunities for one-to-one support are facilitated through the network of orchestras, through which the highest achieving students may access individual lessons (Govias, 2010).

The ethos of social inclusion sits alongside high aspirations and striving for musical quality and excellence (Majno, 2012). Through what Booth (2013) describes as the ‘porous membrane’ of the núcleo, the ethos and solidarity that characterize the learning community is thought to foster a wider sense of pride, inclusiveness, and equity amongst families and communities (Billaux, 2011).

Booth (2009) reports that El Sistema is characterized by a unified vision, an observation that chimes with the fifth fundamental principle of ‘connectivity’ proposed by Govias (2011, p. 21), whereby ‘every núcleo is linked at the urban, regional and national levels, forming a cohesive network of services and opportunities for students across the county’. The network, according to Govias, provides a unified structure within which individual students may forge personal progression pathways, at regional and national levels.

Yet, alongside the unified ideology, an underpinning facet of El Sistema, according to Booth, is openness to improvisation with regards to the day-to-day interpretation of the overarching curriculum. Govias (2011, p. 23) suggests that this quality may be a sixth fundamental of El Sistema, claiming that the ‘genius’ of the organization lies in its unfailing commitment to ‘identifying and assimilating new best practices.’

Practices

Social development through music

We found considerable evidence of the transformative impact of Sistema programmes at an individual and group level. Enhanced self-esteem, raised aspirations, personal development, and improved psychological well-being were noted in research and evaluation concerned with Sistema programmes in North and South America, Europe, Oceania, and the Caribbean (see

Creech, González-Moreno, Lorenzino and Waitman, 2013, for our review). These positive benefits have been attributed to musical participation and achievement within a safe and structured environment.

For example, in two In Harmony England schools, after one year of hosting the programme the percentage of Foundation Stage children (age 4-5) reaching a ‘good level of development’ in personal and social education and communication, language, and literacy rose from 27% to 62% and 29% to 43%, compared with 56% nationally (Lewis, Demie & Rogers, 2011). While the improvement may have been in part attributable to cohort effects or to generally rising standards of teaching, headteachers noted that In Harmony played a contributory role in raising levels of concentration, attention, cooperation skills, pride and self-esteem amongst the children.

Participation in Sistema programmes was also found to have had a positive impact with regard to enhanced academic aspirations (Uy, 2012). For example, Cuesta (2008), reported that 63% of El Sistema participants had good or excellent achievement in school, compared to 50% amongst a matched group of non-participants.

Some indicators suggest Sistema programmes are having a positive impact within communities. Venezuelan communities with the highest number of núcleos per capita reported reduced dropout and crime rates (Guevara, 2006), while participation in El Sistema has been associated with significant and positive impact on employment (Sanjuán, 2007). Cuesta (2008) estimated that El Sistema’s ration of benefits to costs was 1.68, adding that for every dollar invested in El Sistema there was a savings of 36 cents, when compared with an alternative of providing the same amount of addition tuition hours within public education. Likewise, outside of Venezuela, encouraging trends have emerged. For example, overall rates of anti-social

behaviour, domestic burglary, and drug offences decreased in one In Harmony England area between 2008 and 2011, compared with an overall rise in these crimes within a neighbouring area that does not offer a Sistema programme (Burns & Berwick, 2012). However, there have been some methodological problems with some of the studies that have investigated community engagement and impact; this remains an area where further longitudinal research is needed.

There is some evidence of the benefits for parents of Sistema programme participants, including a greater sense of parental empowerment, parental support, self-efficacy, self-esteem and raised aspirations for their children, as well as significant improvements in family communication and sense of community (Bozetto, 2012; Burns and Bewick, 2012; Savoie, 2012; Uy, 2010). However, there is scope for research that focuses on the influence of Sistema programmes in the lives of parents as well as grandparents. A powerful route to achieving social development goals could be through engagement with intergenerational groups within the community. It is well-known that one of the significant social challenges of the 21st century is an ageing population, with associated risks of high rates of depression and isolation amongst older people (Christensen, Doblhammer, Rau & Vaupel, 2009). There is a growing body of literature supporting the view that musical social networks may represent a creative and compassionate way to alleviate these risks (Creech et al., 2014). Thus, in seeking to address salient social development goals, Sistema programmes could broaden their scope and focus, to include intergenerational groups in music-making.

With regard to the social development aims of the programmes, there is also a need for teacher training and continuing professional development that focuses on these aims, possibly drawing upon expertise within the field of social pedagogy, concerned with holistic education and care (Kyriacou, Tollisen-Ellingsen, Stephens & Sundaram, 2009). Indeed, further research is

needed that looks at the impact of participation in El Sistema and Sistema-inspired programmes as compared with other interventions that have social development aims.

Learning through ensemble

Learning through ensemble was found to offer a rich context where protective social networks were formed. Within ensembles, young people developed sophisticated skills in working as a team and formed a positive group identity (Campe & Kaufman, 2013; Lewis et al., 2011; Savoie, 2012; Villalba, 2010). For example, participants in the orchestra for youth at risk in the Caribbean were found to demonstrate improved social skills, cooperation, team work, communication, and a protective social network, after just six months of participation (Galarce, Berardi & Sanchez, 2012).

The pedagogy that underpins these positive outcomes that are associated with learning through ensemble area has not been articulated fully. For example, whilst heralded as a significant positive aspect of Sistema programmes, peer learning and teaching remains under-researched within Sistema context. Wider educational research suggests strongly that children need to be supported in developing the interpersonal skills and strategies for effective peer learning (Kutnick, Ota & Berdondini, 2008). This body of research may have much to offer Sistema programmes, where peer learning and teaching are highly valued. Conversely, Sistema programmes provide a rich context for research concerned with peer learning and teaching.

There are critical debates with regard to the focus on the symphony orchestra as the privileged ensemble within Sistema programmes. Some argue that there are few opportunities within a hierarchical orchestral structure for true collaboration or dialogue, while others caution that a focus on orchestral discipline and product does not necessarily accord with the principle of

inclusivity (Baker, 2012; Borchert, 2012; Mauskapf, 2012). Sandoval (2013, p. 12) adds that the symphony orchestra is not the only form for social transformation and advocates that ‘exploring music in a variety of ensemble types might urge students to critically contemplate different ways in which they themselves might inhabit the world as creative citizens’.

Similarly, there are critical debates with regard to privileging western classical orchestral music. For example, amongst stakeholders in Big Noise, Scotland, there was a sense that the emphasis on western classical music needed to be balanced with a recognition and responsiveness to the very rich cultural context of Scottish traditional music (Allan, 2010). There has been little research that has focused on the question of whether particular musical genres are associated with specific outcomes, or whether, as Marcus (2012b) suggests, ‘music is music’ and the wider benefits are more strongly related to contextual and pedagogical factors other than musical genre.

There were some indications that some programmes offer one-to-one tuition as well (Govias, 2010), although none of the evaluations or research papers focused on the contribution that one-to-one tuition made within the overall ‘Sistema’ experience, or indeed whether the availability of one-to-one tuition may have influenced the social or musical trajectory of the students.

Accessibility and inclusivity

Sistema programmes have been found to provide access to learning orchestral instruments for children who would not otherwise have had that experience (Savoie, 2012; Smithurst, 2011), foster positive perceptions of social inclusion (Matijasevic, Buitrago, Ramírez & Villada, 2008) and reach a representative spectrum of families, including some of the most disadvantaged groups (GEN, 2011). Programmes in England and Colombia have noted some tensions with

regard to equity issues between those who access the after-school extended provision and those who do not (Burns & Bewick, 2012; Matijasevic et al., 2008).

Typically, programmes have responded to visible barriers to participation, for example offering non-selective admission, continuation based on commitment rather than achievement and outreach networks to address physical and geographical barriers (GEN, 2011; Majno, 2012). Little research has focused on ‘differentiation’, a key concept relating to inclusion whereby teachers organize the learning in such a way as to include all participants (Florian & Black-Hawkins, 2011). The Sistema community would benefit from research that articulated the ways in which Sistema teachers understand and implement differentiation.

Frequency and intensity of contact

The literature review revealed considerable variation with regard to contact time in Sistema programmes. There may be cultural and structural differences that have implications for this feature of the programmes. For example, Sistema-inspired programmes have had to develop models that involve partnership working, for example with symphony orchestras, community arts organizations, higher education institutions, conservatoires, social service agencies, and charitable foundations (Cline, 2012; Snowden, 2003). Furthermore, while intensive commitment on the part of the young Venezuelan musicians may represent a well-understood pathway out of disadvantaged environments (Uy, 2010) this pathway may not be so clear or so salient in all contexts.

Within the literature that we reviewed the idea of ‘intensity’ was not clearly defined. Sistema programmes provide a salient context where research could be carried out that addresses this specific issue of intensity – involving pace, organization, verbal and non-verbal behaviours

(Berg, 2008; Goolsby, 1996; Scruggs, 2009; Yarbrough & Price, 1989)– and its relationship with social and musical outcomes.

Connectivity

The literature review highlighted three strands of ‘connectivity’. The first was concerned with connection between programmes and their local communities. Many reports emphasized that social development goals must be grounded within the local context, placing an emphasis on partnership working (Snowden, 2003).

The second strand was concerned to connections within and between programmes. The review highlighted a network of Sistema programmes that is perhaps amongst El Sistema’s most valuable resources. This ‘community of practice’ (Lave & Wenger, 1991) offers opportunities for collaboration, sharing of material and problem-solving.

The third strand of ‘connectivity’ concerns the place of Sistema programmes within the wider music education community and indeed within the wider network of community based programmes that aim to address social development goals. The fundamental principles that characterize El Sistema resonate strongly with the key aims of access, excellence and social development that are enshrined in the UNESCO (2010) Seoul Agenda for music education. Sistema programmes have much to contribute to this wider agenda. In accordance with the idea of a wider, integrated and cohesive approach, Snow (2012, p. 246) positions El Sistema as ‘just one piece of the puzzle’.

Conclusion

El Sistema has fostered a remarkable renewal of interest in the transformative potential of music education. Importantly, this movement has sparked much debate about effective practice. We have, in our literature review, attempted to synthesize the debates, discourses, and evidence relating to the phenomenon that is known as El Sistema, and to contextualize this body of literature within a framework representing El Sistema fundamental principles.

The evidence to date adds a valued contribution to the literature concerned with the wider benefits of music participation. Our review suggests that investment in teacher development is fundamental to achieving the dual aims of social and musical development. Furthermore, dialogue and collaborative networks amongst Sistema programmes and the wider music education community could greatly support a highly integrated and cohesive approach to achieving social development through music.

Acknowledgements

We gratefully acknowledge the support of Sistema Global, who funded the literature review. We also acknowledge the generosity of the many contributors to the literature review who shared their research and evaluation reports.

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Preferences for Tempo and Pitch Levels in Classic Rock Music of the United States and Latin America

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Abstract

The purpose of the present investigation was to examine tempo and pitch preferences for highly popular classic rock and roll songs from the US and Latin America. We were interested also in song familiarity, particularly as related to origin and language of song and preference for changes in tempo or pitch. One hundred forty graduate and undergraduate music students from the United States ($n=48$), Mexico ($n=46$), and Brazil ($n=46$) listened to pairs of excerpts from 12 songs and indicated the version they preferred and their familiarity with the song. In each pair of excerpts

participants heard the original recording and a version that had been altered in tempo ($\pm 12\%$), pitch ($\pm 12\%$), or both. Results indicated that listeners in the three countries generally preferred these popular tunes in the original pitch and tempo levels. Music students in all three countries were generally more familiar with the popular music sung in English. Differences in responses between countries were more pronounced in music sung in Spanish and Portuguese. Magnitude of preference for original versions of these popular songs was somewhat consistent with the degree of familiarity, a finding that corroborates earlier research. The discussion addresses the influence of language as well as cultural and musical experience on music preference.

Keywords: music listening, music preferences, pitch, tempo, country, language, popular music.

Introduction

The study of music preference continues as an important aspect of music education research. Comprehensive reviews of literature (Abeles & Chung, 1996; Finnas, 1989; Wapnick, 1976) document expanding knowledge. LeBlanc's model (1982) has generated a number of studies. Characteristics of the music itself such as tempo, pitch, rhythm, and complexity play a central role in preference (Finnas, 1989; LeBlanc, 1982). Personal characteristics such as age, gender, race, and music training exert influence on listeners' preferences as well (Hargreaves, Comber, & Colley, 1995; Killian, 1990; LeBlanc, Sims, Sivola, & Obert, 1996; McCrary, 1993). The listener's cultural environment is another substantive factor (Darrow, Haack, and Kuribayashi, 1987; Geringer & Solís Guerra, 2002; Walker, 2006)). We designed this study to explore music preferences of listeners from three countries (Brazil, Mexico, and the United

States) for popular rock songs sung in English, Spanish, & Portuguese. Preferences for alterations in tempo and pitch levels were studied in addition to listener familiarity.

Droe (2006) reviewed the literature on music preference and music education and summarized theoretical models. He noted that analysis of social factors in music learning has shown a dependence on the socio-cultural context in which a person develops outside of school such as at home, within the person's peer group, as well as the general community. LeBlanc, Jin, Chen-Haftek, Oliviera, Oosthuysen, and Tafuri (2000/2001) discussed whether a variable labeled "country" should be added to LeBlanc's model as a more efficient way to represent the cultural environment. For example, Darrow, Haack, and Kuribayashi (1987) found that both Japanese and American participants gave high preference ratings for Western music. Japanese students, however, were more receptive to Eastern music than were the Western students. Pembroke (1997) reported that Mexican musicians gave higher ratings for Mexican music than US musicians and non-musicians. Interviews (Solís Guerra & Geringer, 2000) indicated that adults in Mexico preferred classical music relative to Mexican Americans and Mexican immigrants in the US who preferred folk and pop styles. Location and cultural environment apparently influenced music preferences rather than ethnicity. Additionally, students in Mexico who did not receive music instruction in school listed classical music as the kind they wanted to learn more about in school (Geringer & Solís Guerra, 2002).

Researchers have documented that listeners often prefer faster tempos to slower tempos (e.g., Geringer & Madsen, 2003; LeBlanc, 1981; LeBlanc & Cote, 1983; Wapnick, 1980). A similar preference for increased pitch levels (sharpness) has been noted (e.g., Geringer, 1978; Madsen, 1974; Morrison, 2000; Yarbrough, Morrison, & Karrick, 1997), although other variables

appear to interact, such as an association of sharper intonation with brighter tone quality (Wapnick & Freeman, 1980; Worthy, 2000).

Investigators who used popular music have not shown the same listener preferences for increased tempo and pitch levels. Listeners from first grade through college age preferred the original unaltered versions of pop songs to the pitch and tempo changes (Geringer & Madsen, 1987). Recently, tempo and pitch preferences were examined when listening to highly popular classic rock and roll tunes (Johnson, Madsen, Geringer, Gadberry, & Brunkan, 2011). Music majors first turned a *CRDI* dial to modulate tempos to their preferred levels. The second time they modulated the pitch to preferred levels. The presented excerpts had been unaltered from the original performance, or were altered in tempo and/or pitch ($\pm 12\%$). Listeners changed the alterations of these well known songs in the direction of the original pitch and tempo levels.

The present investigation is an extension of these latter two studies. Both studies found that participants tended to prefer familiar rock songs in their original, unaltered tempos and keys. The purpose of the present investigation was to see whether listeners would show similar preferences with classic rock songs from cultures other than their own, and whether the results found in previous studies conducted in the United States would be similar with listeners in Mexico and Brazil.

Method

Participants

We selected participants drawn from large convenience samples of university students. We used a random selection procedure to provide three groups of approximately the same size from each country: The random sample ($N = 140$) encompassed students from music programs at

two large universities in the United States ($n = 48$), two universities in Brazil ($n = 46$) and a large university in Mexico ($n = 46$).

Musical Stimuli

We selected 12 songs for this project. Six of the songs were drawn from the United States/English Rock and Roll tradition. Those songs were among the highest ranks of *Top Classic Rock and Roll Songs of All Time* (Rock-Songs; 2007, October), and were found to have very high levels of familiarity in the US (Johnson, et al., 2011). We also selected three songs from the Brazilian Rock tradition of the same time period, and similarly, three from the Spanish language Rock tradition. These six songs were selected to parallel as much as possible the songs selected for the United States/English tradition, however, there remain important differences. Because of political realities in Latin America at the time, these songs, though similar in classic rock style, do contain some political lyrics.

Digital files of each song were edited to provide excerpts of approximately 30 seconds in duration. Tempo and pitch manipulations were prepared with software (Amazing Slow Downer, v. 3.4). We created 12 pairs of excerpts; one member of each was the unaltered excerpt. The altered versions comprised two excerpts each with the following: tempo increases, tempo decreases, pitch increases, pitch decreases, both pitch and tempo increases, and both pitch and tempo decreases. The magnitude of change was 12% in both directions. Each type of alteration was balanced between English and Latin American examples, as was the presentation sequence between excerpts. Order of presentation within pairs (original & alteration) was also counterbalanced. Table 1 displays the excerpts and the respective alterations. We included two additional example pairs: one practice excerpt, and a control pair with no alteration.

Procedures

Listening examples were burned to CD and distributed to proctors who conducted the listening sessions in the three countries. Participants were tested in small groups of intact classes and were given a written response sheet in the appropriate language. Following the practice example, time was given for questions, and the examples were presented. The inter-trial interval was 15 seconds, and the interval within pairs was 1.5 seconds. After listening to a given pair, participants indicated the version they preferred by checking a response on the five-point rating scale: Responses ranged from “Version A much more” to “Version B much more.” They also responded on a 10-point scale indicating their level of familiarity.

Results

Control Trial

We included a control trial (*La Bamba*) in which both examples were identical with no change from the original. Preference means were very similar and close to 3.0, indicating that there was little difference in preference between the first and second presentation of the example. Standard deviations were also similar. There were no significant differences between males and females, between countries, or their interaction. Analysis of familiarity scale data also showed no differences between gender, country or their interaction.

Table 1 presents descriptive data for the examples. Overall, listeners across all three countries preferred these popular tunes with the original pitch and tempo levels compared to the alterations (a rating below 3.0 indicates preference for the alteration, means higher than 3.0 indicate greater preference for original version). The one exception was a song from Brazil,

Alegria Alegria: Listeners indicated a slight preference for the altered version, which was both faster and sharper than the original. Listeners rated this example as the least familiar.

Familiarity Analysis

We analyzed listeners' familiarity with the songs. A two-way ANOVA with one between subjects factor (country of listener) and one within subjects factor (music examples) was used to compare familiarity ratings of examples that were sung in Spanish or Portuguese. Significant differences were found between ratings of listeners in the three countries and between the individual excerpts. However, there was a significant interaction between country and excerpt, $F(10, 685) = 49.25, p < .001, \eta^2_p = .418$. Students in the United States ($M = 2.45$) were consistently less familiar with the Latin America origin examples than students in Brazil ($M = 6.14$) and Mexico ($M = 4.36$) with the exception of *Oye Como Va*, which also was popular in the United States. Students in Brazil were the most familiar with four of the six examples, except for *Vem Quente* and *Oye Como Va*. These latter two examples were most familiar among Mexican students.

We compared familiarity ratings for examples that were sung in English and originated with North American or British groups. Again, significant differences were found between students in the United States ($M = 9.24$), Brazil ($M = 7.28$), and Mexico ($M = 6.30$). Differences were found between the six excerpts as well as the interaction between country and excerpt, $F(10, 685) = 23.39, p < .001, \eta^2_p = .255$. The interaction showed that students in the United States were very familiar with all six examples (means ranged from 8.2 to 9.7). Brazilian students were slightly less familiar with these six (means ranged from 6.7 to 8.4). Students in Mexico were

familiar with four of the examples, but had lower familiarity ratings for *Satisfaction* ($M = 4.8$) and especially *American Pie* ($M = 1.8$).

Preference Analysis

We analyzed preferences for changes in pitch levels, and asked whether country of listener, language of song, and direction of pitch alteration affected listeners' preferences. We found main effect differences in preference between participants' country, as well as language of song ($\eta^2_p = .446$), but no difference in direction of change. Although there were no two-way interactions between factors, there was a significant three-way interaction between all three variables, $F(2, 137) = 6.17, p = .003, \eta^2_p = .083$. For pitch level increases, listeners from all three countries preferred the original version slightly ($M = 3.31$) for the Brazilian song (*Mosca Na Sopa*). For the English language example (*Hotel California*), listeners preferred the unaltered version much more ($M = 4.26$), particularly the US students ($M = 4.75$). For the pitch decrease examples, listeners in all three countries preferred the unaltered versions for the English language excerpt (*Light My Fire*, $M = 4.14$). Preference responses to the Brazilian example (*Vem Quente*) exhibited a different pattern. Students in Brazil slightly preferred the flatter version to the original ($M = 2.80$), and US students slightly preferred the original to the alteration ($M = 3.19$). Mexican students had a stronger preference for the unaltered version ($M = 3.65$).

We analyzed tempo changes in a similar manner, with one between subjects factor (students from the 3 countries), and two within-subjects factors (language of song and direction of tempo change). There were no main effect differences between countries or direction of change. Significant effects were found for language of song and the two-way interaction between country and direction of change. Additionally, the three-way interaction between these variables

was also significant, $F(2, 137) = 12.78, p < .001, \eta^2_P = .157$. For examples that increased in tempo, US listeners strongly preferred the unaltered English language example (*Satisfaction*, $M = 4.19$) compared to Mexican and Brazilian students ($M = 3.20$ for both groups). Listeners in Brazil and the US had similar preferences for the Spanish language excerpt, *Oye Como Va* ($M = 3.11$ and 3.06 respectively), compared to the Mexican students who indicated stronger magnitude of liking for the unaltered version ($M = 3.59$). Preferences for the tempo decrease examples showed a different pattern. Students in Brazil showed similar preference for the unaltered versions of both the Spanish (*Nena Yo Te Quiero*) and English (*Imagine*) excerpts ($M = 3.76$ and 3.78 , respectively). In contrast, students in Mexico had no preference for the unaltered or slower version for the Spanish example ($M = 3.00$) compared to a strong liking for the unaltered version of *Imagine* ($M = 4.48$). Listeners in the US preferred the unaltered English excerpt ($M = 3.60$) to a greater extent than the example in Spanish ($M = 3.21$).

We analyzed examples that contained alterations in both pitch level and tempo found significant main effects for country and language of song, but no difference in direction of change (sharper & faster versus flatter & slower). Although the three-way interaction between variables was not significant, two of the two-way interactions evidenced significant effects. The interaction of listener country and language was significant, $F(2, 137) = 14.12, p < .001, \eta^2_P = .171$. For the Latin American music excerpts (*Alegria*, *Alegria & Oye Cantinero*), listeners from Brazil ($M = 2.90$) and Mexico ($M = 2.74$) preferred the alterations to the original versions, while US students only slightly preferred the original ($M = 3.08$). In contrast, responses to the US popular excerpts (*Born To Be Wild & American Pie*) showed marked preference for the original versions among US students ($M = 4.45$) and equivocal preferences among Mexican and Brazilian listeners ($M = 3.03$ & $M = 3.11$, respectively). The interaction between language of

song and direction of change was significant as well, $F(1, 137) = 12.02, p = .001, \eta^2_p = .081$. The sharp/fast example from Brazil (*Alegria, Alegria*) was preferred when altered ($M = 2.66$) compared to the US example (*Born To Be Wild*) that was preferred without change ($M = 3.65$). Differences between language of songs were not as large in responses to the flat/slow examples. The excerpt in Spanish (*Oye Cantinero*) was preferred slightly more in the original version ($M = 3.16$), and the unaltered version of *American Pie* was preferred a little more ($M = 3.44$).

Discussion

Listeners generally preferred these familiar rock songs in their original unaltered tempos and keys, which corroborates previous results with popular music (Geringer & Madsen, 1987; Johnson et al., 2011). Students in all three countries were more familiar with the music popular in the United States, and differences between countries in both listener preference and familiarity were much pronounced in the examples that originated in Latin America.

It is important to acknowledge that rock music in Latin America has always been marked by turmoil. Rock was initially associated with unequal power relations between the United States and Latin America, particularly from the 1950s to the 1970s (Hernandez, L'Hoeste & Zolov, 2004), which is when these songs were popular. This cultural imperialism thesis, which is often used to explain how rock music was embraced in Latin America, might also explain listeners' superior familiarity with US/English examples in the current study.

Regarding familiarity with Latin American tunes, linguistic issues probably played a considerable role. Brazil is the largest Portuguese speaking country in the world; however most countries in Latin America have Spanish as their official language. These countries share several cultural practices and artifacts that are mediated by language, including music. This might

explain a superior familiarity with *Oye Como Va* in Mexico compared to Brazil. Another linguistic factor relates to translations and adaptations of songs, as a way to reach new audiences and increase album sales. The song *Vem Quente*, for example, was translated into Spanish and became a hit in many countries (e.g., Uruguay, Peru, and Costa-Rica). This song may have reached a similar level of familiarity as some of the songs popular in the US. Further, it is also interesting that Brazilian music students did not show familiarity with this song. While this song was highly popular in the early 1970s, it is not today. Since most university programs in Brazil do not typically include survey courses in the history of Brazilian popular music (Hentschke, 2003), it is perhaps not surprising that this particular song is relatively unknown among current students.

Correlations between familiarity and preference for the original versions of *Alegria Alegria*, and *Oye Cantinero* were near zero. No recordings of these songs were found in languages other than the original ones, suggesting a small familiarity with them outside of their countries of origin. However, correlations were also non-existent for apparently well-known songs in English as well: *Imagine* and *Born to Be Wild*. It seems apparent that many important questions remain regarding the roles of formal and informal music education in shaping listeners' music preferences.

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Table 1. *Descriptive Data for Music Examples*

Song	Alteration	Scale	<i>M</i>	<i>SD</i>	Correlation [^]
<i>Mosca Na Sopa</i>	Sharper	Preference Familiarity	3.31 4.54	1.25 3.68	-.18
<i>Hotel California</i>	Sharper	Preference Familiarity	4.26 8.12	1.10 2.95	.31 [‡]
<i>Vem Quente</i>	Flatter	Preference Familiarity	3.21 3.09	1.22 3.17	.31 [‡]
<i>Light My Fire</i>	Flatter	Preference Familiarity	4.14 7.93	1.14 2.82	.21
<i>Oye Como Va</i>	Faster	Preference Familiarity	3.25 8.09	1.36 3.03	.28 [‡]
<i>Satisfaction</i>	Faster	Preference Familiarity	3.54 7.21	1.46 3.38	.32 [‡]
<i>Nena Yo Te Quiero</i>	Slower	Preference Familiarity	3.32 3.82	1.29 3.62	.27 [‡]
<i>Imagine</i>	Slower	Preference Familiarity	3.95 8.09	1.23 2.88	-.02
<i>Alegria, Alegria</i>	Sharper/Faster	Preference Familiarity	2.66 2.68	1.27 2.88	-.11
<i>Born To Be Wild</i>	Sharper/Faster	Preference Familiarity	3.65 8.26	1.43 2.92	.10
<i>Oye Cantinero</i>	Flatter/Slower	Preference Familiarity	3.16 3.53	1.31 3.54	.05
<i>American Pie</i>	Flatter/Slower	Preference Familiarity	3.44 6.18	1.50 4.05	.52 [‡]

Notes: [^] Correlation between Preference and Familiarity Rating Scales, [‡] indicates $p < .01$.

Recording and Playing the Reflective Discussion on Music

Improvisation in the Classroom

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Abstract

This experimental study observes whether stimulating and supporting pupils' discussion by recording with MP3 and listening to the playback can improve their creative musical productions in a second musical improvisation. Thirty-one groups of three pupils (11-12 years old) are observed by two groups (control and experimental groups). In the scholarly context of the Canton of Neuchâtel (Switzerland), we adapt the Vaughan Test of Musical Creativity (Vaughan, 1971a, 1971b; Vaughan & Myers, 1971) to evaluate every criterion of the pupils' performances by three experts. Based on our own preliminary studies, this experiment is conducted in four steps: (a) basic information to the pupils and preparation, (b) first pupil's improvisation (pre-test), (c) reflective discussion on the improvisation created, (d) second improvisation (post-test). The data was analysed by means of paired comparison tests. Our analyses show that, in general (all criteria together), there is no significant difference between the control group and the experimental group. The paired comparison tests on fluency and ideation show differences. Inversely, the two groups (control and experimental) do not differ in their rhythmic security and aesthetic synthesis.

This study is an opportunity to further understand the place of recording in a pupil's reflection and the teacher's role in this discussion on music improvisation.

Keywords: improvisation, reflective discussion, recording, creative collaboration.

Introduction

Creating, performing, and listening to music are pedagogical activities that can be carried out in different ways. Music education requires an approach that allows performers to express themselves with sound in different ways according to the moment and their desires. According to Madsen & Madsen (1974):

“Can creativity be learned and can it be taught? If it can be taught but not learned, the pursuit seems irrelevant. If it can be learned but not taught, then perhaps the teacher should be concerned with the situation where this learning can take place” (pp. 39-40).

When pupils improvise music, they cannot make music without first having discussed, and tried the musical ideas that they themselves engender and systematise. The creative technical and aesthetic characteristics can form part of the content of their discussions and the exploratory experiments that they undertake, in order to collaborate on and complete their next musical improvisation.

In the 1960s and 1970s, Torrance and Guilford showed the effects of creative teaching in schools. Teaching creatively favours greater openness and positive relationships in the classroom (Curtis Gowan, et al., 1978; Guilford, 1978; Torrance, 1966, 1978b; Torrance, Ball, and Safter, 1990). For Curtis Gowan (1978), the number of ideas as fluidity, the uncommon usages as spontaneous

flexibility, the associative and expressive fluidity, and originality (inventiveness) can all affect creative learning. Creative teaching has some benefits: while teaching creativity to fourth grade pupils, there were almost no observed incidents of problems with conduct (Torrance, 1978b). For Torrance (1978a), “there exists sufficiently solid evidence that creativity cannot be left to the development dictated by chance” (p. 103). Consequently, what should teachers do to make the creative activity effective for pupils’ development?

Musical improvisation in the scholastic programme

The official programmes of the District of Neuchâtel (Switzerland) propose creative musical activities through individual or group expression and experimentation without explicitly proposing discussion or criticism of the musical pieces created by the pupils. In this curriculum, the prescribed activities propose creating, interpreting, and perceiving music. Additionally, creativity, communication, collaboration and reflection are considered the “transversal abilities” in Neuchâtel’s curriculum. This curriculum proposes writing, reading, rehearsing, playing music, and that pupils should reflect about their performances with their classmates.

Musical improvisation as a creative activity

According to the accepted definition of creativity by Amabile (1996), a musical production will be judged as creative to the extent that it is both novel and appropriate to the task; in relation to their specific field (Gardner, 2011; Mayer, 1999). Creativity is a transformation during a process that involves playing, imagination, fantasies, emotions, meaning and cognitive symbols (Vygotsky, 1925/1971; John-Steiner, Connery, & Marjanovic-Shane, 2010). As a general domain

or a specific musical domain, research about creativity must consider different musical creative practices and be linked to other “cross-domains”: collaboration, communication and reflection. Recent studies (Burnard & Younker, 2008; Miell & Littleton, 2008, Moran & John-Steiner, 2004; Sawyer, 2008; Young, 2008, Giglio, 2013) show that collaboration is closely linked with creativity. This is due to the relationship that evolves between individuals with a common purpose of producing music (improvisation, composition, or arrangement) through certain ideas and shared understanding of something new and a common goal: “creative task and learning” or, most of the time, “creative task without learning” (Giglio, 2010; Giglio & Perret-Clermont, 2010). Teachers need to address a completely different task to try to encourage creativity and learning in their pupils (Vygotsky, 1925/1971; 1930/2004; 1931/1994).

Improvising in collaboration

Music improvisation involves an immediate linking of actions (Webster, 1992; Pressing, 2005). Improvisation in the classroom can be enabled if the teacher allows for collaborative discussion between pupils (Sawyers, 2004a, 2004b). Improvisational activities in the classroom require another set of rules for discussion between pupils and the teacher (Sawyer, 2006a, 2006b). The common achievements and works of the pupils can help to build “communities of mutual learners” and their ways of doing and thinking (Bruner, 1996). Mercer (1995) shows how teachers use techniques for discussion in the classroom by eliciting knowledge from pupils, responding to what pupils say with some confirmations, repetitions, elaborations, and reformulations; and also describe significant aspects of sharing their experiences with literal recaps, or reconstructive recaps.

The sociocultural discourse between the teacher and the pupils is crucial for thinking collectively in educational settings (Mercer, 2004) and in creative music education (Giglio, 2012). Consequently, musical improvisation can be an important occasion for discussing and commenting on the work of the pupils as it progresses.

Psychometric approach and musical creativity

During the 1970s, knowledge of musical creativity received important psychometric contributions from Vaughan (1971a, 1971b; Vaughan & Meyers, 1971), Golder (1976), and Webster (1977). But their tests centred too much on “divergent musical thought” as if this were an important part of an individual’s creative potential. Perhaps they overemphasized the link between creativity and intelligence. The concepts of creativity that emerge from their tests have been openly criticized. According to Gardner (2001) “[...] one alternative tack has been to devise more demanding test items – ones that seem to require genuine insight or mental leaps rather than cocktail-hour glibness” (p. 21).

Perhaps, the tests of musical creativity have influenced the field of research on creativity in music education in different ways. In this study, we focus on the Vaughan Test of Musical Creativity (Vaughan, 1971a, 1971b; Vaughan & Myers, 1971; Frega & Vaughan, 1980). This test proposes a rhythmic improvisation with accompaniment, an improvisation based on a rhythmic response to an antecedent, an improvisation based on a pentatonic melodic response to an antecedent, an improvisation made with natural sounds over an accompaniment or an ostinato, and a composition based on an uncommon musical practice. With a positive correlation to the subtests presented in Torrance Tests of Creative Thinking (1966), Vaughan’s test (1971b) of musical

creativity evaluates four criteria: firstly, he observes fluidity as related to the calmness of the responses without taking into account their quality. Secondly, he observes rhythmic security in terms of maintaining the time set by the examiner and demonstrating some control over given patterns. Thirdly, he observes the conception of ideas for playing over and beyond a close “note by note” response in terms of their frequency of occurrence. And finally, he observes synthesis as a question that points towards what the literature about creativity calls “aesthetic adaptability,” as if it were all tied together. In our first studies (Giglio, 2007, Giglio, Schertenleib & Jaccard, 2008) we used and adapted Vaughan’s test with pupils between the ages of 11 and 13 in scholastic contexts in Switzerland. According to the results (Giglio, 2007; Giglio, Shertenleib, & Jaccard, 2008), the reflective discussions on improvisation experienced together, recorded and shared (listening to the playback) in the classroom can significantly improve a second musical improvisation. Perhaps, by talking together, pupils may learn; through hearing a good argument, they may change their mind (Mercer, 1995) and improve their performance. On the one hand, they may learn how they can discuss before designing an improvisation. On the other hand, they may learn, through dialogue, how to improvise. The tools and the language are “mediating instruments” that help the action of the subjects (Wertch, 1991).

Aim

Our aim is to observe whether stimulating and supporting pupils' discussion by recording with MP3 and listening to the playback can improve their creative musical productions in a second musical improvisation.

Method

Thirty-one groups of three pupils (11-12 years old) took part in this study in the scholarly context of the Canton of Neuchâtel (Switzerland). The required instruments are two tambourines or djembes and a xylophone. This experiment is made in different steps:

Step 1: The teacher gives basic information on rhythms and melody to the pupils.

Step 2: Pupils are then grouped in threes and have to prepare an improvised rhythm or a melody.

Step 3: Each group of three improvises in front of their classmates (pre-test).

Step 4: The teacher asks the pupils to recall. How they have come to this rhythm? How have they managed their social relationships in order to get organized to perform it?

Step 1': The teacher gives basic information on rhythms and melody to the pupils.

Step 2': Pupils are then grouped in threes and have to prepare an improvised rhythm or a melody.

Step 3: Each group of three improvises in front of their classmates (post-test).

This experiment is conducted twice. Two improvisations are observed in the pre-test and the post-test. A reflective discussion is held with the class (control groups and experimental groups). Only the experimental group recorded on MP3 and listened to their own discussions. For ethical reasons, the control group continues to experiment with a recorded discussion after our study. This data is not part of our research.

For the pre-test and post-test, we suggested rhythmic improvisation with accompaniment, or pentatonic improvisation also with accompaniment with percussion (and vice-versa). To compare two groups of pupils (control and experimental), this data are analyzed via an adapted Musical Creativity Test (Vaughan, 1971, 1977; Giglio, 2006). We adapted the interpretation of Scoring Criteria (observation):

- Fluency: As a question of “peace” in the rhythm or melody, also in its response to a wide range of ideas, although this item does not seek to evaluate musical quality as such.
- Rhythmic security: A matter of maintaining tempo and of displaying some control over any complex rhythmic figures attempted (again irrespective of quality of ideas)
- Ideation: frequency of occurrence (note-for-note)
- Synthesis: A matter of the aesthetic “fit”, i.e. how it all comes together as a whole.

We observed the progress of every group of three pupils considered as a single production (n=31): control groups n=15 and experimental group n=16. Three experts (agreed between them) evaluated the recording of the musical productions. Each criterion was graded on a rising scale of one to five, i.e. between 1 point (poor) and a maximum of 5 points (excellent).

Results

The tests were carried out one before (Pre-test) and one after (Post-test) the reflective discussion. We analysed the data with quantitative methods and, more particularly, by means of paired comparison tests. Our analyses show that, in general (all criteria together), there is no significant

difference between the control group and the experimental group. But, there is a greater for the experimental group (Table 1).

Table 1 Paired comparison tests (all criteria together)

Groups			Means	Standard deviation of mean
Control	Pair 1	C_1_TOTAL_preTest	11,33	,549
		C_2_TOTAL_postTest	11,33	,494
Experimental	Pair 1	C_1_TOTAL_preTest	9,88	,625
		C_2_TOTAL_postTest	11,25	,839

The paired comparison tests on fluency and ideation show differences (Table 2). About the frequency of occurrence note-for-note, our results show the pupils of the experimental group improved their ideation ($p < 0.01$) in the second performance. But the control group improved too their ideation ($p < 0.1$).

Table 2. Paired comparison tests - every criterion

Groups			t	p
Control	Pair 1	C_1_Fluency_preTest –	,323	,751
		C_2_Fluency_postTest		
	Pair 2	C_1_Rhythmic security_preTest -	1,000	,334
		C_2_Rhythmic security_postTest		
Pair 3	C_1_Ideation_preTest –	-1,948	,072	
	C_2_Ideation_postTest			
Pair 4	C_1_Synthesis_preTest –	1,146	,271	
	C_2_Synthesis_postTest			
Experimental	Pair 1	C_1_Fluency_preTest –	-2,666	,018
		C_2_Fluency_postTest		
	Pair 2	C_1_Rhythmic security_preTest -	1,431	,173
		C_2_Rhythmic security_postTest		
	Pair 3	C_1_Ideation_preTest –	-3,569	,003
		C_2_Ideation_postTest		
	Pair 4	C_1_Synthesis_preTest –	-1,232	,237
		C_2_Synthesis_postTest		

In the second improvisation, the pupils of the experimental group improved also the musical fluency ($p < 0.05$). Contrariwise, the two groups (control and experimental) do not differ in their rhythmic security and aesthetic synthesis.

Conclusion and discussion

On one hand, this observation is an opportunity to understand the place of recording in a pupil's reflection and the teacher's role in this discussion. On the other hand, this type of study is important for our research projects in creative collaboration in music education. These results contribute to our design, testing, implementing and consolidating different pedagogical sequences on musical improvisation and composition in several educational contexts.

During our test, many groups of pupils played rather original melodies, but lost points in the evaluation of the frequency of their musical responses and in their aesthetic synthesis. Other groups of pupils demonstrated a lot of ideas at the same time, and a certain rhythmic security. So they scored highly on those parts of the test, but their melodies were not very original or aesthetic, according to the experts. Our adapted test, limited to only four factors, is a reductive way of looking at the complex and varied range of creative activities that changes so much from one individual to the next. In many cases, we revised in order to ensure the reliability of our observations. Each creative act is linked not only to "divergent thought," but also to "convergent thought," and bringing together the pupils' different improvisations can also play a decisive role in this creative act, as seen in the results of this test.

Acknowledgements

I am grateful to my colleague Giuseppe Melfi for his help in the analysis of data.

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Preschool as a Musical-Cultural System: Palestinian Girls Dance their Worlds in a Bilingual (Arab and Hebrew) Preschool

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Abstract

Young children move naturally while listening to music. Research on the way they do this and its relationship to the musical features has been done mainly on Western urban children. The present study context is a bilingual (Arabic and Hebrew) integrated preschool in Israel, and focuses on Palestinian girls' self-initiated movement expressions while listening to recorded music in their own initiated activities, aiming to characterize them and in so doing, contribute to the understanding of Arabic-speaking children's musical characteristics. A qualitative research approach was chosen, specifically an audio-visual ethnography. The data included a written field diary, audio recordings and video recordings, allowing their combination in a multilevel analysis reflecting a complex reality. From this emerged three main categories: (1) the context in which they moved, (2) the musical genres they danced to, and (3) the movement styles. The Palestinian girls' self-initiated movement expressions while listening to recorded music reflect their relationship and acculturation to the three cultures they are immersed in: the traditional at home

and in the village; the Western modern one as presented in the mass media, and the dominant Hebrew language one. They adapt to the dominant culture while preserving the traditional and transitional elements of their own minority one.

Keywords: embodied music cognition, creativity, musical styles, bi-culturality, early childhood.

Background and aims

In late October 2007 I began what would become a four-year relationship with the preschool class at one of the five (at that time) bilingual (Arabic and Hebrew) Jewish/Arab integrated schools in Israel. I was interested in understanding how this extraordinary educational setting worked. Extraordinary, in the sense that the State-sponsored schools teach exclusively in the child's first language (Hebrew or Arabic) and observe their pupils' religious holidays (Jewish vs. Moslem or Christian)¹. Here the parents chose a school in which children are taught in both languages, study and observe all holidays, and learn to respect, accept, and hopefully to appreciate their classmates' otherness while identifying similarities². It was extraordinary also in that the school was situated in an Arab village, meaning that Jewish children not only attended an integrated school but one in a place foreign to them, although only 15-minute drive from their own community. I gained access to this preschool through the Jewish preschool teacher, a former student of mine, who invited me to teach music on a voluntary basis, once a week. I accepted gladly, and asked permission to stay for most of the school day and document what was

¹ For more information about the Israeli school system see Gluschkof, (2008) and Volansky (2010).

² For more information on this type of school see Bekerman (2009) and Bekerman & Shhadi (2003)

especially interesting for me: free play indoors and outdoors, looking for musical forms of expression and interaction. A variety of themes emerged from the wealth of data I gathered. The present study focuses on Palestinian girls' self-initiated movement expressions while listening to recorded music, my aim being to characterize them and in so doing, contribute to the understanding of Arabic-speaking children's musical characteristics.

Literature review

Young children's self-initiated movement responses to recorded music fall into the relatively new research field of music-embodied cognition which states that "the perception and cognition of music is firmly, although not exclusively, linked to action patterns associated with that music. In this regard, the focus lies mostly on how music promotes certain action tendencies" (Maes & Leman, 2013). Movement responses to musical stimuli of preschool children have been studied mainly in Western educational settings (e.g. Flohr & Brown, 1979; Metz, 1989), and to a lesser extent, within family contexts (e.g. Chen-Hafteck, 2004; Smithrim, 1994). The variety of studies used diverse research approaches and tools ranging from controlled experiments (e.g. Kohn & Eitan, 2009, on the effect of salient musical parameters in a music excerpt on body movements of children ages five and eight) to ethnographies (e.g. Gluschkof, 2006, on the self-initiated choreography of three preschool girls to a Hebrew pop song).

The relationship between tempo and movement responses has been extensively researched. From those studies we understand that among two- and three-year-olds listening to music, the

movements most frequently observed are: bending their knees, spinning around, opening their arms, and running around (Gorali-Turel, 1997). These movements are related in some way to the beat (Moog, 1968/1976). Pre-K and kindergarten children, i.e. ages three to six, become better at this (Metz, 1989; Moog, 1968/1976; Sims, 1987), but all ages perform better if the music tempo is similar to the child's own natural tempo (Moorhead & Pond, 1942/1978).

Tempo is but one of the musical features that constitute the musical piece. Preschool children express through their movements those prominent musical features related directly to the basic musical parameters, such as dynamics development, meter and tempo (Chen-Hafteck, 2004; Gorali-Turel, 1997; Metz, 1989). Moreover, children reveal an understanding of the schemata underlying the musical piece, such as grouping, directionality and complexity (Cohen, 1986/7; Gluschkof, 2006;). Their body response is related not only to the musical parameters and features but also to the stylistic characteristics, which demonstrates that young children are sensitive to musical styles and cultures (Chen-Hafteck, 2004; Gorali-Turel, 1997; Metz, 1989).

The above-mentioned awareness, sensitivity and response are evident when children listen to either instrumental or vocal music. When listening to the latter, children also represent through their body gestures their comprehension of the text if the lyrics are in a language that they understand. This is done through pantomiming within the motions related to the musical features. What the children represent are mainly the literal meaning of nouns (Gluschkof, 2006).

No study has been reported on research of this type conducted in Arabic-speaking countries. The only related work the author has been able to find are studies on the perception of *maqamat* (Arab melodic modes) among primary-school children in Arab schools in Israel (Bar-David, 2006; Ouda, 2011).

As stated above, most of the research on body responses to musical stimuli has been done on Western urban children, usually without presenting the study participants' cultural background. The present study acknowledges that music listening is part of modern life, and contends that children's musical worlds should be considered when interpreting the data.

Research contexts and method

Twenty percent of Israel's population is Palestinian, being the largest minority in the country. Its first language is Arabic, one of the two state official languages (the other being Hebrew). The Palestinian society is a society in transition: from the traditional, authoritative, collectivistic and rural, with a deep sense of group belonging and mutual dependence, to a society more open, individualistic, less centered in the large family, and urban, these due to Western influences, education, and mass media (Abu-Asbah, 2007). Consequently, its musical culture is deeply rooted in Middle-Eastern musical traditions, although influenced in some ways by the dominant Hebrew language and Western musical styles. This is but one expression of the asymmetrical relationship dominated by the ethno-national educational and cultural system controlled by the Jewish majority (Al-Haj, 2002). This reality is present in this bilingual preschool class.

According to the goals of these bilingual schools, each class is co-taught by a Palestinian and a

Jewish teacher, each speaking mainly in her first language (Bekerman & Shhadi, 2003); the aide in the preschool classroom is Palestinian.

Twenty-eight children attended the class: 13 boys (seven five-year-olds: three Palestinian and four Jewish; five four-year-olds: four Palestinian and one Jewish) and 15 girls (six five-year-olds: three Palestinian, two Jewish and one mixed; eight four-year-olds: four Palestinian and two Jewish). Within this class several children were related (siblings and first cousins). Most of the Palestinian children lived in the school's village.

The children attended preschool five days a week. The day included usually two large-group activities, usually at the beginning and at the end of the day, small- group activities initiated by the teachers, and plenty of free-play time for children to initiate their own activities indoors and outdoors, with the educators being available for them. I attended the preschool once a week, teaching music in the large-group activity, and observing the rest of the day. The school directors, parents and children granted me permission to collect data in the form of a field diary, audio- and video recordings.

Since the aim of the large study was to identify and understand the musical expressions of the preschool children in their own initiated activities, a qualitative research approach was chosen, specifically an audio-visual ethnography (Tobin, Hsueh, & Karasawa, 2009). The data included a

written field diary, audio recordings and video recordings. This allowed their combination in a multilevel analysis reflecting a complex reality, as suggested by Flewitt (2006).

Holding a camcorder I followed children mainly during the time they initiated their own activities, focusing on what looked and sounded potentially musical. Some shots were long and some quite brief. Sometimes children asked me to film them. They were conscious of my presence, and aware of what I was looking for. Of 204 video clips (11°, 4') collected in 21 days (November 2007 through June 2008), 51 clips focused on movement responses to recorded music (3°, 45'), six of them showed the children dancing a dance taught by and with one of the teachers. Most of the shots were recorded while children played freely but also some during large-group activities (see Table 1).

Palestinian girls were present in 43 out of 45 of them, with three older girls present in almost all of them. These episodes were analyzed following an ethological qualitative approach (Gluschankof, 2005; Morse, 1994), looking for patterns, from whence themes and categories emerged.

Findings

Three main categories emerged from a descriptive analysis of the episodes: (1) the context in which they moved, (2) the musical genres they danced to, and (3) the movement styles.

Table 1: Self-initiated movement responses to recorded music: 51 video clips, 3 all dance in the celebration, 3 all rehearse in class with teacher= 45 for research

Gender	Culture	Large-group activity, controlled by teachers	Free activity, controlled by children	Year's-end party, controlled by teachers	Total
Girls	Only Palestinian	1	22	-	23
	Only Jewish	1	1	-	2
	Mixed group	5	2	1	8
Boys and girls	Only Palestinian	-	5	-	5
	Only Jewish	-	-	-	
	Mixed group	1	6	-	7
		8	36	1	45

(1) Contexts

Children responded to recorded music in three main contexts (see Table 1): the large-group activities controlled and initiated by the teachers, free activities mainly controlled and initiated by the children, and the year's-end party, when children perform for their relatives. Their movements ranged from completely free to a set choreography, according to the context: when the role of performer was acknowledged, a set choreography was performed while when the girls did not consider themselves as performers, they moved in less planned ways, as follows:

Large-group activities

Within the large group children danced to music chosen by the teacher, and children either reproduced the taught dance or improvised movements. One episode was exceptional in the sense that four Palestinian girls performed in front of the entire group a choreography they developed.

Free time

Within this context five different situations were identified: children moved freely to music they chose; children moved freely to music they asked me to choose; children reproduced movements taught by one of the teachers; children worked on their own choreography; children reproduced a family celebration familiar from their home. The situation they reproduced was a *hafla*, an Arab party, and both girls and boys, young and older participated in. Three five-year-old girls began their dance as performers, with seven boys and girls sitting in chairs arranged in a half-circle, watching the dancers while joining in singing and clapping. The girls then invited some of these spectators to join in, and later the girls watched the boys dancing.

Year's-end party

Besides three dances that the teachers prepared and taught, two Palestinian and one Jewish girl performed a dance they created and rehearsed for the previous two weeks. It was planned to be performed by five girls though two of them got sick and did not attend the party.

(2) Musical genres

A variety of musical genres was available to the children, including Arabic pop songs and Arabic children's songs (provided by the Palestinian teacher); Hebrew children's songs and Hebrew pop songs, and some World music (provided by the Jewish teacher); and Western Art instrumental music, World music and folk dances (instrumental) from a variety of countries (provided by their music teacher, this author). The Palestinian girls were acquainted with the Arabic pop and Arabic children's songs from their homes and from the Arab media they consume. The other types of music, which they mostly chose for moving to, were familiar to them only from the preschool. Although they were acquainted with them, they had little or no command of the lyrics. They joined in singing in specific parts of them, mainly the chorus, a repeated sentence, or sections that are sung by the children in the recording, answering to the soloist, as in the case of the song "Wash my face" (*Ghassil wejjak ya amar*, in Arabic), performed by the Lebanese child singer Remi Bandali.

The CDs provided by the classroom teachers were always available. Children would independently put these in the CD player, in contrast to the music pieces I provided that they had to ask me to put in the CD player. From this repertoire they chose World music or folk dances, although the Western Art music pieces—instrumental pieces one to three minutes long from a variety of styles and genres, but all of them complex—were their favorite in music lessons. In music class they were asked to move to them either freely or following musical cues. It seems that complex music was not their choice for informal contexts, rather preferring simpler pieces.

This may suggest that they recognize styles and show their preferences, as previous studies among Western children have shown (Chen-Hafteck, 2004; Gorali-Turel, 1997; Metz, 1989).

(3) Movement styles

Movement and music

The girls moved in a variety of styles depending on the musical style and context. The movements to the Arabic pop songs, whether or not for children, corresponded to the dancing style known in the West as the belly dance, and among the Arab countries as *al-raqs al-balad*. This dancing style “consists of an improvised pattern of bodily movements that heavily rely on the controlled movement of isolated body parts, particularly through the shaking and vibrating of the upper body and the sides and on slow and rapid whirls” (Roushdy, 2010, p. 73). The girls have learned these movements from mimicking grownups in their surroundings, since that style is still danced in weddings and other celebrations, which young Palestinian children attend with their entire family. Through their movements, the dancers are expected to express feelings and affects, though not specific musical elements such as musical structure or beat. The Arab pop songs the children danced to have a very clear musical structure (chorus and stanza, identifiable musical phrases), and steady beat (excepting the *mawwal*, i.e. the vocal introduction sung before the verses and chorus). Nevertheless, the girls’ dancing during free time related in some way to the beat, but lacked any awareness of the musical structure as revealed through their movements, although they did so in their partial singing of the songs. Sometimes the four older girls who danced in most of the filming incorporated gymnastics movements unrelated to any musical feature, rather exploring the space and their bodies within it.

Within the context of performing for an audience, as did the above-mentioned four girls who performed their dance for the entire group and teachers: during the large-group meeting they expressed an awareness of the musical structure through their movements, especially the song's ending.

While dancing to Hebrew songs the girls' way of moving changed totally, irrespective of the context: their movements expressed awareness of the beat, the grouping, and the dynamic development, as previous studies in Western cultures have shown (Chen-Hafteck, 2004; Cohen, 1986/7; Gluschankof, 2006; Goral-Turel, 1997; Metz, 1989). Even when they incorporated *al-raqs al-balad* movements while dancing to Hebrew songs that somewhat resembled Arab-style music, their movements acknowledged the above-mentioned musical features.

In the case of the only Hebrew pop song they danced to (at the year's-end party), the two girls imitated the contemporary Western dance style that the Jewish girl danced. This included an extensive use of the space, long gestures, all of these very different from the Arab dancing style.

Movement and lyrics

While moving to Arab children songs, the Palestinian girls reenacted gestures they had learned from the video clips of those songs that they watched at home. The gestures are in some way

related to the content of the song, such as in “*Ami oumassoud*,” a song about a fat uncle who eats all the time and laughs loudly: the girls laughed and held their tummies.

The way they related to the lyrics of the Hebrew songs varied. When moving to action songs, they performed the actions as did all the children, Palestinian and Jewish. The only instance in which two five-year-old girls danced with a Jewish girl to a Hebrew pop song (“The Winter of ‘73”, lyrics by Sh. Hasfary), performing at the year’s-end party. While the lyrics in their deep sense were not understood by any of the girls, some lyrics in their literal sense were expressed through pantomime, as with the phrase “to turn an enemy into a loved one”, expressed by embracing each other. This type of expression was found in a previous study (Gluschankof, 2006).

Conclusions

The Palestinian girls are acculturated in a variety of cultures, as happens in a society in transition. At home, in their village, they learn not only the Arab dancing styles but other traditions, which they reenact during playtime at preschool. As the Palestinian society is a transitional one, most of those traditions segregate by gender. It is then not surprising that Palestinian boys hardly danced. Only in the *hafla* did they participate, first as spectators and then as male dancers, dancing the *dabke* (a line dance, that through stomping and other steps the beat is expressed).

The media play a central role in bringing Western modern values and styles into a transitional society. The Arab pop songs the girls danced to are an expression of this, and since they are exposed to the audiovisual version, they imitate likewise the gestures the singers perform.

The third culture they meet is the dominant Hebrew one. They danced to the Hebrew songs the way the Jewish children did. However, in the few instances that Jewish children danced to Arab music or imitated the Arab style while dancing to Hebrew songs, they were unable to attain the level of mastery of the Palestinian girls. Palestinian girls not only appropriated the Western dancing style of the Jewish children but also learn the Hebrew language and use it, whereas the Jewish children at best understand some Arabic and use some words.

The Palestinian girls' self-initiated movement expressions while listening to recorded music, reflect their relationship and acculturation to the three cultures in which they are immersed, adapting to the dominant culture while preserving the traditional and transitional elements of their own minority one.

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Participant Perceptions of Instruction in Appropriate Rubato Usage on Performances of Mozart

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Abstract

Three previous investigations have demonstrated that students can replicate the rubato patterns of expert musicians, even when students are fairly unfamiliar with the works being performed. This project specifically focused on what participants were thinking while they replicated these patterns. Results of the current study indicated that participants again more closely reflect the model of professional performances in their posttest performances than their pretest performances, and that the CRDI is a satisfactory tool for this type of investigation, though some drawbacks were noted. In the posttest questionnaire, about half of the subjects attested to the fact that they used the model timings to enhance their musical performance. Some participants

indicated that they used their own musical intuition to create the final performance.

Approximately one-third said that they tried to emulate the professional timings without regard to their own musical intuitions. The groups had varying degrees of success, however the group that used the prescribed timings to aid their performance were the most successful.

Keywords: rubato, musicianship, teaching, imitation.

Introduction

The printed page of music notation is but a skeletal framework for the musical performance. Notes are but the most elementary aspect of written music; there are an almost limitless number of other symbols as well, to help interpret the way each note should be played. It seems all aspects of style can be hinted at with symbols added throughout the score, but no amount of symbols provides the whole picture.

Musical timing is one aspect that has been investigated within the auspices of performance research (see Gabrielsson, 2003). Numerous psychology and music researchers interested in the musicality of music performance have created a rather substantive body of literature. Of specific interest would be work by Palmer (1989), which demonstrated a clear link between increased variations in timing and the assessed musicality of that same performance. Also of note is work by Repp (1992, 1995, 1997, 2000) in which he used piano performance to show patterns of timing in performances in *Träumerei* as well as Debussy's *La fille aux cheveux du lin*. Juslin and Madison (1999) removed different acoustical cues from piano performances (tempo, dynamics, timing variations, articulations) and found that removing timing patterns resulted in significant decreases in listeners' ability to decode emotional expressions of the performances.

This study follows a line of projects examining the effects of modifying specific rhythmic nuances in order to change the inherent musicianship of a performance. The first project in this

series (Johnson, 1998), asked volunteer participants to listen to and perform musically an excerpt from Mozart's *Concerto for Horn No. 2*. Subjects generated a rhythmic performance of the concerto with which they were pleased. They were then taught the rhythmic tendencies that had been identified in the finest performances of this excerpt and practiced them until they felt they were prepared to make a second recording. Results indicated that subjects' rubato usage more closely reflected the model performance in the posttest. Following that study, a new set of subjects replicated these procedures, this time performing Bach's *Suite Number 3 for Violoncello solo, Bourrée Number 1* (Johnson, 2000). Results indicated that both groups' pretests as well as the control group's posttest had almost no correlation with the model; while the results of the experimental group's posttest significantly correlated with the rhythmic model. These two studies were replicated by Johnson, Madsen, and Geringer (2012) with new CRDI technology. Findings of this replication were similar to those of the earlier investigations. When these results were presented (Johnson, Madsen, & Geringer, 2010), there were questions as to what the subjects were really trying to do. Although it was found that subjects were more successful in approximating the model in the posttest, it was unclear as whether each of the subjects was really using the information provided to make their performances more musical, or were any just trying to follow the temporal map without regard for the sound being produced?

Purpose

The purpose of this study was to investigate what participants are trying to do when they are asked to incorporate rhythmic nuances expert utilize while performing excerpts of Mozart. Three previous investigations have demonstrated that students can and will include the rubato patterns of expert musicians in performing musical excerpts. This project focused on what participants were thinking while they replicated these patterns. Specific research questions to be answered were:

1. Will the students again be able to improve their replication of the model when presented with the rhythmic nuance data?

2. What do participants indicate they are concentrating on when they try to incorporate these nuances? Specifically, are participants more concerned with enhancing the musicality of the performance, or are they just trying to copy the nuances they are looking at by moving the dial at the right time without thinking about the music, and does that impact their responses?
3. Beyond being a valid instrument, is the new version of the CRDI felt to be the best instrument for this specific task?

Method

Participants

Participants were 30 volunteer upper division and graduate music majors who had previously passed a screening procedure to establish an acceptable level of performance ability. The participants attended a large comprehensive university in the Midwest. All participants completed the same experimental procedures, and human subjects protections were observed.

Experimental Equipment and Software

The instrument used in this investigation was a version of the Continuous Response Digital Interface (CRDI). In the present application, CRDI software was programmed so that changes in dial position controlled the speed of the performance; that is, the participant controlled the instantaneous tempo of music in real time with the CRDI dial. Specifically, when a participant rotated the dial to the left, the audio presentation slowed in tempo, and when the participant turned the dial to the right, the music got faster. The dial was calibrated so that the full range (a 255-degree arc) corresponded to speed changes of $\pm 33\%$. No other aspects of the auditory stimulus (pitch, timbre, etc.) were modified by the dial. The participant controlled the timing of the performance in its entirety. Dial movement data were collected every 0.33 seconds.

Experimental Stimulus

The musical excerpt used was the development section from Mozart's *Concerto for Horn and Orchestra No. 2*, movement 1. This section contains 6 phrases and lasts approximately 60 seconds. The performance heard was electronically created with *Finale*, using string sounds for the accompaniment and horn sounds for the soloist. The decision to use an electronically produced sound was to allow participants to begin with a technically accurate ("metronomic") performance. Although every effort was made to make the stimulus sound as aesthetically pleasing as possible, it was evident that it was a synthesized performance.

Procedure

Music students participated on an individual basis. Participants entered the experimental laboratory and listened to a "technically accurate" performance of the excerpt while reading a 3-line staff reduction of the score. The performance was generated by computer, which played the programmed notes in metronomically perfect time at a preprogrammed tempo. Each participant then practiced using the CRDI apparatus to create what he/she determined to be a "musical" performance, realizing that the only variable that could be modified was the onset timing of each note. Participants were able to re-record their performance until they were satisfied with the performance. When each participant determined that she/he had created a "perfect performance" it was saved. This completed recording served as the pretest.

Each participant was then given a short lesson on rhythmic nuance. The lesson emphasized rhythmic tendencies (rubato) noted in professional performances which were judged to enhance the musical effect (Johnson, 1997). Each subject was presented with this rhythmically nuanced information, both graphically and in prose. Participants were then told that the task was to incorporate these rhythmic nuances into their own performance such that it would be musically enhanced. After the subjects indicated that they understood the task, they were left alone with the rhythmic information and their score, and used the information as they chose. Many participants chose to mark their score in some manner. The presentation of this information functioned as the treatment in this pre/posttest design.

When participants believed that they understood the task for the second part of the experiment, they were again allowed to practice the excerpt for as long as they desired. When participants felt they had indeed achieved their best performance, they again recorded the excerpt. When the recording was exactly what they wanted it to be, their participation was considered complete. Participants were then given a posttest questionnaire with three questions:

1. Did the movement of the dial correspond to your temporal intentions with regard to the performance?
2. What were you thinking as you attempted to comply with the requested task?
3. More specifically, did you find yourself actually concerned with making the performance more musical, or were you just trying to move the dial correctly or both or something else?

When participants finished the questionnaire, they were thanked and excused.

Results

Pre- and posttest timings for each 0.33 second sample of the students' performances were used to calculate the mean CRDI for the two groups across participants. All subjects indicated that the CRDI dial reflected their intended performances, so all data were used in the initial analysis. Timings for pretests and posttests were compared to each other and to the model using the Pearson Product Moment Correlation. Tests for pre- and posttest performances indicated a moderate correlation. However, when compared to the model timings, only the posttest showed a substantial correlation. When the posttest was compared to the model timings, the relationship was moderate and significant ($r = .46$). The pretest data correlated to the model at a much lower rate ($r = .11$). These data are strikingly similar to the results obtained in the study whose methodology is being replicated (Johnson, Madsen, & Geringer, 2012). See Table 1.

Table 1 - *Pearson Product Moment Correlations for Pretest and Posttest Timings and Model.*

Correlation of Timings				
Current Investigation			Previous Investigation (Johnson, Madsen, & Geringer, 2012)	
	Pretest	Posttest	Pretest	Posttest
Posttest	.43*		.57*	
Model	.11	.46*	.12	.51*

* Correlation is significant at the 0.01 level.

The second and third posttest questions were used to analyze the results of the second research question. All thirty participants wrote comments as to what they were thinking about as they performed the excerpt. Almost all of the participants discussed their thoughts in terms of making the performance musical, or in terms of following the model. One participant said that he/she was overwhelmed by the task and was just “freaking out,” and while this may have been true, no participants showed any outward signs of stress. Once all responses were analyzed, three different categories of responses emerged. They were:

Trying to make the performance musical and ignored the model (6 participants). An example of this was: “I was trying to do it correctly according to the score, but I didn’t like it, so I just decided to do it my own way.”

Trying to make the performance musical, but kept the model timings in mind (14 participants). An example of this was: “Making the performance more musical without a doubt. The “correct” dial seemed too much for the flow of the piece. I used the markings just an indicators or possible suggestions. I tried to be the French horn player.”

Focused on replicating the model, but also tried to make it musical (9 participants). An example of this was: “I was more concerned with following the guideline/rules more than making it enhanced musically.”

None of the participants claimed that they were simply trying to match the model, by disregarding musicianship.

It was interesting to note the differences in correlations for the three groups (See Table 2). The first group did not replicate the model at all, and basically replicated their pretest. The group that instead tried to copy the model, but kept the musical aspects in the background changed the most from pretest to posttest, but did not replicate the model very well. The group of participants who said they followed the directions, i.e., used the model to enhance their performance correlated the most with the model in their posttest.

Table 2 - Subgroup Correlations

	Music Focus		Music and Model		Model and Music	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
Posttest	.48		.32		.16	
Model	.12	.18	-.01	.47	.22	.33

The third research question was regarding the new version of the CRDI for use in this type of investigation. All subjects said that the dial did reflect what they wanted to do musically, but many mentioned that it took a while to get used to it. Qualitative comments were made, such as “at first I was trying to move the dial correctly” and “I struggled with the dial for the first few rounds.” There were also comments regarding anticipating regulating the flow of the tempo. These may stem from the fact that having the dial work on speeding up or slowing down does not

work the same as hitting a key to initiate the next onset. It does seem that the dial use was not seamless. Coupled with the fact that correlations with prepared keyboard were higher ($r = .78$ versus $.51$ & $.46$ (Johnson, 1997; Johnson, Madsen, & Geringer, 2012; & this study)), the use of the new CRDI structure for this exact type of investigation was not as positive as the prepared keyboard was in previous projects.

Discussion

Prior to this investigation, research into the area of the use of rubato to make a performance musical has contended several findings. [1] This line of research has indicated that there is indeed common practice with regard to rhythmic performance (rubato) that is inherent to Western Art Music (Johnson, 1996a). [2] It also appears that people can hear whether or not rubato is being used during a performance, even when they cannot define it or track exactly when and what it is (Johnson, 1996a). [3] Furthermore, this common practice can be analyzed, and can be defined using empirical terms (Johnson, 1996b). [4] Additionally, these defined practices can be linked directly to what is considered to be a more musical performance (Johnson, 1997). [5] Finally, that these common practices of rhythmic nuance (rubato), once clearly defined, can be taught such that students of typical musical ability can apply them relatively quickly with only a little practice, thereby making their own performances more musical (Johnson, 1998, 2000; Johnson, Madsen, & Geringer, 2012). The current study extends and fortifies the previous findings.

It seems safe at this point to conclude that simply conveying the knowledge of rhythm common practice to students is enough for them to mimic these patterns, where before they may not have known they existed. As one of the primary goals of applied music instruction is to teach students to perform more musically, the implications of these results would seem to be a crucial aspect of what effective teachers should choose to do. It should be clear that these micro changes in time, used by the very finest performers, make a tremendous difference in how they are

perceived. Without doubt these seemingly minor differences in timing not only deserve our attention, but that consequential increases in expressiveness should be examined by every person who is serious about musical performance. Especially when proficiency in making these minute changes might be achieved with relative ease.

Results obtained from the surveys answered the third research question. Those responses clearly indicated that the recently developed control software for the Continuous Response Digital Interface can do some amazing things when it comes to controlling and modifying the temporal aspects of a musical performance, but that those things do come with some drawbacks. Though participants clearly indicated that their intentions were conveyed by the CRDI in their performances, they did point out a number of aspects that were not ideal. In short, they needed to be totally cognizant of the passage of time throughout the entire project. Participants were forced to anticipate when changes needed to happen and to always be looking ahead. Many expressed that keying each onset would have been preferable to the CRDI device. This might also account for why earlier studies done with onset timings (Johnson 1998, & 2000) had higher correlations than the last two replications (Johnson, Madsen, & Geringer, 2012, and this current study). Clearly, there are many excellent uses for the new CRDI software package, but its usefulness in this context is still up for debate.

The primary focus of this investigation was the question of what participants were really thinking and/or trying to do when they completed the rubato task. It was suspected by some, prior to this investigation, that participants were just trying to please the researcher and copy what they were seeing in the picture examples. However, that does not seem to be the case. Though a third of the participants indicated that they eventually became focused on the model, and tried to replicate it more than being concerned of their musicality, they all claimed to have their own aspects of musical interpretation included in their final performance. Approximately 20% of participants claimed that they abandoned the model before their final recording and only went with their own musical instincts. It is interesting to note that the data from participants who

said they ignored the model, had pre and posttests that correlated very highly, and posttests that did not correlate at all to the model.

It should be noted that while both of these participant groups claimed to be doing something other than what they were instructed to do (either abandoning the model, or abandoning their original performance to only do the model), the level of their departure from the original instructions might be worth consideration. Although it appears that a good degree of effort was made by participants to comply with the model at first, it is likely that they reverted to something they felt comfortable with in the end. Participants who made statements of abandoning their original intentions may have been unsure or insecure in their ability to successfully complete the task. It is possible, however, that many participants who said that they did not really complete the task, completed it much more than they thought. An individual cannot simply unlearn something on a whim or even in mild frustration. The question becomes, for these participant groups, were there some residual effects of the model and/or participants own musical intentions in the final performances? One might also ask, if given different circumstances of more time, less pressure, or an alternate instrumentation setup, would participants have greatly outperformed this particular effort? Perhaps these questions will serve as the basis for a project in the future.

Another aspect of this project to note was that roughly half of the participants claimed to have done exactly what the instructions asked them to do, they used the model to enhance the musicality of their performance. It was interesting that while this group did not have a remarkably high correlation between their posttest and the model, it was the highest result in the project. This result was also substantially higher than those who only attempted to copy the model. One might conclude that when people claimed to have followed the instructions and completed the assigned task, they were very successful.

This project was prompted by healthy inquiries emanating from the ISME Research Commission on whether some aspects of this line of research were as valid as being claimed

because we really did not know what people were trying to do. These results clearly indicate that the subjects were trying to do just what the project was designed to investigate, and not simply please the researcher. While continued investigation into this topic is always important, it seems from these results that the data presented in this line of research have been once again validated, and the conclusions thus far drawn are further substantiated.

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The Link between Cultural and Musical Backgrounds and Ability: An Investigation into Music Education Students at a Malaysian University

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Abstract

The paper presents the findings of the first part of a study which was to determine whether there was a link between musical and cultural backgrounds and musical ability. The students were enrolled in a Bachelor of Music at a predominantly Islamic Malaysian university and were studying to become secondary school music teachers. Religion played a major role in Malaysia as it influenced which educational institution the students could attend and musical preferences and style. The cultural backgrounds of students in this study included Malays who were Muslim, Chinese Malaysian who were Christian and international mainland Chinese students who were either Buddhist, or did not identify themselves with any particular religion.

The study was in three sections, a survey—interviews and a musical aptitude test. This paper presents the findings of the survey using thematic analysis. The results of the study showed clear distinctions between musical and cultural backgrounds and attitudes towards music. This included; family structure and support, the choice of musical instrument studied, the age they commenced formal music tuition and why they had decided to become secondary school music teachers. The musical and cultural background of the student did play a major role in the ability of the student as well as attitudes towards music and music education.

Keywords: Malaysia, music identity, music culture, sociology of music education.

Introduction

In 2011 to 2012, a study was completed to determine whether there was link between musical and cultural backgrounds and ability. The students were enrolled at a Malaysian education university which was predominantly Islamic. During that time, the university had recently begun to employ lecturers from the West as well as enrolling international students from mainland China.

The faculty of music and performing arts comprised students who were Malay, Chinese Malaysian, Tamil Indian and mainland Chinese. Students commenced their Bachelor of Music at approximately age 20 after completing a Diploma in music or in another field. Consequently their skill sets were varied with some students who had focused on formal music training from an early

age to other students who had decided to become music educators after selecting a university course. Their instrument majors ranged from flute, saxophone, piano, keyboard, popular vocal to the erhu (traditional Chinese violin). To provide the students with an overview of music techniques, they spent a semester studying; keyboard proficiency, woodwind technique, string technique, brass technique, vocal technique, aesthetics, conducting, music education methodologies and gamelan.

As the students had come from such different backgrounds and cultures, there were challenges as a music educator. Moreover, as a Western classically trained musician, assumptions about skill, repertoire and training did not apply here. The *Conservatoire* model was not part of the Malaysian university tradition. Music students on the whole, did not train to become classical soloists or orchestral players although private music lessons were available for some students. A study was conducted to examine whether there was a correlation between the students' cultural background and musical ability. This paper discusses the first section of the study which were the results of the surveys. Here, the cultural background and music experience of students prior to attending university was investigated.

Literature review

There is much scope for research into music education in Malaysia (Shah, 2006; Tahir, 1996). The first designated music journal into Malaysian music was published in 2012 (Lierse, 2012). The *Malaysian Music Journal* displays the diversity of musical styles taught and practices ranging from Western, Chinese and indigenous music. The research highlighted how learning music is closely linked to ones' culture (Shepherd & Vulliamy, 1994; Stokes, 1997; Wright,

2010; Volk, 1998). Students use music as a form of identifying with peers and place (Aróstegui & Louso, 2009; Schippers, 2010; Stalkammar, 2006). Understanding how students learn music in context is also an important factor (Durrant & Welch, 1995; Hallam, 2006; Swanwick, 1988).

Methodology

The study was to determine the cultural and musical backgrounds of music education at a Malaysian university from 2011 to 2012. The research methods were surveys, interviews and a musical aptitude test. This paper focusses on the first part of the study, the survey results.

The methodology selected for the study was thematic analysis, that is, through the research data, examining trends, themes and patterns (Aronson, 1994; Boyatzis, 1998; Braun & Clarke, 2006; Denzin & Lincoln, 2011; Ryan & Beranard, 2000). After becoming familiar with the survey data, codes were created, themes identified, reviewing and labeling themes and writing up the results. The survey was given to second semester students during the last week of semester. There were 29 students in the class in which 27 were present and completed the survey. To comply with ethics, it was not compulsory for students to complete the survey and they were given the option to withdraw at anytime.

The survey was four pages long and took approximately fifteen minutes to complete. It was written in English and had the questions verbally translated to Bahasa Melayu or Mandarin Chinese if there were any queries. The first page was the background and education of the student. The second page focused on the family, the number of siblings, occupation of parents and musical background of the family if any. The third page was on the student's musical

background prior to commencing university. The final page gave a general indication of musical skills prior to their university studies.

Survey results and discussion

The study found that there was a clear correlation between the cultural background of the student and their musical experience prior to attending university. The students could be categorized into their religious and cultural backgrounds which played a major impact on their musical experience.

Background

(a) Nationality. The students were given a series of general questions to determine their background. This included; age, gender, Nationality, first language and other languages spoken and religion. Nationality provided a clear division of groups within the class. In Malaysia, there are three major races, Malay, Malaysian Christian and Tamal Indian. In the music Faculty, there are also Mainland Chinese students. There were three groups represented in this survey (no Tamil Indians were represented here):

Table 1.

N=27

Background	Number of Students	Percentage of Students
Malay	12	44.4%
Malaysian Christian	5	18.5%
Mainland Chinese	10	37.1%

It was interesting to note that all Malay students identified their religion as Islam and their mother tongue as Bahasa Melayu. The Malaysian Christian students identified their first language as

either Iban (one student), Bahasa Melayu (one student), English (one student) and Chinese (two students). Out of the ten Mainland Chinese students, three identified themselves as Buddhist and seven had no religion. Language and religion plays a large role in the selection of music listened to and learnt.

Age of students. The students age range was from 19 to 25 with the majority of students 21 years old. The range of seven years was wide for a second semester degree subject:

Table 2.

N =27

Age	Number of Students	Percentage of Students	Nationality
19	2	7.4%	Mainland Chinese (2)
20	6	22.2%	Mainland Chinese (5), Malay(1)
21	12	44.4%	M. Christian (4), Malay (8)
22	3	11.1%	Mainland Chinese (3)
23	2	7.5%	M. Christian (1), Malay (1)
24	1	3.7%	Malay (1)
25	1	3.7%	Malay (1)

The Mainland Chinese comprised the youngest students and the Malays were in the eldest age brackets. The Malaysian Christians were either twenty-one or twenty-three years old.

(b) Gender It was anticipated that there would be more female students. Seventeen students were female and ten were male. Interestingly, the male students were in a closer age range with only one twenty year old, six males were twenty-one years old (50%) and all the twenty-two year olds were male.

Education

(a) This section was to determine whether the students attended a standard or specialist academic or music school during their compulsory education. Prior to commencing the degree course, it was to determine whether the students had completed any music studies such as a Diploma in Music.

Table 3.

Secondary School (Ages 12-17)

Students	Normal School	Academic School	Music School
Malay	6	6	---
Malaysian Christian	4	1	---
Mainland Chinese	6	2	2

Out of the 27 students, only two attended a specialist music school with the majority attending a normal school. One third of respondents attended an academic school.

Post School Studies

(b) There was a varied response to studies after completing school. Some students did not have a diploma or any post school studies whereas some had tertiary qualifications. There was also a group that had completed a Diploma in Music prior to coming to university.

Table 4.

Students	No Courses	Course	Music Course
Malay	4	5	3
Malaysian Christian	2	2	1
Mainland Chinese	---	---	10

The length of courses varied from ten months to three years. All the Mainland Chinese students had studied in tertiary institutions in China prior to transferring to Malaysia.

Family

Family and family background can play a major role in ones career. It was found that Malay students generally came from large families with the seven out of twelve respondents first born children.

Table 5.

Malay Students N=12

Number of Children in Family	Number of Respondents	First Born Child
3	6	4
4	3	2
5	2	1
10	1	---

Out of the twelve students, four had relatives who were musicians. One father was a music teacher, one had an uncle who was a singer, another student had three uncles who were all performers and the last respondent was the child of two music teachers who had subsequently moved into other subject areas.

Table 6.

Malaysian Christian Students N = 5

Number of Children in Family	Number of Respondents
2	1
3	1
5	2
6	1

In regards to the Malaysian Christian students, none were first born. Out of the five students, only one student had musicians in the family who was both the mother and uncles.

Table 7.

Mainland Chinese Students N = 10

Number of Children in Family	Number of Respondents	First Born
1	8	8
2	1	1
3	1	---

The majority of Mainland Chinese students were only children. This may be a result of the single child policy of the 1980s which has had a generation of children grow up. Three students had mothers who were musicians in the family and one of these students had both parents as musicians. The mother's profession may be influential in Chinese culture.

Musical background

The students were asked what their major instrument was and the age they commenced lessons. They were asked to specify they commenced lessons and whether they also played socially.

Table 8.

Malay Students N = 12

Instrument	Number of Students	Age Started	Social Group Activity
None	4	---	Yes, Yes, Yes, No
Tuba	1	20	Yes
Vocal	1	10	Yes
Vocal Classical	1	19	Yes
Trumpet	1	18	Yes
Guitar	1	15	No
Drums	1	15	Yes
Piano	1	15	No
Violin	1	17	No

The youngest age for commencing a musical instrument was ten with the majority learning music in their teenage years. This may have been due to an opportunity to have tuition or a general

interest in learning music. Four students did not have an instrument major before commencing the course.

Table 9.

Malaysian Christian N = 5

Instrument	Number of Students	Age Started	Social Group Activity
None	1	- - -	Yes
Flute	1	20	Yes
Piano	2	10, 10	Yes, Yes
Piano	1	6	No

Out of the five Malaysian Christian students, three learnt the piano, one learnt the flute and one did not identify as having a major instrument. Three out of the four students whom played socially identified Church as the social music activity.

Table 10.

Mainland Chinese N =10

Instrument	Number of Students	Age Started	Social Group Activity
Dulcimer	1	6	No
Erhu	1	7	Yes
Accordian	1	7	No
Piano	1	4	No
Piano	1	12	Yes
Piano	1	14	No
Piano	2	16	No, No
Piano	1	18	No
Piano	1	19	No

The majority of students had learnt the piano. The other instruments were traditional Chinese instruments. It was interesting to note that most students had not played in a social setting.

Musical skills

The final section was on musical skills and experiences acquired before commencing the course. The results of these questions were predictable. The students who had no musical knowledge prior to commencing the course could not read a musical staff. The students who had learnt the piano had piano keyboard skills. Seven out of the twenty-seven respondents had attended a symphony orchestra concert and nine students had used a musical software package. This would be inline with their prior musical experiences and access to computer software packages. There seemed to be a direct correlation between the instrument learnt and the musical skills acquired coming into the course. However, this did not guarantee a successful music teacher.

Why do you want to be a music teacher? This was the final question in the survey. The answers across all the respondents were altruistic or aesthetically based. There was not a clear division in the answers between the social groups.

Malay

1. "I want to be a music teacher because I want to help the one who have no chance on playing individual or group."
2. "I want to teach student about how beautiful music is."
3. "To be a versatile (sic) teacher."
4. "I love teaching and music."
5. "I like to be a teacher."
6. "Yes, I want to be a music teacher for teach all student work."
7. "Learn more about music."

8. "Because I love music very much and very interesting about this subject."
9. "I love music."
10. "Because I want to teach my student very well in music and give an appreciation of music in school."
11. "Because I got inspired from my marching band teacher. He's so great because can manage a big band to join competition."
12. "Because I want to teach people to know what is music about."

Malaysian Christian

13. "Because I love music and want to explore more about music and try to learn it."
14. "There are too little trained music teachers that can teach in school in Malaysia."
15. "Music is a subject I am interested in and I would like to share the knowledge on this beautiful subject to other people."
16. "I want to share my musical knowledge with others."
17. "I like to play and enjoy music, dislike paperwork. (sic)"

Mainland Chinese

18. "Because I like music. I want to teach so many people have one day like musician."
19. "Because the music teacher is very good."
20. "Because when I young girl, I like singing. My mother is art teacher. So I want to become my mother."
21. "Because I like music."
22. "Because I like to teach the people who need I teach."

23. "I want to teach children about music knowledge."
24. "I like music."
25. "I like music and play instrument."
26. "From I was a children, I was singing and playing music."
27. "I like music very much."

It was pleasing to find that all the respondents knew why they were enrolled in the course. They wanted to be teachers because they loved music, or had a desire to teach.

Summary of findings

The students were placed in three groups based on their cultural/religious backgrounds. The local students were divided into Malay where the religion was Islam and Malaysian Christian where the majority of students had a Chinese background. The mainland Chinese students were international students and were either Buddhist or did not identify themselves as having a religion.

It was found that their cultural background did have an impact on their musical background and preferences. The Malay students generally commenced a musical instrument when they were in their teenage years and the selection was an instrument for popular music making such as guitar, drums or vocal. Playing in a social setting was frequent here. They came from large families and seven out of the twelve respondents were first born children. It was interesting to note that four respondents had no musical training prior to commencing the course.

Three Malaysian Chinese students had learnt piano, one flute and one did not learn an instrument. The piano students commenced their studies at primary school level with two starting at ten years old and one at six years old. The social setting for playing music was mainly Church based activities. The Mainland Chinese students were mostly only children, a product of the one child generation. They had either learnt either piano or a traditional Chinese instrument. The majority had not played music in a social setting.

Conclusion and further research

From the initial surveys, it was found that cultural background does have an impact on the musical background of students. The major differences were the selection of instrument, age when first commencing tuition and whether they played socially. The survey did not reveal musical skill or musical aptitude and it anticipated that the interviews and aptitude test in the next part of the research will determine these differences. One pleasing aspect was that all students knew why they were enrolled in the course. They had a desire to learn more about music and teach it to the next generation.

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**The Everywhere Music: Research on Ubiquitous Music,
ICT, Music, Education**

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Abstract

The music, which even its diversity, remains one of the things we have in common. Also we share our differences. We also have in common our need to share. With the demand of ICT, relationships of people with information have changed. Also is the fact that relations between the world of sound and people also undergo major changes, largely because of new possibilities associated with tools that provide new forms of these relationships happen. In music in particular, The presence of ICTs has been particularly significant in music making. The Ubiquitous Music Research Group proposes a multidisciplinary approach to research the creative aspects, educational, technological and social aspects that emerge from music phenomena associated with development and usage of ICTs. We discuss recent advances in ubiquitous music research and their impact on current educational practices.

Keywords: ubiquitous music, ICTs, education, social musical activity, sharing musical experiences.

Introduction

The cultural miscegenation music, world music as the core cultural communication internationalized youth are according to Morin (2011), extreme examples of this human tendency to make connections, exchange, shares, and has been expanded by the use of ICTs, associated with a process increasing globalization, also identified as closely linked to musical phenomena. Pop culture, infinitely increasing the number of music applications available through the Internet, and the ever increasing activities related to music on the web, give us clues about the importance of music in our relationships provided by ICTs.

Access, modification and distribution of music files on the Internet, comes also causing repercussions in various fields, bustling markets groups linked to musical and non-musical, and free groups, independent, no direct link with the market.

Some thinkers such as Michel Serres (2000) already for some time discussing and defending the Internet as a transgressive space, "a space of lawlessness" and therefore transforming [...] The lack of control is sometimes problematic, but sometimes, on the contrary, is very, very fruitful (Serres, 2000, p. 135). According Maffesoli (2010), we are living today in a cycle that widens its manifestation, that distance themselves from institutions and ways of maintaining power, proliferate.

The popularization of electronic devices and digital resources foster an increase in the dissemination and exchange of visual and auditory information, especially among the younger crowd. The easy access and transfer of sound files facilitates the exchange of contexts, aesthetic, cultural, educational, professional and ethical references, and expands the possibilities of relationship among individuals. An example of this is the popularity of free software and music applications that provide direct manipulation of sound files.

Through easier access to tools that facilitate the realization of complex processes such as editing and processing of sound files, these applications have expanded the possibilities of relations between producers and consumers of creative products, from simple listening toward an increased potential for intervention and modification of sounds. Music sharing has widened since the advent of MP3 format sound files (Valle; Guimarães; Chalub, 1999). Furthermore, the very act of producing music also became a shared experience through collaborative composition environments. Therefore, music is increasingly seen as

a social activity (Brown & Dillon 2007; Burnard 2007; Keller et al. 2011a; Miletto et al., 2011), as well. This trend is associated with the possibility of exchanging experiences through the Internet and with the expansion of the availability of open source applications, access to open source code projects, and wider distribution of mobile technology.

The daily immersion in the music world which has been made possible by recent developments in ICTs is one of the aspects investigated by a new research field called Ubiquitous Music (Keller et al. 2011a). The Ubiquitous Music Group, formed in 2007, is characterized by its multidisciplinary profile, with interests at the intersection of the educational practices (Lima; Beyer 2010a; Lima; Beyer; Flores, 2009; Lima et al 2012), ecological grounded creative practices (Keller, 2000; Keller; Capasso 2006), the development of open-source music software (Lazzarini et al., 2012), and human-computer interaction techniques (Miletto et al., 2011; Pimenta et al. 2012). All these different areas of application converge on common concepts, methods and objectives, emphasizing emerging collective behaviors through non-hierarchical social interactions afforded by technological support tools.

A working definition of Ubiquitous Music has been built upon musical phenomena being the result of the combination of systems that afford musical activities, allowing access to multiple users using multiple devices, within a ubiquitous context (Keller, 2009, p. 542). One of the approaches to research in Ubiquitous Music investigates ways to support music making by non-musicians, including multiple modalities, such as listening, sharing. An important aspect of this research entails the transformation of consumers into active producers of musical content. Ubiquitous Music as a multidisciplinary

endeavor involves distributed computing technologies, mobile computing, cooperative systems and assistive technology, covering issues beyond the technical, the social and human, all aspects, especially in recent years, has generated behaviors and emerging demands, and can be felt and viewed in a very intense and peculiar in music. Thus, the Ubiquitous Music, though so intimately connected to ICT and its possibilities, is not a phenomenon limited to technology, and in this sense it has an approach that aims to be increasingly transdisciplinary, as has been reaffirmed by Keller and other members of the ubimus community at several events during the discussions on the topic held at the workshops sponsored by the Ubiquitous Music Group. The phenomenon of musical ubiquity makes possible new forms of relationship with music, either by breaking established hierarchies or by supporting interactivity and sharing of musical ideas. Two approaches that had a strong impact on ubiquitous music research are collaborative music making and ecologically grounded creative practices.

Another aspect that is interested in a particular research on Ubiquitous Music, is the development of open source music software. Projects for development of open-source software have existed for many years under the general term free software. But there are fundamental differences between free software and open-source projects. Open source software is "free" in the sense that it does not require fees or license to use or redistribute the source code. As important as the access to the product, is the access and opportunity to intervene on source code. And it is precisely this possibility of intervention that distinguishes free software from open source software, although it does not require fees for its use, the code remains closed. On the other hand, open source contributors are free to change the source code, create derivative works and distribute the results. This not

only promotes improvements in IT products, but also changes social practices related to technology. Open source projects enable effective support in obtaining troubleshooting by groups of active developers, who potentially share contributions to the improvement of the tools (Lazzarini et al. 2012; Lima et al, 2012; Pimenta et al. 2012).

Experiences of collaborative composition are demonstrating that individuals with different ideas, backgrounds, experiences, musical and from different contexts, can reach consensus on the creation of musical products (Lima et al. 2012; Pimenta et al. 2012). One example of this trend is the platform CODES – an interactive and collaborative web environment - developed for asynchronous creative activities (Miletto et al, 2011).

A common denominator of embedded-embodied musical creative practices is the close integration of sound processes shaped after natural phenomena with perceptual and/or social factors wrought by everyday experience. The ecompositional paradigm that has emerged from multiple creative projects encompasses two strategies: (1) the construction of a theoretical framework for creative practices supported by embedded-embodied cognitive mechanisms (Keller 1999a; Keller 2000; Keller & Capasso 2000; Keller & Capasso 2006; Keller 2012); and (2) the concurrent development of design techniques coherent with this theoretical scaffolding, featuring participation and emergence as the two central creative driving forces (Flores et al. 2010; Keller et al. 2010; Keller et al. 2011a; Miletto et al. 2011; Lima et al. 2012; Pimenta et al. 2012). Ecomposition takes a step forward in the design of soundscapes, addressing issues such as modification and treatment of social interactions and recreating the palette of everyday sounds. By expanding the possibilities for activities in Ubiquitous Music making, the creative potential provided by the use ICT is also boosted (Keller, 2012; Keller; Capasso, 2006).

Additionally, free access to knowledge and rapid circulation of resources within social groups with common goals have led to the emergence of a new social phenomenon: the "communities of practice" (Lave, Wenger, 1991, Wenger 2010), i.e., social systems that arise from learning processes and are characterized by their high flexibility and agility. Communities of practice usually consist of volunteer members who perform individual contributions, as part of temporary teams with shared governance. Because they promote the free movement of material resources: exchange of sources (such as code and software), and creative products (sound files, data and experimental music, etc.), communities of practice foster imagination and engagement and provide fertile ground for creative activities. Ubiquitous Music practice encourages an increase in the perception of everyday life as a source of inspiration for creative actions encouraging people to make their own interventions and creative experiences from their local soundscapes through active exploration of the possibilities of these environments and through shared experiences.

Music, ICT, education:

The discussion on the use of technology in formal music education is not new. In the 1990s, Kemp (1993) and Mark (1997) presaged a profound change in the function and value of music in society with the advent of digitalization and processing of visual and acoustic signals. Kemp (1993) said that the incorporation of technological advances in music education revolutionizes music education and making it more effective for larger numbers of students. Although the rapid development of computer technology in music offers a growing range of opportunities for musical education, Kemp regrets that these developments do not focus directly on the needs of teachers. Concomitantly, many

music teachers can also be criticized for not nurturing postures sufficiently flexible and consistent with technological advances.

Mark (1997) points to the growth of demand and use of digital music technology by young people, as being relevant to musical socialization. This process sustains the emergence of multicultural and pluralistic societies, with the coexistence of different aesthetic levels, styles, opinions, value systems, and supports "the demise of hierarchies".

Although ICTs are enabling a broad movement in society, related to information, knowledge and interpersonal relationships, specifically in school contexts, mobile devices are still regarded as distractors. One of the issues raised by research and investigation on Ubiquitous Music, is the need for a critical and analytical approach to the range of possibilities and the widespread access to tools and media content. Considering educational contexts, the fact that the musical content and technology are readily available, does not necessarily mean that students will become aware of the creative potential afforded by the technological infrastructure. Research on Ubiquitous Music attempts to fill part of the gap in the knowledge needed to implement participatory practices in educational settings, encouraging the effective use of the local technology.

Since its inception, the Ubiquitous Music Group (g-ubimus) has been developing and performing experiments that combine technical aspects without losing sight of the social and procedural dimensions in educational research both for musicians and non-musicians.

One of the research goals of the g-ubimus is to collect insights into the relationships between the profiles of the subjects and the strategies they use to deal with creative tasks,

without requiring familiarity with technology. This research has its source of inspiration in the dialogical approach to educational practices proposed by Freire (1999, cited in Lima, Beyer, 2010 c).

Between 2011 and 2013 some experiments were carried out in conjunction with the g-ubimus, directed to elementary school teachers, linked to formal public educational institutions, community projects, and high school students. The experiments were conducted in different school contexts in the Southern states of Brazil. One of the goals was to check how the people involved in the experiments behave towards musical creativity involving the use of everyday technologies.

Lima and coauthors (2012) developed and applied a set of design techniques – the Ubimus Planning and the Ubimus Design Protocols – to assess relevant aspects of social and procedural creativity dimensions that have been usually excluded from field studies in creativity (Keller et al. 2011b). Two workshops were conducted to assess both technological and domain-specific requirements for support of creative musical activities. The first workshop was conducted with music teachers and school teachers that had no formal musical training. The objective of this workshop was to assess domain-specific requirements for musical activities by educational staff. The second workshop focused on technological support for tool development by non-musicians. This workshop yielded two software projects which involved user evaluations of creative musical processes. Participants in the user studies included both musicians and non-musicians.

The Ubimus Planning protocol served to raise important questions regarding technological usage by musicians and naive subjects in educational contexts. Non-technical approaches,

such as those proposed by traditional soundscape activities (Schafer 1977), may not be suited for introducing non-musicians to sonic composition. Naive subjects may respond better to technologically based approaches which emphasize aspects of the relationship between the personal experience and the environment. The Ubimus Design approach was effective to assess the usability of musical tools at early stages of development. Prototypes were implemented and usability studies were carried out by undergraduate information technology students within a three-week time-slot. Sharp differences were observed in the type of requirements expressed by musicians and non-musicians regarding creativity support tools. Despite these differences, both groups of subjects regarded the use of software prototypes within exploratory musical activities as being fun and expressive. The Ubimus Planning and Ubimus Design protocols highlighted the existing limitations in the evaluation of creative activities in real-world settings. Although the protocols included careful consideration of the role of the participants within the design cycle, the data obtained did not provide enough information on the dynamics of the creative processes. Place and product creativity factors were considered both as individual and group manifestations of creative behavior. But the assessment of procedures was limited to the analysis of the participants' self reports. The study helped to identify a methodological gap in the development of procedural support for creativity, namely, the lack of time-based methods to study long-term creative musical practice.

The experiments were divided into two stages: The experiments were divided into two stages:

1 °. Low-tech (no use of technological resources): performing "ear cleaning" and "Soundscape" activities (Schafer, 1991). Activity focused on perception and musical creation, from the perception of sound elements related to environments, reflection

about the noise, and the sound as a material capable of establishing creative relationships, proposing to build soundscapes.

2nd. High-tech (use of technological resources): proposed ecocomposition (Keller, 2000; Keller; Capasso, 2006), has linked more directly to the proposed Ubiquitous Music. Perception activities and collecting raw sound, through the use of portable recorders, cell phones, mp3 player, and use software to modification, editing, processing and recreating the palette of sounds available in everyday life.

Groups of participants, teachers, although familiar with their own devices (phones and MP3 devices), did not undergo the recordings, preferring to write down on paper the sounds and then describe them, although the description of the activity itself sounds was, according to them, surprising, since generally not perceived sounds listened.

The group of teenage students from High School, held during the "field trip" in the vicinity of the school, with recording devices that were (phones and MP3 players), and then shared the sounds in the classroom and sought alternatives to the transfer of these sounds to your computer.

Teachers showed some anxiety before an activity that had never done, and during the listening tasks that demanded silence from the participants on several occasions some of the participants interrupted the task with verbal remarks and questions. Among the group of students, there were demonstrations of anxiety before the silence necessary for the activities of "cleaning ears" and walk perception, gathering and recording ambient sounds. Students also showed no anxiety at describing these tasks within the group.

Activities (high-tech), in the computer labs of schools, the subjects 'ear cleaning' and

soundscape, noise pollution have been taken up and discussed, before leaving for the technical aspects relating to sound file formats and software free. The group of teachers in general expos impressions on issues related to noise pollution and put some experiences and questions regarding the handling software. After this time they were presented to the teachers Kristal software (free software) and a library of sound samples made available for use. All began the exploration of editing tools Kristal software and use free palette of sounds sample library.

During the exploratory activity technology, teachers with musical instruments, showed some difficulties in completing the task and also in sharing the results of their actions and compositions. These were very concerned with musical parameters (such as pitch, harmony, melody, rhythm), and attempts to transpose the reference of a traditional score for the software interface, limiting the exploration of other aspects sonic palette. Already in the activity of "soundscape", without the use of technology, the group of musicians teachers felt more comfortable and more expressed.

Among the group of students, both activities had good reception, but it was noted that students showed the greatest expressions of fun while they were exploring the possibilities of sound software. In addition, they also felt happy to share their results with colleagues. In fact, had more behavior of exploration and strategy game than a behavior related to performing a task specific school.

Among the experiments conducted from prototypes developed by Ubiquitous Music Group, users are not musicians preferred the ease of use and ease, while musicians tend to prefer

interfaces that reproduce behaviors based on metaphors acoustic instruments and musical notation. The exploitation of different technological environments can be more motivating for users with no previous experience in music. Innovative forms of interaction may find a more receptive audience. The results of experiments and ecomposition soundscape, the design of educational technologies to meet different requirements, depending on the users profile.

In experiments with high school students in the classroom, even those who had no formal knowledge of music, expressed great pleasure in exploring the opportunity and the tools of composition with CODES. A particularly attractive feature of this system is the ability to apply strategies for collective musical creation. Users can cooperate in the development and realization of prototypes music through negotiation and discussion between stakeholders. Given the non-hierarchical form of social interaction supported by CODES, specialists can negotiate on equal terms with non-experts. Experiments have not had as objective the development of software, but the use of tools available and compatible for the maximization of creative possibilities by its users.

Conclusion

During the last seven years, the Ubiquitous Music Group has been investigating the use of computer technology for targeted support of musicians and non-musicians in musical activities involving ICT. The main motivation of this work is the belief that formal musical knowledge should not be a requirement for participation in creating musical experiences (Keller et al. 2011a; Pimenta et al. 2012).

Social interaction is a key component of the Ubiquitous Music experience. In this sense, the final products that emerge from the creative process go beyond the production of musical works. We believe that one of the most important aspects observed occurs when collective behavior is not superimposed on individual behavior, individual visions and concepts converge as a creative whole that can be helpful in enabling creative musical activities in different contexts, and particularly promising in supporting school practices for creativity-centered teaching strategies. One of the key goals of ubiquitous music research is to understand how our contact with technology changes our perception and our ways of relating to the world, and how we in turn change the technology through our experiences in the world.

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**Contemporary Music, Music Reading, and Aesthetic Response:
A CRDI Study at Undergraduate School. Preliminary Report.**

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Abstract

Music can awaken strong emotions. Research proved that familiarity and preferences are the most influential factors on emotional responses which are closely related to aesthetic ones. Mere exposure and instruction seem to increase familiarity, decrease complexity, and therefore improve liking although aural saturation is to be avoided. Furthermore, social and historical factors modify taste judgments and, without inherited valuations, we seem to express ourselves more freely when contemporary art is to be assessed. Taste judgments originate from appraisal but some degree of enculturation is needed for them to be possible. Music reading seems to be an adequate way of dealing with new, unfamiliar pieces in order to get some understanding, thus intensifying our aesthetic response to them. The *Continuous Response Digital Interface* has proved to be a valid and reliable tool to study emotional responses to musical stimuli but, as far as we know, has never been applied in the field of contemporary music.

Several groups of undergraduate students (adding up to 49 subjects) were tested while or after listening to N.N. (1986), a guitar piece completely based on extended techniques by Argentinean composer Carlos Costa. At different stages of the study, aesthetic responses to music were observed as well as the possible influence of music reading on such experiences, even when there was almost no traditional notation in the score. Respondents participated both by manipulating CRDI dials and by completing questionnaires designed *ad hoc*. Research was conducted in an ecological environment aiming to reproduce naturalistic situations for music appreciation. Descriptive statistical and content analysis are yet to be completed but preliminary observations are shared in the present paper.

Keywords: contemporary music, music reading, aesthetic response, familiarity, musical preferences, undergraduate students.

1. Introduction

Since ancient times, it has been agreed that music can awaken strong emotions, though according to familiarity and preference, emotional responses to it can be quite different (Huang & Wu, 2007).

Just repeated passive exposure (the *mere exposure effect*) tends to increase liking and enjoyment as familiarity increases (Silva Pereira *et al.*, 2011). And, although results are yet ambiguous, several studies indicate that, at different levels, instruction may also provoke an increase in preference (McKoy, 2003). Regarding familiarity, it should be considered that there is a clearly identifiable relationship between music complexity and liking, often described as an inverted U-shaped curve, being a moderate level of complexity that which elicits the maximum liking (Hargreaves & Castell, 1987). “*The effect of exposure to music, repetition, training or practice is to lower the perceived complexity of the music*” (Hallam, 2006:66), consequently enhancing or decreasing the degree of liking by its displacement in the above mentioned curve. Over-familiarity leads to boredom or dislike; once an aural saturation point is reached, preference increase is no longer feasible.

Emotional responses are one of the possibly only two dimensions related to music listening, the other being arousal (Madsen, 1997). Although different, they are however related, since “*one needs to be somewhat aroused in order to have an emotional response*” (Madsen, 1997:64). And even if aesthetic responses would involve both perception *and* cognition (Hallam, 2006), emotional aspects are always related so much so that aesthetic and emotional

responses tend to be noticeably similar (Madsen, 1997). In its own terms, emotion is generally assessed as positive or negative (Schubert, 1996 cited by Huang & Wu, 2007) and so could be aesthetic experience to music, since “*originating from the appraisal of the acoustic and formal properties*” of the stimulus, it “*leads to conscious judgments of liking*” (Silva Pereira *et al.*, 2011:3).

According to LeBlanc (1980, cited by Hallam, 2006; 1982, cited by McKoy, 2003), musical taste reflects a multiplicity of individual and contextual factors as well as those of the music stimulus. In this context, musical training proves to be strongly influential in “*the strategies used in processing input information, leading ultimately to a preference decision*” (McKoy 2003:1). However, it seems that older people’s musical preferences are more difficultly modified even by instruction. On the other hand, although musical analysis, performance, direct listening, and extramusical information may increase college students’ preference for a specific piece of music or music selections, preference transfer may require extensive and intense, multiple-approach-based instruction (Flowers, 1980; Shehan, 1985; cited by McKoy, 2003).

We must consider that social and historical factors exert coercion on judgments of taste. Inherited works of art are received together with assessments, values and categories that previous generations applied to them. Even in such an eclectic era as ours, and although revisions are constant, in every given period, *approved* productions from the past are limited, and confronting *recognized* works of art, people will consciously or not adopt a definitely conditioning *cultural reception* attitude. However, we would be more likely to freely and spontaneously assess contemporary works since we frequently do not even know if they are institutionally considered as artistic, how much so, or by which definition.

It must be said, though, that taste, despite involving intuitive aspects, is educated (Aumont, 2001). Appraising music requires some level of enculturation. *“Without comparison with some conception already held, appraisal cannot occur”* (Hallam, 2006:65). In order to comprehend it, music should be internalized, and a plausible way to achieve this is through music reading. Music reading seems related to sensitivity to structural configuration; what is read is analyzed for musical significance, and musical knowledge is always implicated (Sloboda, 1984).

The history of CRDI studies has shown that *“emotional responses to music can indeed be measured”* (Madsen 1997:59, Geringer, Madsen and Gregory, 2004; Madsen and Geringer, in press, Frega, 2000-2001) and that the CRDI is a strongly valid and reliable tool. Yet, research on responses to contemporary music or avant-garde aesthetics, particularly in undergraduate students in our country, seems to be deficient as well as absent in the history of studies involving the CRDI. New music, novel to most listeners in non-specialized environments and frequently exhibiting complex dimensions proved to be worth of studies in this field. Besides, much research has focused on the study of how we listen to short fragments or specific musical elements, which is a poor contribution toward understanding how we listen to music in normal circumstances and our actual experience of listening (Hallam, 2006). The use of complete music works, for which the CRDI seems very well suited, may allow a deeper comprehension of human responses to musical stimuli (Madsen, 1997).

2. Method

2.1. Subjects

The research team on charge of this work is accredited by the National University Institute for the Arts (IUNA), Argentina, for a two-year ongoing study on aesthetic experience. One of the

proposal's goals is providing insight on the students' profile for academic planning. Having done previous studies in this line of work with undergraduate music students (Castro, Galante & Limongi, 2013; Galante & Limongi, 2013) and requiring music readers for the present research, students at the researchers classes were selected as a purposive sample. Subjects (N=49) can be assembled in different groups: three of them belong to the Department of Music and Sonic Arts (DAMus), IUNA, Buenos Aires city, and currently attend either Aesthetics or Analysis classes.

Considering the need for new data and a more numerous sample, it was decided to test another three groups attending music teacher training programs at the Art School "Republic of Italy" (EARI, Florencio Varela) and the Municipal School in Fine Arts (EMBA) "Carlos Morel" (Quilmes), both cities in the province of Buenos Aires. According to the research stage at the time of testing groups, different procedures apply (see table 1).

Within the groups, Aesthetic students are at different stages of a Bachelor's degree program in Music (*Licenciatura en Música*), while Analysis students are mostly in their first (or second) year. Students at the teacher training programs are part of more homogeneous groups as stated in table 1.

2.2. Instruments

2.2.1. Musical stimulus

2.2.1.1. Selection

Studies on aesthetic response to music have largely worked with popular, ethnic or traditional academic music (*classical*). In some studies (e.g. Madsen, Byrnes, Capperella-Sheldon, *et al.*, 1993), it is explicitly stated that stimulus selection has been made on the basis of familiarity.

In others, even when a particular excerpt may be new, it generally belongs to quite traditional music and aesthetic codes. Our aim, instead, was to explore responses facing non-traditional, most probably unknown or unfamiliar aspects of music, both in sound and notation choosing within the Argentinean new music repertoire.

2.2.1.2. Aural aspects

N.N. (1986) by Carlos Costa presents an extensive exploration on new sonorities for the acoustic guitar. The use of many non-standardized extended techniques in sound production results in frequent loss of the instrument identity since most characteristic timbral traits are eliminated. Most of the time, no association can be made to a traditional sound source, musical or not. Planned for an amplified instrument (guaranteed in a recorded version), the dynamics range is considerably wide. Although some discursive general organization may be perceived, no traditional structures are to be heard. The cassette recording used for playback was made by the composer himself who is an accomplished guitar player internationally recognized. Being one of the research team members a guitarist who prepared the piece performance under supervision of the composer, research design was based on a good knowledge of the score.

2.2.1.3. Notation

Traditional notation is used for dynamics, some accents and, in a modified 20th-century way, for some rhythms (applied to extended technique performance); time is conventionally indicated from left to right and measured in seconds. The vertical dimension mostly presents frequency-related events in an analogical kind of notation, although variations on this coordinate can also represent changes in texture or intensity (loudness) (eventually associated with frequency changes). Graphic density also shows sound textures, and/or event density

(with dynamics changes usually derived from them). At certain points, specific pitches are notated traditionally on a staff. Extended techniques notation is more complex. Sound production modes are explained on a separate instruction sheet and marked on the score by tiny graphics or text. As a result, events that are similarly displayed sometimes sound quite differently.

The piece is organized by more or less homogeneously sections in terms of included event quality with varied repertory of durations, presented in boxes called structures. Most of the time, they are separated by clearly indicated silences of different lengths.

2.2.2. Measuring tool: The CRDI

The CRDI version used for this study can simultaneously record through a computer the movement of 8 dials manipulated by the subjects while listening to the musical stimulus. Each dial is about 30 by 30 cm and has been made locally according to Dr. Madsen's instructions. It has a triangular needle which moves along a 256-degree arc marked "negative" at the left end and "positive" at the right one and is connected to the computer via an interface or CRDI box through a USB port.

Software version is 1.0.7 and the sample rate chosen was two per second. Control files that allow timing coordination between stimulus duration and data collection required cassette playback of the musical excerpt, having used for this purpose equipment available at each institution. Each researcher worked with her/his personal laptop to register the session involving her/his students.

2.2.3. Questionnaires

The original exit questionnaire designed for the initial *La Bohème* study (Madsen, Brittin, Capperella-Sheldon, 1993) and its replications (Frega, 2000-2001; Castro *et al.*, 2013) was adapted as presented in figure 1 (originally in Spanish) to estimate frequency, duration, location, and magnitude of perceived aesthetic experience as well as subject's assessment of the stimulus.

QUESTIONNAIRE										
1. Do you consider having listened to music?										
NO		YES								
2. Did you have what you consider an aesthetic experience(s) while listening?										
NO		YES			SEVERAL					
3. Did you feel that your movement of the dial roughly corresponded to variations of the above aesthetic experience?										
NO		YES								
4. How long did this experience last?										
All the time			Long fragments			Specific sonorities				
5. What was the highest magnitude (intensity) of this experience(s) compared to others you have had?										
1	2	3	4	5	6	7	8	9	10	
Low									High	

Figure 1. Questionnaire 1 (about aesthetic experience)

After listening while reading the piece's music score, another specially designed questionnaire (figure 2, originally in Spanish) was administered. As an exploratory instance, asking for influences of score reading while listening to music, questions are appreciably opened.

QUESTIONNAIRE
Answer freely
1. Was it useful to see the score while listening?
2. Why?
3. What for?
4. Do you have any further comments?

Figure 2. Questionnaire 2 (about music reading experience)

2.3. Procedures

Researchers opted for an ecological environment, providing participants with a naturalistic situation in which music appreciation occurred. All through the study, subjects were tested in the classroom where courses normally take place. No particular attempt was made to control aural conditions. The equipment was installed in front of the students and visual contact was not intentionally avoided among those manipulating a CRDI dial although they were advised not to copy the movements of colleagues. Every time respondents were volunteers. As stated in table 1, several of them went through different phases of the study.

At an initial stage, before listening to the piece for the first time, subjects received the following instructions (in Spanish):

“This study aims to provide information about what you define as aesthetic experience. As you listen to the following work, move the dial corresponding to your aesthetic response.”

Following experimental aesthetics’ principles and Madsen’s line of work, “aesthetic experience” was purposefully not defined. At the session’s close, participants completed questionnaire 1. No music score was utilized at this phase.

Seven weeks later, five of these subjects listened to the piece again while reading the music score. Next, they completed questionnaire 2 reflecting about the experience. Immediately, the initial actions were repeated; the music excerpt was listened once again while manipulating a CRDI dial corresponding to aesthetic response and questionnaire 1 was completed afterward. Three new participants went through this session’s procedures, listening to the piece for the first time.

Acknowledging the need for new samples, and consideration of a possible familiarity/aural saturation effect after listening three times, new groups were tested: Two of them, just reading while listening and then manipulating the CRDI dial; the other three reflecting about the reading experience (questionnaire 2) before completing the CRDI stage. Prior to the reading experience, all five groups were just told they were about to make contact with a new work without further instructions, and, at the session's close, responded to questionnaire 1. For the CRDI phase, instructions were the same stated above.

As part of the last group, two participants who were not present at the time of following the score just completed the CRDI experience and questionnaire 1, as did the three that were only part of the first stage.

Table 1. Subjects distribution and procedures

Subjects (N=49)	Aesthetic experience (CRDI + Questionnaire 1)	Score reading	Score reading + Questionnaire 2	Aesthetic experience post Score reading (CRDI + Q1)
DAMus, IUNA Aesthetic class June 18, 2013	3 5			
DAMus, IUNA Aesthetic class August 6, 2013			5 3	5 3
EMBA Teaching program (1 st year) October 1, 2013		7		7
EMBA Teaching program (3 rd year) October 1, 2013		8		8
EARI Teaching program (4 th year) October 3, 2013			7	7
DAMus, IUNA Analysis class (G1) October 18, 2013			8	8
DAMus, IUNA Analysis class (G2) October 18, 2013	2		6	6

2.4. Data analysis

Numeric data collected by the CRDI were processed using a standard spreadsheet application (Microsoft Excel) that allows a graphic representation of samples. Descriptive statistics will be applied in order to draw conclusions also considering demographic information that characterizes the respondents. Questionnaire-collected data will also be analyzed with statistical tools and categories will be designed to undertake content analysis, particularly for questionnaire 2.

3. Results and discussion

Data is yet to be fully analyzed. Preliminary observations of CRDI curves show that groups that read the music score while listening to the piece for the first time expressed more contrasted aesthetic experiences when manipulating the CRDI dial and higher degrees of liking. So did the first group after having read the music.

It is intriguing that the steepest curve corresponds to the group of 1st-year students at the teacher training program. It displays the lowest and highest values, even reaching once to the very top. Although responses follow the general tendencies, such an intense experience would be expected of supposedly more encultured listeners. Possibly, they are less conditioned by education. Deeper and maybe complementary studies are required.

Questionnaires 1 exhibit several cases where the stimulus was not considered music but it was stated that a strong aesthetic response was experienced. That places the question not only about aesthetic experience but also about what we understand as music itself. Questionnaires 2 mostly mention possibilities of a better understanding by comprehension of formal organization, of anticipating sonorities before listening to them, and a valuable help in

keeping listeners in task which can be related to Madsen's (1997:65) observation about "many people [...] not really listen[ing] to music for more than a few seconds, unless they are listening for something specific."

Categories should be established in order to properly process this information and data from various sources and instances should be adequately crosschecked. Processing is in progress and will be completed by the time this paper might be discussed at the ISME Research Commission Seminar.

4. Conclusions and suggestions

Studies on contemporary music reception seem to be a necessity in order to provide new visions for improving teaching practices. Through development of instructional strategies that offer students a variety of meaningful and valuable music experiences, preferences for new, very far from traditional music and more positive aesthetic responses to it may be enhanced.

This study intends to stimulate further research on instructional factors and/or technical knowledge affecting emotional response to musical stimuli of such aesthetic characteristics.

Further conclusions and suggestions are to be made once data analysis is advanced.

Post-scriptum

Out of plenary and informal discussions at the ISME Research Commission Seminar João Pessoa July 2014, it was evident the relevance of the focus of this study and the need for the collection of further data to test reliably the final design about using or not the score with *N.N.* and CRDI measurement.

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Risky Apprenticeships: A Case Study of “Signature Pedagogies” in an Orchestral Composers’ School

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Abstract

The training of aspiring professional composers is a largely under-investigated area. Workshops with professional performing ensembles may assist emerging composers in the transition from university to professional practice. This case study of a composers’ school led by eminent composer-teachers and hosted by a professional symphony orchestra examines teaching and learning practices and structures evidenced during and after one such workshop. Considered in light of understandings of creativity development and of “signature pedagogies”, the workshop provides students with risk-laden, authentic experience, and guided apprenticeships in cognitive, practical and moral aspects of professional composition practice. To write effectively, composers who typically work free-lance, and away from the orchestra, need to acquire deep understandings of the ensemble’s culture and traditions as well as practical and technical skills.

Keywords: emerging composer, signature pedagogy, creativity, orchestra, apprenticeship

Introduction

While the study of composition within school music curricula has received considerable attention (Berkley, 2001; Burnard & Younker, 2002; Fautley, 2005; Folkestad, 2012; Hickey, 2003; Odam, 2000; Paynter, 2000; Webster, 2003; Wiggins, 2003), training aspiring professional composers remains largely under-investigated. Initial investigations have focused on university-based composer-teachers working with advanced students (Barrett, 2006; Barrett & Gromko, 2007). In recent years attention has also been drawn to workshops with professional ensembles assisting the transition from university study to the professional world (Dahm & Isaacs, 2011; Love & Barrett, 2011, 2012, in press). This paper reports findings from an investigation of a 5-day composers' school offered by an Australian professional symphony orchestra, led by a team of 4 eminent composers. Specifically, the paper examines aspects of teaching and learning evident in the structures and processes implemented by eminent composers for a cohort of aspiring, emerging composers.

Theoretical framework

As the project investigates both a creative practice (composition) and the attendant teaching and learning practices, we situate this study within research into creativity learning and development, and “signature pedagogies” (Shulman, 2005a; 2005b; 2005c)¹.

¹ “signature” as used here, refers distinctive and identifying qualities.

Creativity learning and development

Creativity researchers generally describe creative practice as “novel” *and* “appropriate” or “useful” (Amabile, 1983; Runco, 2007; Sawyer, 2006). Learners need to develop both innovation-relevant (Amabile uses “creativity-relevant”) and domain-relevant skills and knowledge, as well as requisite task-motivation (Amabile, 1996). An ever-present challenge for composers of acoustic concert music is discerning how much novelty can be realised by performers within available preparation time. This varies according to performers’ backgrounds and the nature of the ensemble. A small innovation is magnified when multiplied within a large, traditional ensemble such as the orchestra (Boulez in Ford, 1993).

Professional creative practice requires considerable domain knowledge and skill (Kaufman & Beghetto, 2009). While much can be nurtured within formal education settings, there are aspects better learned (and perhaps only learned) in authentic professional settings. Formal knowledge is transformed into skill, or “knowledge-in-use” (Shulman, 2005a, p. 20) and intuitive (Bereiter & Scardamalia, 1993) and self-regulatory (Zimmerman, 2006) knowledge are deepened through situated practice and mentors’ tips and models. Applying learning gained in school to professional contexts is “best promoted by engaging in social relationships with more knowledgeable peers who can answer questions and provide informal social support” (Smith & Reio, 2006, p. 130). This may be evidenced as expert composers identify “promising” possibilities (Bereiter & Scardamalia, 1993; Love & Barrett, 2012) for aspects of composer-students’ works.

Signature pedagogies

Shulman (2005b) introduces the term *signature pedagogy*: “the particular forms of teaching that characterize each profession” (p. 52), a notion distilled from his observations of teaching and formation processes in the professions of medicine, law, and clergy. The purposes of these pedagogies are education toward thinking, acting, and acting ethically within the profession (2005c, p. 3).

They are characterised by uncertainty: making decisions in response to unpredictable conditions, even without enough information; and by carrying responsibility for one’s actions. Vulnerability is essential: “I would say that without a certain amount of anxiety and risk, there's a limit to how much learning occurs. One must have something at stake. No emotional investment, no intellectual or formational yield” (Shulman, 2005a, p. 22). Although some may be leaders (professors, head residents), all participants are learners, deeply engaged and likely to be asked to report, explain, or critique their understanding and judgements at any time. A community of active and collaborative discussant-practitioners is established.

Shulman describes signature pedagogies as syntheses of three apprenticeships: cognitive apprenticeships in which one learns to think like a professional, practical apprenticeships in which one learns to perform like a professional, and moral apprenticeships in which one learns to think and act in a responsible and ethical manner (2005c, p. 3). These three apprenticeships induct newcomers into essential practices and values of a professional community.

Shulman studied post-formal education, adamant that signature pedagogies transform formal disciplinary content knowledge into “knowledge-in-use” and “create the basis for new kinds of understanding that can only be realised experientially and reflectively” (2005a, p. 20).

Signature pedagogies in university arts education

Shulman's implicit challenge to re-evaluate formal teaching practices has been taken up by tertiary educators within the arts practices of music, drama, and creative writing (see Gurung, Chick, and Haynie (2009)). Researchers have identified the critique (drama, art and design), the writers' workshop (creative writing), and the one-on-one studio lesson (music) as signature pedagogies within these domains.

Critiques in drama performance and visual art (Klebesadel & Kornetsky, 2009) and design (Schrand & Eliason, 2011) are group sessions in which students present work and receive immediate feedback from teachers and other students. An element of risk is present in the reactive feedback. Critiques may provide a means to induct students into the values of the artform and enable students to perceive greater complexity (Klebesadel & Kornetsky, 2009). Like dialogic case law classes observed by Shulman (2005c), critiques provide practice analysing and articulating as professionals. Describing writers' workshops as a signature pedagogy, Meacham (2009) encourages students to talk, think, and read like writers: notice how a work is made, not just what it says.

The music pedagogies examined by Don, Garvey, and Sadeghpour (2009) of one-on-one lessons and theory classes are distanced from the public professional domain. Describing individual lessons as providing professional practice and study routines, they express concern

that unless deep integrated theoretical understandings develop preparation will be incomplete. Noting professionals' integrated understandings, Don and colleagues call for more permeable theory and performance curricula.

Extending the notion of signature pedagogy into the professional environment (beyond academia) is noticeably absent. Most of the professional pedagogies Shulman describes involve practice within the professional environment, unlike individual music lessons or theory classes. In contrast to the structured professions Shulman studied, professional practice in music performance, drama, visual art, and writing is often characterised by self-directed and free-lance work. While universities may try to carry the burden of these less-structured pathways, they are not necessarily authentic professional environments.

Signature pedagogies: summary

Although Shulman's notion of signature pedagogy emerged from studying professions, it can assist in understanding ensemble-based performance workshops as preparation for free-lance careers in music composition. Learners experience vulnerability to real risks and accountability for their choices as they work on authentic problems in the domain.

The three apprenticeships—cognitive, practical, and moral—are social, situated in communities of other learners and experts. Through cognitive apprenticeship, learners become able to think as professionals think. Meacham (2009) challenged her students to “read like a writer”; composer-students need to “listen like a composer”. Through practical apprenticeship they become able to perform professional tasks. A moral apprenticeship prepares learners to behave with integrity in relation to other professionals, users of their

work, and to domain traditions and culture. This study of an orchestral workshop for emerging composers contributes to understanding signature pedagogies in ill-defined professions and to understanding the transition from student to professional practitioner.

Setting, methods and techniques

This investigation² is set in a 5-day composers' school hosted by an Australian professional symphony orchestra and led by 4 eminent composer-teachers, one of whom is school director, and another, the conductor. Applicants audition through submitting a completed work for orchestra. Successful students' works plus assigned orchestration exercises are workshopped over 3 days and performed by the orchestra in concert. Learning experiences include rehearsals, orchestration lectures with full orchestra and selected principal players, one-on-one lessons with composer-teachers, group masterclasses (critiques) after rehearsals, and informal interaction during breaks and meals. The school is an intensive immersion in a real-world work context.

The school is held annually and data were generated over two successive iterations. These data included: observations and field notes for all school events; video-recordings of all group learning experiences; audio-recorded individual interviews with composer-students at the commencement and several months after the school (two per participant); group interviews with composer-students at commencement and completion, and several months after the school; and individual or group interviews reviewing rehearsal video recordings. We interviewed composer-teachers, orchestra members, and past composer-student participants. Analysis was through direct interpretation (Stake, 1995) of notes, transcripts, and repeated

² Barrett, M.S. (2009 – 2011). *Eminence perspectives: case studies of the pedagogy of creative thought and practice in music*. Australian Research Council Discovery program grant DP0988312.

re-viewings of recordings (Ratcliff, 2003); and using narrative analysis procedures (Polkinghorne, 1995). For this paper, to examine composer-teachers' beliefs and teaching structures and processes, we draw primarily on interviews with the 4 eminent composer-teachers, observations of masterclasses, and explicit orchestration instruction.

The purpose of this case study is to understand teaching and learning in a unique context. Looking at this phenomenon through a signature pedagogy lens offers the following understandings.

Findings

Themes

From Shulman's model we note 4 significant themes: risk, cognitive apprenticeship, practical apprenticeship, and moral apprenticeship. In the following, we present examples from interviews and observations that illustrate each theme.

Risk

Composer-teachers intervened relatively little before the first rehearsal of composer-student works, explaining that composer-students needed to "hear what they wrote". Noticing this, one student observed, "They are not afraid to let you fail catastrophically in front of the orchestra". He saw the School as "real life" and "transitional" (post-school interview). If the risk is genuine, failure is possible (Shulman, 2005a). Visibility and accountability made students feel deeply engaged and vulnerable.

Nearly all students reported feeling extremely anxious (Love & Barrett, 2011). One described her fear of performers finding mistakes, and of how awful an out-of-balance, sight-

reading orchestra sounds compared to what she had “lovingly crafted in her brain”. A creative orchestral score is complex, and most students were not completely sure that what they had notated would achieve their intent.

After the School in our interview, the conductor reflected on students’ first rehearsal experiences:

Standing up in front of an orchestra for the first time can be really intimidating if you’re not used to it. And so that’s something they have to quickly overcome. You feel sorry for them because it must be quite overwhelming to start with. But they do; they adapt very quickly.

For some composer-students, feeling exposed and vulnerable increased their resolve to proofread meticulously, aiming to eliminate players’ rehearsal-stopping questions. One reflected:

I think there’s a real value in having the absolute crap scared out of you because you have to find some way to cope and to process what’s gone on. And maybe that can sometimes be beneficial, you know? [Like] recognising how little time you have in a rehearsal room and that you’re just expected to be at this standard in terms of parts production.

Recognising that is easy to do in theory but perhaps harder for it to be real, and if you’re in the situation where something’s gone wrong, you suddenly think, “Shit, I don’t want to be in this situation again”. And you work harder (post-school interview).

As Shulman writes: “No emotional investment, no intellectual or formational yield” (2005a, p. 22).

Cognitive apprenticeship

Listen like a composer.

The school director led a demonstration of orchestration principles through repertoire masterworks. As the orchestra played, something caught his ear.

“Nothing covers up the sound of the flute like a double bass. Look at figure 2. See how the low E is placed in the horns: two, second and fourth, just to make sure that it speaks. And that will resonate. The same note could have been given to the double basses but that would cover and cloud the harmonics of the flute in that register. Let’s play the 2 bars at figure 2.”

They play. Next he asks the basses to play low E, *arco*, omitting horns.

They play with his changes.

He returns to the original, “Now hear the difference with the way a master has done it.” They play it once more as written.

As an experienced orchestral composer, he noticed scoring nuances a less-experienced listener might have missed.

Performer mentality.

The orchestra is not only a vast cornucopia of sounds, but a collective of experts. Composer-teachers drew attention to the social and cultural affordances and constraints offered by orchestral performers. One who trained as an orchestral musician, discussed this performer mentality in our interview:

A lot of feedback that our [composer-]students are getting from the orchestra is, whilst they’re not actually saying, ”Don’t be creative”, what

they're issuing forth seems to be at such a pragmatic level that it seems a little stifling, I think. But it's not.... When an orchestral player is studying and learning to become a professional they play classical music. They play Brahms; they play Beethoven. They spend hours and hours producing beautiful tones on their instruments. So the most recent music you'd get as an [audition] excerpt is probably 100 years old and then the concerto is probably 200 years old, so it's little wonder that when they get confronted with this stuff where they're asked to scrape their bows on the side of the instrument...that it causes problems because, you know, it's still such a small part of what they have to do and it's not part of their culture.

Composers and musicologists are taught a historical *progression* of musical language. Many players, on the other hand, concentrate on a Classical–Romantic core, with music from earlier and later periods at the fringe.

Practical apprenticeship

A composer's business is writing new works. Both aspects of creativity—innovation and appropriateness—are constraints. In this school, while composer-teachers said creativity (*innovation*) shouldn't be suppressed, they championed *appropriateness* as they advocated clear, idiomatic writing to facilitate efficient rehearsal. Berliner notes that, "Experts are usually more constrained by task requirements and the social constraints of a situation than are novices" (2001, p. 1). Students may be less constrained because they do not yet fully understand the constraints.

Much more attention was given to notation of the music than to its content. Composer-students were admonished to ensure their notation was clear, consistent and accurate, yet not cluttered with too much prescriptive information. Players should be trusted to contribute from their expertise, even though that expertise is largely grounded in music of former periods.

When interviewed, the conductor said:

I don't think young composers realise just how much of what they do in their own studio has an impact on how the orchestra's going to (a) perceive those pieces and (b) find the resource to...really want to do those pieces. I mean it's very, very important that they have a sympathy towards those works right from the start...If they've got bollocks³ in front of them, they're not going to play it as well as if they've got a well written, well conceived piece in front of them. Simple.

Moral apprenticeship

A moral apprenticeship was evident as composer-teachers advised and modelled orchestral etiquette and protocols: get permission from orchestral management to contact players in advance, principal players speak for their sections, unconventional symbols must be explained with a key (Love & Barrett, in press). One composer-tutor observed during a masterclass session:

³ Slang: nonsense, rubbish.

Every thing you put on the page, it has a consequence, doesn't it? And so when we're asking for extended techniques, and I really love that imaginative aspect of the piece, don't get me wrong, I'm not trying to tell you not to do them, I'm just suggesting to you maybe a bit of research. It can help the execution of things, because we saw how much time fixing this up took... and in a professional situation it would be really disastrous, you know, if you've got – I've had instances where I only get 15 minutes in total of rehearsal.

Composer-teachers interpreted players' comments, guiding composer-students' reactions:

Some of the coaching that we've been doing at the sides this week has been saying to students, "Well, look, this particular player was extremely narky⁴ right then and he was a bit out of line to say that. He made a good point, but he should have said it in a different way". So just to make clear that this sort of thing happens but actually don't take it to heart (post-school interview).

Composer-teachers also addressed appropriate relationships to tradition. This was most evident as they critiqued composer-students' orchestration exercises. One composer-student fragmented lines and added percussive techniques to exaggerate articulations in her orchestration of a piano work. The conductor exclaimed:

Why did you write it like that? It makes it quite jerky. You can't do that. It doesn't give us any license to be expressive like the original. Again, keep in accord with the gesture of the piece itself. That's what you've

⁴ Slang: overly picky, bad-tempered.

missed out on. It's all very well being humorous, but [not] if we can't get the essence of the piece from the orchestration.

Moral and ethical standards extend beyond immediate social relationships with performers and audience to relationships with the tradition and conventions embraced by the performance community. To work as professionals with these communities, composers need to know how to relate to their members and to those things members value.

Conclusions

Workshops with professional ensembles may serve as signature pedagogies to the extent they provide:

- Guided modelling by and dialogue with experienced professionals who thus convey tacit knowledge and ways of thinking.
- Real risk. The choices made have consequences beyond the composer, encouraging development of the ability to make appropriate judgements in situations without clear solutions.
- Cognitive, practical, and moral apprenticeships embedded in existing and past practice and tradition. In creative practices such as composition, tradition is inherent, even when contravened. In the constrained practice of orchestral performance, tradition provides a common language and time-limited working milieu.

Workshops such as this composers' school are in many ways an introduction to the performance ensemble's culture and tradition, with which the composer needs to work. They contextualise knowledge gained in formal training within specific performance practices and cultures. The composer must be knowledgeable of the ensemble's culture, how performers

read notations, and how much one can push existing boundaries. Thinking like an orchestral composer involves constantly taking into account the constraints of traditional practice, limited rehearsal time, and traditionally-trained performers.

This case study of a short-term orchestral composers' workshop offers further nuance to Shulman's model, demonstrating how composers, who usually must be able to work with a range of performance ensembles, may acquire cultural knowledge and develop practical skills essential for professional free-lance work through expertly guided apprenticeship within real-world ensemble contexts.

Acknowledgements

This study was supported by the Australian Research Council Discovery scheme, grant no. DP0988312: *Eminence Perspectives: case studies of the pedagogy of creative thought and practice in music*, (Margaret Barrett, chief investigator). We are grateful to the composer-teachers and composer-students who participated in this study and to the management of the orchestra for generously granting us access.

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The Relationship between Teacher Preparation and Long-term Teaching Effectiveness

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Abstract

Effective teaching or more particularly identifying specific ingredients of effective teaching for teacher preparation is of utmost concern for every teacher preparation program. The study of effective teaching is no small undertaking for many reasons, the least of which concerns how and in what ways students as well as others determine what is effective. The most apparent aspect of evaluation concerns the assessment of subject matter mastery. Students often express another aspect as "that teacher cares for me" or "that teacher makes me do my best" or "I like to be in her/his class." One might ask what constitutes the precise ingredients attributable to "achieving", "liking" or "caring." Sometimes there is an important subject matter variable, as in the case of music where students take great joy from listening or participating in the subject matter itself. Sometimes there is a strong teacher variable that transcends or enhances this subject matter. Sometimes there does not seem to be any specific

aspect to which one might assign the ingredient(s) that *cause* or at least promote “liking” or “caring” or doing ones best. Some conjecture that it is students themselves who are most capable of assessing their degree of effectiveness by their rating of meaningful and effective tasks and teaching techniques. The present investigation concerns many learning activities and learning experiences that have been studied across the years. Seventy-five music education students enrolled in a capstone course prior to graduating completed ten learning activities previous research deemed important for effective teaching. These activities ranged from demonstrating the ability to specify precise learning objectives to actual teaching short music activities. One year after graduation each of these ten assessments was compared to assessments made by two experts concerning current teaching effectiveness. All 75 students had previously ranked these same ten activities at the end of the course and their rankings were compared to results from the experts. Results indicated that while most of the learning activities evidenced positive moderate correlations with final teacher effectiveness as judged by the experts, there was a large disparity between students’ rankings and the experts’ teacher effectiveness ratings.

Keywords: teacher effectiveness, teacher preparation, learning activities, teacher intensity, music education.

Introduction

Effective teaching or more particularly identifying specific ingredients of effective teaching for teacher preparation is of utmost concern for every teacher preparation program. This issue is paramount to all music teacher educators; it is of special importance to those who are concerned with preparing prospective teachers for work with divergent populations

(Madsen & Jellison, 1991). The study of effective teaching is no small undertaking for many reasons, the least of which concerns how and in what ways students as well as others determine what is effective. The most apparent aspect of evaluation concerns the assessment of subject matter mastery. Students often express another aspect that appears prominently in learners' priorities: "that teacher cares for me" or "that teacher makes me do my best" or "I like to be in her/his class." One might ask what constitutes the precise ingredients attributable to "achieving", "liking" or "caring." Sometimes there is an important subject matter variable, as in the case of music where students take great joy from listening or participating in the subject matter itself (Forsythe, 1975). Sometimes there is a strong teacher variable that transcends or enhances this subject matter. Sometimes there does not seem to be any specific aspect to which one might assign the ingredient(s) that *cause* or at least promote "liking" or "caring" or "doing one's best."

During the past forty years we have been attempting to investigate those aspects of effective student/teacher interaction that contribute to teacher effectiveness (Madsen, 1965; Madsen, Greer & Madsen, 1975; Madsen & Madsen, 1998). While there have been some successful advances, many more times we have been frustrated in our attempts. Findings from some of our earliest work have endured the test of repeated scrutiny especially those relating to student *time on task* which is now recognized as one of the most important aspects contributing to student learning (Madsen, 1971). However other ingredients (especially relating to how teachers should interact with students) have remained more elusive. In early work we presumed that students' working hard, completing assignments and being highly attentive were the primary ingredients necessary for both academic achievement and personal enjoyment. Thus, the teacher's main goal would be to provide accurate subject matter that was appropriately sequenced and combined with a high rate of social as well as academic approval. Some later work demonstrated quite conclusively that appropriate feedback

concerning correctness and incorrectness of the specific subject matter being studied was important as well (Madsen, Moore, Wagner, & Yarbrough, 1975). Detailed observation forms were developed that coded teacher academic and social approval, academic and social disapproval, as well as common errors of teacher interaction (e.g., unwittingly approving a child when the child was actually misbehaving). These forms, combined with the aforementioned student on-task forms, were quite useful in providing an individual teacher with feedback on how he/she was actually interacting with each student (Madsen & Madsen, 1998). Other aspects of the student /teacher interaction process remained troublesome, especially those relating to teacher preparation.

More and more observational forms were developed, subsequently tested and incorporated into teacher training curricula. Typically, a new form was developed that addressed a new issue when someone determined that the basic taxonomic basis was wrong and/or incomplete. Observational assessment forms covered many different aspects relating to both the teacher/student interaction and the learning environment. For example, some of these forms rated specific aspects of instrumental and choral conducting, or conceptual aspects of teaching elementary music to young students, or how to evaluate appropriate music selections as well as develop resource files relating to effective music teaching (Madsen & Yarbrough, 1980).

Having assembled all of this somewhat compartmentalized knowledge, during the next several years we attempted to put all of this information together and test effects within our last series of classes for prospective teachers, just before they left the university to begin their student teaching. Previously, we had isolated many specific behaviors that seemed necessary for effective teaching which were incorporated into this final model. To our surprise putting all of the information together did *not* produce the complete "whole" we had anticipated. We actually conceived one very comprehensive study to be the "study to end all

studies." However, the entire study was almost a complete failure. Large and small aspects relating to everything that we evaluated regarding effective teaching proved incomplete or wrong with just a few minor exceptions, one of which was that each student always rated his or her own teaching significantly higher than did the experts. While it may be obvious, it should be stated that many separate aspects thought to be necessary for effective teaching (even when tested in well-defined and well conducted experiments) did not prove to be effective when assessed in the Gestalt.

At that point in time we decided to begin at the other end of the continuum, as it were, and attempt to assess a more "global" aspect of teaching apart from any *a priori* specifics. Thus began a long series of studies that seemed quite conclusive in their results concerning people's ability to rate effective teaching in its global dimension. We defined this global attribute as teacher *intensity* and rated it in much the same way as we had previously assessed student *on-task* (Madsen, 1988; Madsen, Standley, & Cassidy, 1989; Madsen & Geringer, 1989). Teacher intensity was defined as the "sustained control of the student/teacher interaction evidenced by efficient, accurate presentation and correction of the subject matter with enthusiastic affect and effective pacing" (Madsen & Geringer, 1989, p. 90). Problems arose, however, when we asked panels of experts to list the specific attributes of effective teaching. We did this by asking experts to view videotaped teaching interactions and to list the "best" and "worst" aspects of each individual's teaching. While experts had extremely high agreement on their overall global ratings of teacher intensity, their lists of specific "best" and "worst" aspects for each individual teacher did not coincide at all (Madsen et. al, 1992). Additionally, another panel of music supervisors who were trained in a statewide teacher assessment instrument were asked to rate the same teaching tapes. This group rated these same videotaped excerpts almost identically to the other set of experts concerning the attribute of teacher intensity, yet the specific reasons for their individual ratings did not agree

with each other or with the other group of raters. It became apparent to us that while intensity was a global concept that correlated highly with other "global ideas" of good teaching, and while almost anyone can distinguish among various levels of "good versus bad" teaching using a global rating, no one seems to be able to accurately specify its ingredients. Within our teacher training program we were also able to have every prospective teacher both recognize teacher intensity and to demonstrate it for a period of fifteen seconds to three minutes (Madsen, Standley, & Cassidy, 1989). However, this outcome did not generalize either for longer time periods or when presented in different venues.

After establishing this line of research we began again to investigate those specific teaching behaviors that seemed necessarily subsumed within the above definition of teacher intensity (Madsen, 1990). We were concerned about how to proceed and felt that it was necessary that we proceed slowly in order not to assume that we already knew the specific ingredients of this perplexing issue. This was difficult; after all, we had spent years in isolating specific variables that had proven effective, why should they not work together? The present investigation attempts to address this question by analyzing ingredients covered in a "capstone" course in music education taken immediately before student teaching and comparing each of these ingredients to an overall assessment *after* completing the entire undergraduate program including Teacher Certification.

Method

This investigation was designed as an *ex post facto* descriptive study of teaching education modules presented in the last "capstone" course taken just before the students' final internship. Seventy-five student responses were analyzed across ten modules. All subjects were in the same class and had completed their regular four-year curriculum leading to the

baccalaureate degree in music education. Additionally, students evaluated this same course by ranking every activity and assignment(s) from high to low. We investigated two questions: (1) What Learning Activities correlate to experts' summative rating of effective teaching? and (2) Is there a relationship between students' overall rankings of importance and experts' final ratings? Previous research had indicated that all of the following modules were important and directly related to effective teaching (see review of literature). The ten modules were evaluated using a four level grading rubric: Superior, Excellent, Adequate and Below expectations.

LA # 1: Translating ideas into observable and measurable behaviors. The first module required the prospective teacher to *specify observable and measurable behaviors for ideas*. For example, taking the idea of musical sensitivity and listing behaviors that can be observed and counted such as plays correct rhythm, plays accurate pitches, or claps in time to a given beat.

LA # 2: Specifying schedules of student/teacher interactions. This module goes through all extant *schedules of reinforcement* and includes a transfer task dealing with various effects, for example, partial reinforcement. An additional and important temporal aspect from previous research concerns the ability to *analyze a music learning task* and included the temporal direction of each instructional unit: Forward Direction indicates the sequences proceeds in the correct direction without the teacher having to back up. For example, the teacher might advance too quickly leaving out important steps in the learning sequence and have to state "Oh I forgot, let's go back and put the reed on the mouthpiece before we go on to correct embouchure" (Duke & Madsen, 1991).

LA #3: Students completed a self-determined music *task analysis* by specifying the sequential steps for teaching the task.

LA # 4: An essay covering *ethical and moral questions* involving teaching, for example, Is corporal punishment legal in your state? Can humans really avoid controlling others (through an ongoing exchange of rewards and punishments) even if one wishes to do?

LA # 5: A summative task consisting of *questions covering the entire class*. For example, “What would be the long-term effect(s) of a student receiving *only* academic and social teacher approval? What would be the long-term effect(s) of receiving *only* academic and social teacher disapproval etc.?”

LA# 6: Required students to complete four detailed music *observations* with reliability computed on one observation.

LA # 7: A short student-selected *final teaching demonstration* as evidence of what each student considered her/his most effective teaching. This task was included as a replication of previous research that indicated almost anyone can be an effective teacher for a few minutes. It was rated using a ten point Likert-type scale.

LA# 8: Each student completed a series of written *transfers* stating how each of 12 specific pinpointed examples (chosen from 120 research examples) could be used in their future teaching.

LA # 9: Every student kept a *Time Log* across 7 days and recorded every ½ hour what he/she was doing for the entire 24 hour day.

LA # 10: Covered at least 26 days of *self-modification* consisting of a five-day baseline and at least 21 days of attempts to *change one's own behavior*. This task included daily record keeping checked by a reliability observer.

Following successful completion of the capstone course and an internship, all students took the State Certification test and thereby completed the program. A year later, two experts independently determined an overall rating of teacher effectiveness. The rating rubric for this assessment was identical to those assessments for each of the previous Learning Activities: Superior = 4, Excellent = 3, Adequate = 2, and Below expectations = 1. The agreement between the two experts for this independent rating was extremely high ($r = .97$).

Results

Using a four-point grading rubric every student was assessed across each module and this assessment compared to the final overall rating of potential effectiveness on a four-point scale determined by both the class instructor and the internship supervisor. Table 1 presents the *Pearson* correlation matrix containing all Learning Activities as well as the *post hoc* “Final” rating of teacher effectiveness determined by the experts. The correlations indicate that the learning activities in which students had to specify actual classroom behaviors instead of ideas along with answering summative questions covering ethical issues and the entire course combined with being able to specify appropriate temporal reinforcement evidence the highest correlations. Surprisingly, while the students’ highest ranking was for their Self-shaping Activity (*LA #10*), followed by their Time Log assignment (*LA # 9*) and for their individual daily transfers (*LA # 8*), all of these evidenced very low correlations when compared to the experts’ final assessments or to other course activities. The relationship between the self-selected teaching episode (*LA # 7*) and the final experts’ ratings was almost non-existent.

Discussion

The most important aspect of the current study was the attempt to determine the relationship of specified learning activities to long-term effective teaching. If we, as teacher educators believe we know for ourselves what constitutes good teaching and we can both demonstrate it and immediately recognize it, yet cannot adequately specify its ingredients or long term components, then what should we teach prospective teachers? As was previously stated, for years we were quite content (having experimentally isolated numerous aspects considered necessary for effecting teaching) to teach these same aspects to our perspective music educators assuming that when all of these ingredients came together good teaching would result. This was not the case. Problems arise over time within the teaching experience. While almost anyone can be effective for a short duration (a few minutes or teaching one song), the difficulty is maintaining this *intensity* for a long time i.e., over a complete rehearsal or several days. Perhaps it takes years for each teacher to make the adjustments necessary for truly effective teaching. In our ongoing attempt to investigate this difficult, yet most important, subject it would appear wise to proceed with caution, yet continue our work in order to advance the teaching profession with as much careful research as possible.

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Table 1. *Correlation Coefficients between Learning Activities and Final Teaching Rating*

Activity:	Final	LA 1	LA 2	LA 3	LA 4	LA 5	LA 6	LA 7	LA 8	LA 9	LA 10
Final											
LA 1	.37*										
LA 2	.41*	.55*									
LA 3	.45*	.47*	.47*								
LA 4	.45*	.57*	.47*	.41*							
LA 5	.40*	.51*	.43*	.63*	.45*						
LA 6	.29**	.39*	.43*	.22	.44*	.26**					
LA 7	.10	.04	.17	.04	.02	.24**	.15				
LA 8	.52*	.24**	.31**	.30**	.42*	.33**	.39*	.26**			
LA 9	.13	.18	.21	.13	.06	.24**	.12	.72*	.37*		
LA 10	.31**	.12	.10	.21	.15	.29**	.08	.06	.14	-.04	

Note: * indicates $p < .001$; ** indicates $p < .05$

Gestural Content Influences Evaluations of Ensemble Performance

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Abstract

Previous research has found that listener evaluations of ensemble performances vary depending on the expressivity of the conductor's gestures, even when actual performances are identical. It was the purpose of the present study to test whether this effect of visual information was evident in the evaluation of specific aspects of ensemble performance, articulation and dynamics. We constructed a set of 36 test items in which four music excerpts—two featuring a high degree of articulation contrast and two featuring a high degree of dynamic contrast—were performed by a large chamber ensemble. Each excerpt was performed with either a low or high degree of contrast in either articulation or dynamics characteristics. Performances were then paired with video of one of four conductors conducting with either a high or low degree of expressive contrast appropriate to the target parameter. Using one of two equivalent test forms, college majors and nonmajors ($N = 288$) viewed sixteen 30-second performances and evaluated the quality of the ensemble's articulation, dynamics, technique and tempo along with overall expressivity. Results showed significantly higher evaluations for performances featuring high rather than low conducting expressivity regardless of the ensemble's performance quality. Evaluations for both articulation and dynamics were strongly and positively correlated with evaluations of overall ensemble expressivity.

Introduction

Visual information has been shown to play an important, if not central, role in the perception and evaluation of musical intentionality and expressivity in performance. Physical gesture as a meaningful marker in musical practice is strongly linked to all aspects of the performance experience, to the point of movement and music-making being seen as

inseparable in several musical cultures (Emberly & Davidson, 2011). Indeed, it might be that separating these two aspects of performance creates a different perception of the performance experience of the music being portrayed, such that “a genre is never independent of technologies or mediation processes” (Thompson, Graham & Russo, 2005, p. 206). Although it has been suggested otherwise (McPherson & Thompson, 1998), it appears appropriate to state that, with the possible exception of audio recordings, visual information sits as an integral part of musical performance.

Previous research in this area has shown that this visual channel, manifested in physical gesture, evidences that the “muscular reactions that arise while playing music are also carriers of musical expression” (Gellrich, 1988 translated by Gellrich & Parncutt, 1991, p. 177). This has been found in both expressive gestural information communicated by performers (Davidson, 1993; Vines, Krumhansl, Wanderley, & Levitin, 2006), as well as in audience’s perception of the musical information being observed. Illustrative of this video influence, Schultz and Lipscomb (2007) found that while longer and shorter performance gestures do not affect percussion note durations (as measured acoustically), longer gestures resulted in the perception of longer sounding tones due to the combined sensory integration.

The present study focuses on how the combined visual perception of conductor expressive gesture and aurally apparent musical expressivity affects an audience’s perception of musical performances. Previous research in musical cross-modal sensory interactions such as these have received some attention (Shove & Repp, 1995), helping to clarify that the visual stimuli encoded by performers communicate a plethora of expressive information to the listener (Davidson, 1993; Juchniewicz, 2008; Thompson et al., 2005; Vines et al., 2006).

In the realm of large instrumental ensembles, conductors serve as both physical and conceptual focal points within the ensemble. The perceived quality of gestural communication exhibited by these conductors is often the measure by which their skills are evaluated. The

relationships of conductors' actions (e.g., frequent and sustained eye contact, expressive gesture, varied facial expression) to resultant performances are now beginning to be established (Johnson, Frederickson, Achey, & Gentry, 2003; Labuta, 2010; VanWeelden, 2002; Yarbrough, 1975). Indeed, certain gestures or *emblems* have been shown to be capable of transmitting specific musical ideas (Byo, 1990; Erdemir, Bingham, Beck, & Rieser, 2012; House, 2000; Mayne, 1993; Sidoti, 1990; Sousa, 1989). Other research has found that experienced conductors use more idiosyncratic expressive gestures (Byo & Austin, 1994; Goolsby, 1999). Expressive conductors also yielded positive attitudes toward performances (Laib, 1993; Sheldon, 2000; Silvey, 2013; Wöllner, 2008), even if there was no change in the performances (e.g., Fredrickson, Johnson, & Robinson, 1998; Price & Winter, 1991; Schultz and Lipscomb, 2007).

Within this, we see that conducting can be best articulated as communication of musical information using exclusively visual means, with more expert practitioners exhibiting a wider repertoire of effective gestures (Byo & Austin, 1994; Goolsby, 1999). Indeed, many conducting pedagogues view temporally focused, less expressive conducting as inferior.

As music is a multivariate entity—encompassing a wide range of elements in its performance and construction—traditional conducting pedagogy has largely codified representational gestural vocabularies with which to communicate wide swaths of this information in a one-to-many setting (conductor-to-ensemble, as well as conductor-to-audience). Bender and Hancock (2010) reported a study where high and low intensity gestural conducting was combined with high and low performance quality to examine the relationship of these to the evaluation of conductor effectiveness. Generally, the high intensity conductor was rated higher, but the quality of performance also had an effect on assessment with a high quality performance resulted in a higher conductor rating.

A study by Sasanfar (2012), found that expressivity of the accompanist, for a solo piece, had a significant effect on the evaluations of both the aural and visual video of the performance. The performances also had an affect, with expressive being rated higher. She also found that the participant's backgrounds mattered, with music majors being much more influenced by the differences. So, we see the statistical impact of the accompaniment and performance, and a difference between major and nonmajors.

The current study extends research that examined the impact of conducting on evaluations of ensemble performances (Morrison, Price, Geiger, & Cornacchio, 2009; Morrison & Selvey, 2012; Price, Mann, & Morrison, in press). Music majors and nonmajors rated videotapes of two conductors conducting with high and low expressivity, using identical recordings. Even though the ensemble performances did not vary, ensemble expressivity was rated higher under expressive conductors. This is similar to Price and Mann (2011) who also found a significant relationship between conductor ratings and evaluations of identical ensemble performances. Given the recent research reporting the dominance of visual information in evaluations of musical performance (Tsay, 2013), we examined whether greater specificity in musical/gestural relationships—*isolation of discrete musical components and their gestural counterparts*—might yield a greater understanding of perceptions and evaluations of musical experiences.

Method

We selected four music excerpts, two featuring high levels of dynamic contrast (e.g., piano/forte) and two featuring pronounced contrast of articulation (e.g., legato/staccato). Excerpts were extracted from Beethoven string quartets and rescored for a small chamber wind ensemble. The 11-member chamber group was selected to create a full ensemble timbre

but allow for a high degree of precision in the realization of each excerpt with clear executions of target parameters (articulation, dynamics). Consistent with previous research in this area (Price, 2006; Price & Chang, 2005), each excerpt was of approximately 30-second duration, starting and ending at appropriate phrase points, and included an equal balance of dynamic or articulation contrast. Within like pairings, we included one faster and one slower (~75% of faster counterparts) excerpt.

One of the researchers arranged, rehearsed, and recorded each of the four excerpts, one high (+) and one low (-) expression version. For each pair (+, -), the conductor utilized a metronome to ensure tempo consistency. During the recording process, performers were instructed to maximize or minimize variance of the target characteristic (articulations or dynamics) and perform all other variables accurately. Segments were then reviewed by all researchers to check for clear contrasts between performance conditions and tempo consistency across like excerpt pairs.

For the video portion of the stimuli four graduate conducting students—two male and two female—were given scores and recordings of the four segments and provided with guidelines of high and low expressivity conducting (Byo & Austin, 1994). The conductors were video recorded conducting each excerpt synchronized with a purpose-recruited live ensemble. Similar to the original ensemble recordings, conductors were recorded for each of the four excerpts showing a high or low level of expressive gesture appropriate for the target characteristic, resulting in a total of eight video segments for each. Ensemble members changed position every two excerpts and conductors changed clothing for each recording. Another researcher reviewed the completed video recordings to check for clear contrasts between + and - conducting conditions.

The video segments were imported into iMovie and the prerecorded low and high expressivity audio segments were paired with high and low expressivity video segments to

create fully crossed conditions combinations (+ +, + -, - +, - -). This procedure was followed for all excerpts and conductors creating a total of 32 segments. So the test was of a reasonable duration, and to prevent identical video stimuli from appearing within a single test administration, the 32 segments were divided into two 16-item test forms, including two items from each condition. Presentation order was randomized with the stipulation that neither the same conductor nor the same music excerpt would appear successively. The segments were interspersed with a screen displaying “Please Respond” for 8 seconds. Each order was burned on a separate DVD.

Data collection took place at a different institution in a different region from where the stimulus materials were prepared. Participants ($N = 288$) were undergraduate students (music majors, $n = 79$; nonmajors, $n = 209$) enrolled in music courses. Data collection took place in class settings with groups randomly assigned one of two test forms ($n = 145$ & 143). Participants were asked to watch the stimuli as if and evaluate the group’s performance in several categories using a 10-point Likert-type scale (*Poor to Excellent*). Evaluation categories included Articulation, Dynamic and Expressivity. Obscuring the emphasis on these specific target characteristics, participants also evaluated Performance Tempo and Ensemble Technique, qualities bearing minimal relationship with the conductor’s gestures. Test administration took approximately 20 minutes with procedures approved by and carried out in accordance with the university’s Institutional Review Board.

Results

For each pairing of conductor and ensemble expressivity (+ +, + -, - +, - -) we calculated overall mean scores for evaluations of Articulation, Dynamics and Expressivity. To determine whether the current data were consistent with previous findings (Morrison &

Selvey, 2012; Morrison et al., 2009; Price & Mann, 2011; Price et al., in press), we compared overall Expressivity scores using a repeated measures analysis of variance with conductor/ensemble expressivity, for within-subject and major status (music major, nonmajor) and test forms for between subject variables; alpha level was set at .01. There was a significant main effect for expressivity ($F(1, 284) = 434.98, p < .001$), with a strong effect size (partial $\eta^2 = .61$) (Cohen 1988). Using Bonferroni correction for multiple comparisons we found significant differences between each pair of conditions except between the + - and - + conditions (Table 1). Data indicate that participants judged ensemble performances as generally being more expressive when paired with conducting that featured greater visual contrast along a specific expressive dimension (articulation or dynamics), regardless of whether the ensemble performed with or without commensurate expressive contrast.

There was a significant interaction between expressivity and major ($F(1, 284) = 17.48, p < .001$); the effect size was small (partial $\eta^2 = .06$). Regardless of the ensemble's performance, music majors' responses to low expressivity conducting were more negative than those of nonmajors'. The main effects for major and test forms were not significant nor were the interactions of expressivity by test form or expressivity by major by test form.

Having determined that evaluations of ensemble expressivity varied depending on the visual information provided by the conductor, we then examined the relationship between these evaluations and those for the target parameters of dynamics and articulation. We separated the 16 items for each target and summed responses for each pairing of conductor and ensemble expressivity (+ +, + -, - +, - -) resulting in a set of four Articulation and Dynamics scores for each participant. We also summed each pairing of Expressivity scores corresponding to each characteristic resulting in four Expressivity scores for the articulation and dynamics examples. Articulation scores were significantly and positively correlated with

Expressivity scores (Pearson's $r = .71, p < .001$); there was also a positive correlation between Dynamics and Expressivity scores ($r = .85, p < .001$).

Interestingly, comparably strong correlations were also observed among examples not highlighting the target variable: Articulation and Expressivity scores were significantly correlated for dynamics items ($r = .77, p < .001$) and Dynamic and Expressivity scores were significantly correlated for articulation items ($r = .82, p < .001$) (Figure 1). Both Dynamics and Articulation were more positive for performances featuring more expressive conducting (Table 1). Indeed, across all items there was a significant positive correlation between Expressivity scores and evaluations of Dynamics or Articulation ($r = .84$ & $.73, p < .001$, respectively).

To further clarify these relationships we used a regression analysis (stepwise) to determine the combined contribution of Articulation and Dynamics scores, conducting condition, ensemble performance condition, music major status, and test form to Expressivity evaluations. The final model (Table 2) predicted 75.0% of the variance ($R^2 = 0.75, F(6, 2297) = 1150.41, p < .001$) and included all variables except ensemble performance of dynamics, music major status and test form. Articulation and Dynamics scores alone predicted a full 74.5% of the variance with minimal though statistically significant contributions by conductor gesture.

Discussion

It was the intent of this study to examine whether the differences in evaluations of ensemble expressivity observed for performances featuring broadly expressive or nonexpressive conducting would be evident within evaluations of specific aspects of ensemble performance. The present data suggest that, at least in terms of articulation and

dynamics, such a relationship between visual and auditory information persists and is strongly and positively correlated with evaluations of overall expressivity.

In the case of conductors—performers whose movements have no direct effect on the sounds being created—previous research has determined that the degree of gestural expressivity exhibited has a significant impact on the way in which musical performances are evaluated (Morrison & Selvey, 2012; Morrison et al., 2009; Price & Mann, 2011; Price et al., 2011). In the present study we also note that evaluations of overall ensemble expressivity were higher in cases where the conductor exhibited variability of gesture. Significant differences in evaluations of identical performances were evident between expressively conducted excerpts and those conducted in a more neutral manner.

Our results replicate Tsay's (2013) findings in which both novice and expert evaluators were most able to replicate piano competition outcomes when using visual only elements of performances by concert pianists; evaluations of our visual components also make a greater impact on evaluations of expressivity than audio. The lack of difference between evaluations of expressive ensemble performances featuring less expressive conducting and less expressive performances featuring more expressive conducting further substantiates the apparently critical role of visual information.

Studies of the relationship between performer movement and viewer/listener perception extend into specific aspects of a musical performance. Evaluation of seemingly unambiguous characteristics as melodic direction, harmonic content and note length (Schutz & Lipscomb, 2007; Thompson et al., 2005) vary depending on the accompanying visual information. In the present study we isolated similarly specific musical parameters germane to instrumental ensemble performances in the Western tradition—articulation and dynamics—and denoted by an agreed upon set of conducting gestures. Again, gesture had a significant effect on evaluations of performances, even when specifically asked to evaluate the quality of

an ensemble's performance of articulation and dynamics. Ensemble articulation and dynamics was rated as better when the variability was represented visually as well as aurally. Even with an absence of variability in the performance, evaluations were higher when conductor variability was provided.

It has been suggested that the power of the interaction between auditory and visual information is derived from the latter's ability to clarify, accentuate or draw attention to some aspect of the former (Vines et al. 2011). Musically, the manner in which movement delineates or amplifies critical aspects of a performance may allow a listener access to, or at least heighten awareness of, particularly salient affective material. While available data are limited, it seems that in the presence of well-performed affective material, the inclusion of appropriately expressive gestures does not necessarily enhance listeners' evaluations as much as the presence of unexpressive gestures may detract from the overall sense of expressivity (Morrison & Selvey, 2012). In the current study, where performances featured both strong and weak realizations of specific expressive elements, one may interpret the generally lower evaluations for nonexpressively conducted expressive performances as consistent with this finding.

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Table 1

Mean Ensemble Evaluations by Target and Condition

	Perf +		Perf -	
	Cond +	Cond -	Cond +	Cond -
Expressivity	29.79	26.06	26.51	23.56
	** _____		** _____	
	** _____		** _____	
	** _____		** _____	
		** _____	** _____	
<i>SE</i>	0.34	0.38	0.37	0.39
Articulation	15.13	13.69	13.41	13.07
	** _____		** _____	
	** _____		** _____	
	** _____		** _____	
		* _____		
<i>SE</i>	0.17	0.19	0.19	0.17
Dynamics	15.44	14.24	13.93	12.61
	** _____		** _____	
	** _____		** _____	
	** _____		** _____	
		** _____	** _____	
<i>SE</i>	0.18	0.20	0.19	0.20

* $p < .01$; ** $p < .001$

Note: Bonferroni correction for multiple comparisons. Expressivity scores summed over 4 items (max. 40); articulation and dynamics scores summed over 2 items each (max. 20).

Table 2

Summary of Final Regression Model Predicting Expressivity Evaluations

<i>Variable</i>	<i>B</i>	<i>SE B</i>	<i>β</i>	<i>R² change</i>
Dynamics Evaluation	.63	.02	.63*	.708
Articulation Evaluation	.31	.02	.28*	.038
Conductor Dynamics	.51	.09	.06*	.001
Conductor Articulation	.35	.09	.04*	.002

* $p < .001$

Indigenous Music for Classroom Practice: A Process of Building or Burning Bridges?

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Abstract

Various attempts have been made by music educators in Kenya to refocus indigenous music for classroom use since the revision of the secondary school music syllabus in 2002 that saw a remarkably large content of African music added to the curriculum. Twelve years have elapsed and, the Kenyan music scholars are concerned as to why the large content of African music added to the curriculum does not translate into classroom practice. The discrepancy between the theory (planning) and practice (execution) which occasioned the revision of the new syllabus still persists in spite of this addition. This study sort to establish the modalities employed in refocusing indigenous music for music education in Kenya. Questionnaires were administered to 190 music students from 18 schools in Nyanza Province. Oral interview was used to collect data from 22 music teachers. Analysis of the new music syllabus was done to establish the content to be covered in the African music section and the objective of teaching

the course. Non participant observation was done to establish how the content is taught, the focus of the teaching and reaction of students.

The findings of this study showed that the current attempts made at refocusing indigenous music for classroom use has resulted in only the sonic component being transferred and used to teach various concepts in music such as pitch/tone discrimination, rhythm, harmonic rationalization , while the practice of the music is ignored. Indigenous music has therefore become a facilitator for grounding the Western music concepts instead of being taught for its own sake. In addition, the methodology of delivery of content, pedagogical approaches and procedures, learning activities and resources, assessment visions and prescriptions are derived from the Western music education practice. This suggests a process of burning bridges between the cultural practice of the music and the classroom culture. The study recommends developing an Africa- sensed musical arts curriculum that allows the use of culturally appropriate pedagogies derived from theoretical, philosophical and performance practice of indigenous music.

Keywords: refocusing, indigenous music, music education, classroom practice, Kenya.

Introduction

In Kenya as elsewhere in Africa, scholars of music education have lamented the disproportionate representation of indigenous music within the curriculum (Akuno 1997, 2005). The Kenyan policy makers heeded this call and revised their music curriculum in the year 2002. The revision saw a remarkably large content of “African music” added to the syllabus. The music curriculum immediately changed its focus to emphasize the learning of

local Kenyan music as is evident in the introduction to the revised secondary school music syllabus (2002) below:

“The syllabus is designed to involve the cultural expectation of the students. It gives the learner an opportunity to know music of Kenya and that of the rest of the world. The content has been reorganized to enable the learner begin with local Kenya music with a view to identify talent and gradually expanding his/her scope to music of other countries over the four years.” The syllabus emphasizes on improvisation and use of locally available materials and resources without compromising quality.

The above introduction implies that, teaching of music should aim at producing a uniquely Kenyan specialist musician who would effectively employ the processes of music making that would enable its citizens appreciate the real value of the forty two Kenyan diverse musical cultures. It is only after appreciating their own music, that the student would appreciate musical cultures of other people and treat it with respect.

The need to refocus indigenous music in music education also stems from the fact that, the childhood and youth, when the individual traditionally learnt their cultural music practices is now spent in school. More so, the breakdown in traditional systems of cultural transmission among modernized nations on the continent of Africa has resulted in much of its traditional music being severely misinterpreted. With the urbanized children not having their working parents to induct them into indigenous musical life which is critical in the formation of cultural identity, the need to take indigenous music to the classroom has become more urgent and crucial. Taking indigenous music to the classroom would make music education and practice relevant to the societal needs and economy.

The revision of the music syllabus posed a myriad of challenges. The most urgent was to establish the modalities of refocusing indigenous music for classroom use. This challenge was coupled with the need of developing teaching resources for the new content and inservicing teachers to enhance their capacity and indigenous music knowledge base to meet the demands of the syllabus.

The change of focus of the revised syllabus set a stage for a number of studies investigating the implications of using indigenous music material to facilitate music education. Mutuku (2005) established that African folksongs can not only be used in the teaching of African music components but also Western music concepts. Akuno (2005) established four main challenges namely; ignorance in terms of misconception of the value and worth of the music in facilitating learning, inadequate vocabulary to articulate the procedures, inadequate skills to discern the processes and inability to manipulate the music products. In terms of content and processes of indigenous music, she established that, the music is versatile, acceptable and adaptable, hence, justifying its suitability for use in the classroom. The above studies concentrated on analysis of the intrinsic characteristics of indigenous music (content), its value, availability, versatility, and adaptability so as to justify its viability for use in music education. Music educators addressed the problem of access to the music, rather than the modalities of refocusing the music to the cultural present for use in modern discourse in the contemporary classroom. In my opinion, studies addressing access to indigenous music were relevant when the syllabus was still loaded with Western music content. Those studies were important to pave entry for indigenous music into the curriculum. However, the revision of the syllabus in 2002 having put more emphasis on learning Kenyan (African) music, pointed to another level of advancement with a focus of establishing the modalities of refocusing indigenous music to facilitate music education. The focus should have now aimed at

emphasizing the teaching of African (Kenyan) music for its own sake using culturally appropriate pedagogies that match the demands of the music. Akuno (ibid) having justified the use of indigenous music in music education posed the question: “do we want to refocus indigenous music in music education? If the answer is yes, then we go ahead and do just that”. But she did not explain the modalities of transferring this music to the classroom to facilitate music education, hence the need for this study.

Since 2002 when the music syllabus was revised, several attempts have been made by music educators to refocus indigenous music for classroom practice. Despite the many attempts made, the large content of African music in the revised music syllabus has not translated into the classroom practice. The discrepancy between theory (planning) and practice (execution) in the teaching of African (Kenyan) music which occasioned the revision of the new syllabus has persisted in spite the addition. The big question is why? Could it be a problem of:

- i. the method (s) used in transferring the music to the new context?
- ii. knowledge base of the teachers and their ability to handle indigenous music?
- iii. recourses used in teaching indigenous music?

This study sort to answer the above questions.

Methodology

This study employed descriptive research design. It was done from May 2012 to June 2013 during three school terms. Participants were 190 music students and 22 teachers drawn from 18 secondary schools in Nyanza Province, Kenya. Out of the 20 schools that offered music in Nyanza province during the study period, 18 were selected to form the sample. Four schools had 2 teachers each while 14 had only one teacher each, totaling to 22 teachers. The total

number of students taking music in the province during the study period was 202 spread from one to four. The highest number of music students in a school was 10 and the lowest number 2. Out of the 202 music students, 190 were selected to form the sample. Saturated sampling technique was used to arrive at the sample. Permission to interview the teachers and students was sort from the Provincial Director of Education (PDE), Nyanza. Self administered questionnaires containing both closed and open ended questions were used to collect data from 190 students. The answers for the closed questionnaire were designed in three formats namely: checking a 'Yes' or 'No' answer; cycling the correct response and inserting specific data in spaces provided. The students were instructed not to write their names to ensure anonymity. Oral interview method was used to collected data from 22 teachers using an interview guide containing both structured and unstructured questions. The oral data was recorded on tape recorder and analyzed. At the end of each interview session, a playback of the recorded data was done as part of the respondents' checking process (Punch, 1998) to validate, add or reorganize the information given. Non participant observation was done in all the schools. Two lessons lasting 3 hours each were observed. The observed lessons had to be taught in different topics and class levels. A total of 44 observations were made with an aid of observation schedule. This method was used to corroborate the responses received with the questionnaires and the interview. Analysis of music syllabus was done to establish the content to be covered in African Music. A comparative analysis of how the course was taught, and the content of the course were then drawn and the results analyzed. Data collection instruments were pre-tested for reliability prior to their use in the field. A pilot study was done in the two remaining schools which were not included in the sample, one with 2 teachers and 10 students and another with 1 teacher and 2 students. The instruments were then edited and revised in light of the results of the pilot study. Quantitative data was analysed and presented in

percentages, while qualitative responses were described by explaining the results and their implications in prose.

Results and discussion

Content analysis of music syllabus

African music is covered under history and analysis, practicals (voice, dance and instruments) and project (field work and visit and participation in music activity). The project component of the syllabus which requires students do research and participate in music making within the community through field work, visits and participation in live music performance was not taught. Yet, this is the section that provides a window for the students to interact with the music in the community and learn from the cultural practitioners. Majority of teachers admitted to being ignorant of its existence while others sited financial implications to the school.

Practical performance is another area that exposed teachers' ignorance to the syllabus.

According to the objectives, the student should perform traditional African dance and choose between playing an instrument and performing folksong. Most teachers instructed the students in one item mainly, folksong. This is because teaching is heavily examination focused hence, the teachers based their teaching on examination as opposed to the syllabus requirements. The Kenya National Examination Council (KNEC) requires that the students either perform a dance, folksong or an instrument which is at variance with the syllabus requirements.

Some objectives are not explicit and measurable e.g. in form one under history and analysis, by the end of the sub topic, the learner should be able to: (d) vocal music, (e) instrumental music. What should be done with/to the vocal and instrumental music? Such inadequacies

result in misguided interpretation of the syllabus. Hence, majority of the teachers (90.9%) complained of the syllabus being vague and amorphous. Teachers interpreted the syllabus selectively to camouflage their insecure background of African music knowledge.

The general objectives of the music syllabus are action oriented geared towards a practical teaching where students should learn by doing (theory-in-practice) and gain experience through participation. As practical oriented as the syllabus may look, teaching of African (Kenyan) music in the classroom is still theoretical in approach hence, contributing to the discrepancy between planning and execution.

Teachers' knowledge base and capacity

- i. Majority of teachers admitted having insecure background and inadequate instructional skills of handling indigenous music and instruments. They blamed this on their training, which emphasized theory of Western music at the expense of practical performance. Daniels (1986) maintains that, it is unrealistic to expect that teachers will emphasize in their teaching what was neglected as part of their own musical background. As a result, most teachers put emphasis on the singing, which was more pronounced in their training, and ignore instrumental performance, which was not emphasized.
- ii. Majority of formally trained teachers don't have a working knowledge of the natives' music. The diversity of musical cultures in Kenya caused many to doubt their ability to teach musical cultures other than their own. Most of these teachers just like the students were trained to play one African instrument and are only vast in their respective instruments. All the teachers admitted to having not done research in other music cultures and resorted to using the students whose cultures were represented in the classroom to produce songs to be learnt by others.

iii. Teaching is heavily examination focused that the cumulative nature of music learning as so aptly reflected in the syllabus, is of no use to the students. Wherever the sonic component of the song material was brought for use in the classroom, it was observed that teachers used indigenous songs to facilitate the teaching of Western music concepts e.g. intervals, harmony. They therefore used methodologies, learning activities and resources and assessment strategies derived from Western music education practice. Indigenous music therefore becomes a facilitator for grounding the Western music concepts instead of being taught for its own sake using culturally appropriate pedagogies derived from theoretical, philosophical and performance practice of the music. This was confirmed by the fact that after the lesson, the students could not remember the indigenous song taught to them. It was observed that learning by imitation is the methodological approach mostly used in practical performance.

a) As it is done

Imitation is practiced in the context of “do as I do” in other words, ‘copy me’. It becomes a mechanical activity where the learner takes over knowledge unproblematic from the instructor. When practiced in this manner, imitation only help the learners to acquire one element of action which is skills, while compromising the more complex social behavior and emotional reactions of the instructor’s action and the humanistic aroma acquired by experiencing the music through participation in a musical culture.

b) As it should be done

Imitation should be a dialogue between the reflective instructor and his/her student where the student is at liberty to think and act in practice. The student should provide a mirror image of the instructors design by recreating and reconstructing particular aspects of performances.

This allows the student's creativity to emerge. According to Schon (1987), imitation is the basis for the reflective practitioner to create a design, where he can coach the student's performance. The student selects and integrates in his own performances things which are valuable to him but which are within the idiomatic thematic cycle. Since imitation is a dialogue between the two performers, the instructor also learns from the student as they build a community of practice. The students must build confidence in the teacher as a fellow practitioner with whom they share the same basic idea about how music should be performed. The students should not only imitate the skills but also imitate away of living with the music in a community of practice acting as a performer in context (Nielson, 2006). Through imitation, they should strive to unite both the technical (skill) and the expressive (humanizing) components of the music. Currently because the students only imitate the skill, they end up beating the drum as opposed to playing the drum. Beating has a painful negative connotation, while playing is interactive, interpersonal communication with the instrument.

Methods used to refocus indigenous music for classroom practice.

- i. In transferring song material, it was evident that only the sonic component of indigenous music was brought to class and used to facilitate learning of music concepts e.g. pitch/tone discrimination, harmony etc, while the practices of the music was ignored. Most African cultural music manifestations command two levels of perception and analysis namely, the surface level and the deep level. Transferring the sound and ignoring the practice of indigenous music in perceiving and teaching of the surface level impressions of the music, while ignoring the deep level derived from the philosophical humanizing conceptualization of the music.

- ii. Playing of African musical instruments is tied to an accompaniment role. Where tuition on African instrument was offered (26.3%), students were not taught techniques of manipulating the instrument to achieve some level of adeptness and virtuosity. Hence, the learners could only play the instruments while accompanying the songs learnt. They could not accompany a song that was not learnt and which is drawn from the same community where the instrument comes from at the spur of the moment as is the practice of instrumental performance in African culture. This is because the teaching of the instrument was pegged to accompanying a particular song.

- iii. Dance is not taught in the schools. Instead students teach themselves dances from their communities. If the students cannot get a dance, the teacher gives them videos to watch and imitate, offering guidance fortnightly. Majority of teachers directed students to perform folksongs as opposed to dances because according to KNEC requirements, dance must be performed in a costume while, folksongs can be performed in school uniform. Performing in a costume has financial implications which schools may not afford. In order to refocus indigenous dances to the cultural present, teachers should study the indigenous dances to establish the non verbal cues that informed the dance vocabularies and movements with which indigenous choreographers created their work. Since non-verbal cues and their meaning are culture bound, culturally appropriate non-verbal cues should be used to communicate relevant contemporary themes. This is possible through interviews and collaboration with the indigenous choreographers.

Resources for teaching

All teachers interviewed reported lack of teaching resources. There are only two books that are used for teaching African (Kenyan) music. As a result, most teachers resorted to using audio-visual and visual material for teaching. Majority of students reported not having touched nor played African instruments even in schools where the instruments were available. This was due to the teachers' limitation in handling the instrument. Even though the teachers blame lack of teaching-learning resource material as the reason for not teaching well, their limitations, capacity and indigenous knowledge base also contributes to this discrepancy. For example, what resource does one need to teach folksong? The song itself is the resource. It is the intentionality of teaching the folksong that will determine whether to teach it as a past cultural heritage or a living tradition where we draw and building the new from the old. Musical arts education in contemporary Africa commands practical creative activities and group performance imperatives at any classroom level derived from performative learning environment of the students.

Conclusion

I have attempted to discuss the strategies and modalities of refocusing indigenous music for classroom practice. It is evident that the discrepancy between theory (planning) and practice (execution) has persisted due to the theoretical approach used in teaching African music, methods used to transfer indigenous music from cultural setting to classroom, teaching methodologies applied, limitation in the teachers' indigenous knowledge base and lack of resources among others. The methods used in refocusing indigenous music for use in the classroom are dictated by the examination requirements and not the syllabus demands. This study recommends:

- I. development of an Africa-sensed musical arts curriculum
- II. developing resources in indigenous music together with guideline on how to use them
- III. In-servicing teacher to enhance their capacity to handle indigenous music.

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Critical Reflections and Relational Understandings of Musical Values: Transformative Learning with Post-Secondary Music Education Students

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Abstract

In this paper, we explore a transformative learning approach with music education students in higher education. The overall aim is to help students recognize their own musical values and scrutinize inherent biases and assumptions through critical reflections and relational understandings. Our approach asks students to select one piece of music they love or value highly and one that they hate or do not value. They were then asked to engage in a deep inquiry into all aspects of both pieces by deconstructing both musical and extra-musical

features, with a particular emphasis on engaging them in critical reflections and “hunting” for assumptions underpinning their values for both pieces. Drawing on four key concepts (marginalization, essentialism, translation, love), the students engaged in deep explorations of the music and in most cases began to see the relational or dialogical significance of their values. In other words, many of the same characteristics that fostered their valuing of one piece of music were also found to be key characteristics in the piece they did not value. This discovery created a number of “disorienting dilemmas” that revealed paradoxes which challenged polarized positions and encouraged more relational understandings, with the outcome of increased striving on the part of the students to consider the integrity in any music-making endeavour. We describe the transformative learning approach used, an illustration of one student’s work, and present evidence of the learning transformations we found in students’ reflections on their experience.

Keywords: transformative learning, critical reflection, relational understanding, post-secondary music education.

Introduction

A number of music education researchers have acknowledged the need to find ways of helping music learners challenge their own musical biases and assumptions (Green, 1997; Morton, 2000). If we want to create opportunities for children and young people to appreciate and value a wide variety of music and help them develop their understanding of cultural and musical diversity, we believe it is important to create transformative learning opportunities for students in our post-secondary music education classrooms. Learning transformations occur when individuals change their frames of reference by reflecting critically on their assumptions and beliefs and make conscious efforts to implement plans that bring about new ways of

defining their worlds (Mezirow, 1997). Senyshyn (2006, p. 191) describes what may be perceived to be the innovativeness of new and transformative techniques and what may be referred to as the problem of *describing* them adequately or accurately in spite of the inherent indeterminacy that works against any such definitive descriptions. Dialogue-directed reflection is central to this process, encouraging listeners to test their own perspectives about unfamiliar personal paradigms that can accommodate different points of view (Mezirow, 1990; 2006). We approach this work as an opportunity to create “complicated conversations” in our educational practice, which Pinar (2012) argues is an ethical, political and intellectual undertaking, as well as a form of curriculum that “enables educational experience” (O’Neill, 2013).

The authors of this paper are both university professors who teach undergraduate and graduate classes in music education. We have discovered over the years that many students impose their own barriers and constraints to understanding and appreciating musical forms and styles beyond those they themselves value. Our values contribute to the way that knowledge is constructed, used, and exchanged – in the present and the future. However, values have an odd life cycle, one that transcends the dichotomy between the individual and the social. Values are never born solely within one person, but they can only thrive – or fail to develop – within relationships between individuals. Only through critical reflection and dialogue, can students and educators create the conditions and circumstances in which they can search together collaboratively for a more effective musical knowledge exchange. In approaching this form of *perspective transformation* with our students, we draw on transformative learning theory.

Transformative learning theory

Mezirow's theory of transformative learning draws on the work of Piaget, Freire, Habermas, Bruner, R.D. Laing, and Dewey, among others. It is a process for developing perspective transformations – becoming aware and critical of how and why our assumptions about the world act as barriers and constraints to our understandings and actions. According to Mezirow (1991), changing our meaning schemes (specific beliefs, attitudes, and emotional reactions) “make(s) possible a more inclusive, discriminating, and integrating perspective” (p. 167). In other words, perspective transformations occur when individuals change their frames of reference by becoming aware of, and reflecting critically on, their assumptions and beliefs, and consciously making and implementing plans that bring about new ways of defining their cultural understanding (Goldblatt, 2006). In particular, we focus on the notion of creating a “consciousness of dissonance” – what Mezirow would call a “disorienting dilemma” – that encourages students to narrate events or relationships that awaken in them a questioning of the given and accepted thereby fostering a questioning of the influences that have shaped their own values and experiences. Kegan (2000) argues that disorienting dilemmas foster a synthesis between valued aspects of the old perspective and insights of the new. We believe it also encourages a form of critical reflection whereby students begin to recognize and scrutinize the assumptions that underpin their musical values.

Critical reflection and hunting assumptions

Ideas on critical reflection by Brookfield (1995), Mezirow (1990) and others have their origins in the writings of the philosopher Jürgen Habermas. Habermas (1971) proposed that reflection should lead to some degree of change such as knowledge generation and emancipation (the act of liberating or freeing others or the state of being free). He argued that

uncritical acceptance leads to hegemonic assumptions being perpetuated. Critical reflection is necessary to help reveal systemic and societal controls that otherwise obstruct freedom to acquire knowledge. Habermas maintained that the goal of reflection is the transformation of self, personal, or social worlds: “Critical reflection, or reflection upon assumptions and problematization of taken-for-granted situations, is thus informed by Habermas’ concern with emancipatory interests as they relate to human knowledge” (Ng, 2012, p. 122).

We adopted Brookfield’s (1995) notion of “hunting assumptions” to encourage students to examine the fundamental, taken for granted ways of viewing the world that inform their musical values. Assumptions are presuppositions, or (often) unstated premises that underlie a particular belief. We encouraged students to analyze the assumptions underpinning their musical values in order to: 1) understand the foundations, 2) understand the strengths and weaknesses, 3) find possible sources of critique (one way of interrogating a value or belief is to identify counterexamples that do not fit with a set of assumptions), and 4) make them aware of their own assumptions when building an argument based on their values so that they can argue with better self understanding and with better strategies for exploring the validity of their values. Very often major assumptions are unconscious - they are not part of a self-consciously examined set of reasons. Thus, they are difficult to identify and argue. We all have the habit of justifying what we do by reference to unchecked “common sense.” Yet, “unexamined common sense is a notoriously unreliable guide to action” (Brookfield, 1995). In addition, a key aspect of the reflective process is to attempt to “see things differently.”

Exploring musical values through inquiry and reflection

To date, we have implemented the *Exploring Musical Values Project* with five classes of students in post-secondary music education. The most recent iteration is described below. Each class had between 16-24 graduate students or up to 35 undergraduate students. The students were asked to engage in an inquiry-based project, written paper and reflection as follows:

You will be asked to select two pieces of music as follows: one piece that you love or value very highly and one piece that you hate or value very little. You will be asked to investigate and find out as much as you can about the music/musicians associated with your musical choices. You should also analyze the music and the meanings that you associate with each piece of music and why. The purpose of this assignment is to invite you to consider the experience, beliefs and values (assumptions) that shape, constrain and enable our understanding of music and the meanings we associate with it. Our beliefs, values, and attitudes exist on an unconscious level until we examine them and recognize their influence on the decisions we make. Although there is no “recipe” or one correct way to conduct a reflexive analysis, we will explore possibilities for meaning making. However, to assist you in your critical reflections and with “hunting assumptions” as we have discussed in class, we ask that you consider your musical choices in relation to the four key concepts (marginalization, essentialism, translation, love/listening) described in the reading by O’Neill (2009). The paper explores a theoretical framework that encourages music educators to *revision* their curriculum and pedagogy and embrace opportunities for social justice education. A cultural diversity theory of difference is aimed at recognizing and scrutinizing our current (and possible) musical practices through a critical lens involving the four key concepts. These concepts are actualized through the musical/cultural practices that give them particular meaning.

Revealing paradoxes and relational understandings

The music that the students chose became an “object” of study and the catalyst for inquiry, dialogue and reflection. We have found numerous examples where students reveal key paradoxes through the juxtaposition of music that they identify (at least initially) as being highly valued or valued very little. Paradoxes create opportunities for perspective transformations precisely because they challenge our thinking and understanding. They are full of seemingly contradictory and yet interrelated features or qualities that on closer examination may appear far less polarized than they first appeared. The philosopher Gilles Deleuze (1994, p. 286) argued that even though there are different kinds of paradoxes, they are all opposed in some way to good sense or common sense. They have a way of confronting us with something that is seemingly unrelated or incomparable thereby forcing us to see something that may have been hidden or “totalized within a common element” or that might have been equated or cancelled out by common sense. In both education and research, paradoxes are often manifested through theories and methods that seem to be based on consensus but are in fact derived (at least in part) from misperceptions, misinterpretations, or misunderstandings that nevertheless lead to courses of action that defeat the original intention. Revealing paradoxes helps us to (a) move through and beyond oversimplified labels and bounded categories, (b) recognize the complexity and ambiguity in existing theory and pedagogy, and (c) raise our critical consciousness by problematizing and de-mythologizing existing structures and potential blind spots in our theories and practices.

Revealing paradoxes also increases students’ relational understandings. Relational understandings are a key feature of constructivist approaches, such as those proposed by Engeström, (1987), drawing on Luria (1976), Cole (1988), Bakhtin (1981) and Wertsch (1991) among others. These approaches elaborate on Vygotsky’s sociocultural approach and activity theory to describe the way humans engage in goal directed and purposeful

collaborative transformations of their environments. We provide an illustration here from one student. She chose a piece by the British singer-songwriter Charlie Winston as the music she values most and a piece by the South African Zef rap group Die Antwoord as the music she valued least. She describes her inquiry as a deliberate attempt “to shift away from polarized love-hate relationships with these musical artists and their work”, drawing on the four concepts of marginalization, essentialism, translation, and love/listening. She added in her introduction that she hoped the process of her inquiry would help her “acknowledge my assumptions and biases, to shift my perspective, and to evolve a new appreciation and understanding for these musicians and their music.” Her exploration of the music of Charlie Winston and the music she valued highly took her on a journey of discovery of the political subtext of the “hipster” and indie music scene as a way of revealing abuses of power in mainstream media, and arguing, “Hipsters are radically open-minded” and reject mainstream ideology and consumerism.

The student’s exploration of Die Antwoord, the music she “hated” was complex and indeed created a “disorientating dilemma” when she discovered that what she had previously viewed as a highly offensive song, video and lyrics was actually an activist project. The band originated from “zef” subculture – a subculture that emerged in post-apartheid South Africa, mostly among white, low to middle class, urban youth. She describes the song “Evil Boy” as “sinister and dirty [...] filled with violent images of scantily clad tattooed men and women (some tied up), phalluses, grotesque monsters, black magic witches, and rats all trapped in a filthy crack house.” And yet, her inquiry revealed that Die Antwoord’s “aggressive ‘filthy’ lyrics and imagery” actually mirrored “the harsh realities of life in South Africa suburban ghettos.” She also went on to discover, that the song was also a protest against African tribal leaders who force ritual circumcision on boys in their late teens. These tribal leaders call

“intact” men who refuse to be circumcised as “evil boys” who are prevented from participating in cultural and traditional ceremonies and ostracized by the community. Botched circumcisions have resulted in infections, permanent injuries and even death. After this discovery, the student stated that Die Antwoord’s “extreme image and lyrics act both as a marginalizing force (too explicit for public radio) and as an enabling force promoting cultural differentiation and financial success.”

After revealing a number of complex paradoxes through her inquire and reflection, the student wrote the following:

Before researching these music and style genres, I was convinced that Die Antwoord and Charlie Winston had very little in common, socially or culturally. But I now see that is not the case. Both zef and hipster subcultures have emerged from mostly white, low to middle class urban environments in the last ten years. And, although artistically they are different, both groups share anti-mainstream sensibility, emerging themselves in and through the aesthetic of the working class. I am surprised to discover more commonalities between these two artists than I would have even imagined before conducting this inquiry. I have come to appreciate and respect the fact that both artists deeply value their artistic freedom and creative expression – and both create music that matters and this matters to me!

Students’ reflections

Several patterns in the students’ reflections of their experience of engaging in the *Exploring Musical Values Project* have become apparent. Many students mention the growth and perspective transformations they experienced, commenting in particular on the tensions that the assignment created that enabled them to reveal previously hidden or taken for granted relationships that awakened in them a questioning of the given and accepted thereby fostering

a questioning of the influences that have shaped their own values and experiences. For some students, the disorienting dilemmas created experiences that one student described, “I was dreading, but ended up being a real time of growth.” As the students worked to create a synthesis between valued aspects of their old perspective and insights of the new, it encouraged a form of critical reflection where they begin to recognize and scrutinize the assumptions that underpin their musical values.

Many students also describe their sense of continuing interest in the work and personal growth even though the assignment due date imposes a possible “end point.” One student describes this as follows:

I'm struggling with submitting this as an assignment because it was so much fun to write and think about.... especially when you're perseverating, constantly processing, never-ending information gathering...it gets kinda tough to end things.

Another student illustrates the more specific and deepening levels of relational understanding that emerged through her engagement with the assignment, and the connections she was able to make to wider issues in education:

I very much enjoyed doing the assignment and it opened my eyes to listening with new ears to music. I believe you have found an innovative and effective way to teach about differences and social justice issues in a way that is meaningful to students. Most people will not even sign up for ‘cultural diversity’ workshops because they are afraid they will descend into ‘look what you bad colonizers did to us’ which do not accomplish any positive outcomes. Having said that, diversity workshops arose so that the big D could replace the big R—racism! People do not want to acknowledge the presence of racism in our society and so they soften it by calling it diversity. Whatever you call it, it is positional and demeaning to both sides. My current strategy is to teach about traditional social structures, which do not raise red flags, because it's before ‘those bad

white guys came.’ However, this assignment creates a new way to cast ‘webs of differences’ and see where they intersect! Instructors usually don't 'make' students do something they hate but it works!

Conclusion

Increasingly, music learners are encountering uncertainties and contradictions over what constitutes valued and valuable forms of music knowledge in their everyday lives. Different sociopolitical agendas embedded in different music practices obfuscate music learners’ worldviews and challenge them in personal and compelling ways. These values, as well as the central role that music plays in students’ emotional lives, create a particular lens through which knowledge about music is evaluated. Too often, these evaluations are considered at odds with many formal or school music education agendas. By engaging students in inquiry and reflection about their own musical values, they found that many of the same characteristics that fostered their valuing of one piece of music were also found to be key characteristics in the piece they did not value. This discovery created a number of disorienting dilemmas and revealed paradoxes that challenged polarized positions. This encouraged more relational understandings, with the outcome of increased striving on the part of the students to consider the integrity in any music-making endeavour.

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Meanings and Conceptions about the Music Activities in the Open School: A Case Study

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Abstract

This paper discusses some results from a case study at Open School Chapéu do Sol, Porto Alegre (RS), which aimed to analyze the meanings of musical activities as proposed by the young participants of the Open School Programme (UNESCO / MEC). This Programme consists of a public education policy in which public schools are opened at weekends as an alternative to decrease the level of social violence among young people in communities considered socially vulnerable. I collected data and information from interviews with participants, official documents of the Open School Programme and the empirical field observations. The data analysis was based on the concepts of musical pedagogy (Albarea, 1994; Piatti, 1994; Kraemer, 2000), school and culture (Forquin, 1993; Certeau, 1995). The analysis revealed the predominance of a content-based perspective of music education not considering young people's socio-cultural contexts. Practices resulting from this conception

ended up influencing the dynamics of participation, motivation and interaction of young people in music activities at weekends.

Keywords: Open School, musical pedagogy, young people.

Introduction

The system and policies of education in Brazil demands the opening of public schools to young people from communities considered socially vulnerable at weekends. The debate about the current situation and the policies of the basic education system indicate the need to build up a renewed or an expanded and innovative school (Abramovay *et al.*, 2003). These demands resulted from a system of public schools that were conceived and maintained under supposedly universal curriculum models but have been showing worrying data revealed in dropout rates and levels of violence in the communities in which young people have been the main protagonists.

This situation resulted in a proposal of valorization and redefinition of the institution as “a school function and not just as a school address” (Werthein, 2004), by UNESCO in 2000, which launched the Open School Programme at national level. This initiative involves the opening of public schools at weekends as an alternative to decrease the levels of violence and build spaces of citizenship for young people of communities considered socially vulnerable.

In this Programme, workshops are offered in two shifts (morning and afternoon) and "selected from the query to the local youth and previous mapping talent [that can act as workshop instructors] in schools and communities" (Noletto, 2008, p. 19). This selection is supposed to take into account the peculiarities of local and regional diversity of each state where the

Programme is developed.

In the Open School Programme, music and other cultural activities have been taken as an ally to confront social problems involving young people from these communities. Considering this premise, this research sought to understand the sense in which music could contribute to the fulfillment of the proposed objectives for the Programme.

The choice of this school as the *locus* of research was justified by the continuous participation of the institution in the Open School Programme between the years 2006 and 2007 - the time I collected the data. This school also demonstrated to be an interesting field for the study proposed due to the diversity of the musical activities developed such as Music Production Workshops and Hip Hop Groups.

This study had as main objective understanding and analyzing the meaning of music pedagogy at Open School Chapéu do Sol through the methodological tools of participant observation of / in musical activities, interviews with workshop participants, and analysis of the official documents of the Open School Programme. Which musical and pedagogical concepts were related to the Open School Programme? What musical pedagogy really happened in music workshops at Open School Chapéu do Sol?

Theoretical framework

The theoretical framework of this study is based on the concepts of musical pedagogy (Albarea, 1994; Piatti, 1994; Kraemer, 2000), school and culture (Forquin, 1993; Certeau, 1995). Piatti (1994); Albarea (1994) and Kraemer (2000) argue that the pedagogy of music or musical pedagogy is defined as a concept and as an interdisciplinary area, which assumes that

music itself is not the focal point, but an object of knowledge for the service of different human needs in different contexts. Kraemer (2000, p.52) states that all educational practices with music belong to the field of music pedagogy once it focuses on the relationship between people and music.

To understand the meanings of musical pedagogy at Open School Chapéu do Sol, it was necessary to consider not only the social context, but also the musical and pedagogical conceptions arising from the speeches and musical practices of the participants. It became necessary, therefore, to perform a deeper analysis in order to understand this community, its history, its cultural values, tastes and musical practices confronting them with the organizational, political, ideological and educational aspects behind Open School Programme.

Although the Open School Programme has been conceived from the idea of transforming the school into a welcoming place to the people of the community, the occupation and appropriation of places used for the music workshops, the time of operation activities, the permanence of people in space, and especially, the control of who could or could not participate in activities, became quite similar to the regular school rules. Furthermore, the concept of music as a "cultural activity" in leaders speeches and documents of the Programme, are consistent with Forquin's (1993) analysis when he states that "undoubtedly there is an organic relationship between education and culture" and therefore, the school and society are characterized as legitimate sites of "cultural transmission" (p. 9-10).

Methodology

Interpreting the Open School space was a big challenge for someone who like me has worked at regular schools since the beginning of their career. The hybridization, mutation,

multiplicity and ephemerality characteristics of this space were unfamiliar to me, a person who was also brought up by school education. In this sense, to approach people, be received in the empirical field as a researcher, listen to the speeches of the participants about this space, and also interpret and suspect of everything I read, listened and watched, made me feel like an outsider in / for the community and participants at Open School Chapéu do Sol.

The observations and interviews constitute the main instruments used to perform the data collection in this study. Photographic and video materials, musical recordings of the participants' musical productions were also collected. From February to December 2007, the period of data collection in the empirical field, twenty-two interviews were done with research participants. This group consisted of fourteen teenagers, one music instructor, one street-dance instructor and six Programme coordinators. Besides the interviews, observations and theoretical reflections were recorded in field diaries.

The films and photographs of the rehearsals and the recordings of participants' musical productions were transformed into DVDs and CDs, and copies were given to them. I tried to let them see and listen to themselves immediately after their performance, allowing them to evaluate their own production. These recordings have an important role in their lives and in their permanence in music activities at Open School as illustrated by some statements from participants B. Boy and MC: "I showed the DVD to my friends and they said they will make me a fan club!" (MC); "Everything's better for me! I feel people see us and we can move on! " (B. Boy).

I should also emphasize the importance of the official documents of the Open School Programme which were used as sources for this study, specially the Pedagogical Proposal Open School Programme (Tinoco; Silva, 2007) and the UNESCO publications.

I considered as elements of analysis, the assumptions of the Programme, its main objectives, conceptual frameworks and also the results of evaluative research on the impacts of the Open School Programme in the documents above. The documentary sources had a key role in understanding the Programme physical, organizational, political and pedagogical structures, as well as to carry out a critical analysis of speeches and events observed in the empirical field.

Results

Among the main aspects revealed by empirical data, I realized the limited participation of young people in community music workshops. In other words, young people who participated actively in music workshops were mostly the same students who attended the regular classes at Chapéu do Sol School, or young people who were chosen to conform to a certain standard of behavior. The following statement from the School Coordinator reveals this aspect: "Those who participate in our workshops can not have discipline problems during the week." Therefore, access to music workshops was not "open" to the community, but selective from a controller paradigm that is based on traditional school rules.

In this sense, the adults who planned the music workshops for the Programme justified that music, in this context, should help young people to become "more human" as they understood that music could be an effective tool for "transformation and pacification of youth in social vulnerability." These conceptions could be confirmed through some popular sayings

mentioned by coordinators and workshopers of the Programme such as "Those who sing put their sorrows away"; "Nothing better than a guitar to promote a culture of peace"; "All work and no play makes Jack a dull boy" and yet, "Idle hands are the Devil's tools".

The analysis of the speeches of music workshopers and UNESCO managers indicate that the difficulties in the development of music workshops were related to the lack of technical-musical information, young people's excessive interest in rap, flood of low culture brought by funk and rap lyrics and lack of time that people in situation of social vulnerability have to learn music. The "formula" found to deal with such "difficulties" and teach "new musical information" to young people is explained by a music workshoper with the following metaphor: "It's like giving medicine to children: you have to put some cherry taste in order to make them like it! "

On the other hand, for young people who participated in the Hip Hop Group of the School, the activity of creating rap lyrics and rehearsing their music at weekends represented a chance to become visible to themselves and to their community, as stated by MV Bill:

I like making music! I have had a dream to become a MC since I was a child!
To be a Hip Hop Singer! Sing the reality that happens every day in the streets...
Because I have to follow my dreams, right? Write my songs so I do not forget
them anymore... (01/12/2007).

MV Bill 's speech represents the voice of a large part of the young people interviewed, for which the Hip Hop represented not only the possibility of a better life and career but also the chance to be successful and recognized in their community and even at school, through

presentations in commemorative events held in the institution. Another important aspect for young respondents was related to the construction and affirmation of their generational, socioeconomical and racial identities through the sharing of choices and musical practices in the Hip Hop Group. Although the coordinator of Open School, UNESCO managers and even the Pedagogical Programme themselves affirm that one of the main objectives of the workshops was to transform the young people into "protagonists" in rehearsals and teaching processes, there was a need for explicit control of musical activities and young people by an adult, by a qualified professional.

Final thoughts

This paper aimed to understand the meaning of music pedagogy in the Open School Chapéu do Sol through the analysis of the participants speeches, data collected in the empirical field and documentary sources of the Open School Programme. For this, it was necessary to understand the musical and pedagogical concepts underlying the speeches of the participants regarding the practices carried out during music activities and interpret these in relation to the conceptual framework of the Programme.

In this sense, the choice of case study methodology was adequate to deepen the theme proposed for this study, consisting of often conflicting discourses and practices. This methodological approach assumes that the researcher acts as a mediator between the philosophical conceptions and the realities constructed by individuals interacting with their social worlds, not excluding therefore, the contexts in which the data were collected (Merriam, 1998). In this perspective, the reactions, perceptions and decisions made during the process of data collection can broaden the scope of "what was known about the situation [individuals, context]" through "nonverbal aspects" (pp. 6-7).

Although the discourses state that music was an element of social inclusion, pacification and raising of self-esteem, or even considered as an important tool for the development of youth participation, the information revealed in the data indicated that the music workshops at Open School Chapéu do Sol were not a space for inclusion of all young people in the community, but only for those who attended regular school.

The Hip Hop Group was the main activity for most young participants. This can be explained by the capacity of the group in providing links to the identity, polysemic and social aspects inherent to them. The Hip Hop Group represented an opportunity for the young people to express their ways of being, living and seeing the world, the society and the community to which they belonged.

Paradoxically, according to the Programme coordinators and managers' conceptions, the activities of singing, writing lyrics and practicing rap, did not represent a legitimated process of musical learning, but a waste of time or hobby. In their opinion, there is only one way to learn music and that reinforces traditional conceptions about the processes of teaching and learning music. These conceptions are necessarily linked to the effort, discipline, reading and writing songs considered of good quality. This view reveals what Piatti (1994) defines as "content-music pedagogy", in which only the music is the main point, while people and contexts are disregarded.

It was inevitable to conclude that the Open School inherits from the regular school an educational model that defines how and what should be taught, what content has value, who can teach, how each should participate and which physical space can be occupied for certain

activities. Such views were clearly reinforced in the speeches and practices in music workshops and in many instances influenced the attitudes, behaviors and especially the activities of musical creation, appreciation and performance of the participants. Sometimes they used the suitable behavior for the school environment, for example, avoided singing or sang softly and hid rap and funk lyrics which contained bad words and explicit reference to violence. The lack of pedagogical and musical comprehension and the consequent devaluation of youth musical processes led to drop out or lack of commitment to Hip Hop Group and musical activities at Open School.

Among the results of this research I highlight the need for music educators to understand the importance of the relationship between people and music to conduct a significant educational proposal in the context of Open School. To do so, we must articulate the dialogue between academic knowledge with the know-how of the participants of Open School. It is also important to make directors, managers and coordinators at Open School Programme aware of the legitimacy of the musical practices that happen in music workshops in this Programme.

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Independent Music Teaching in the 21st Century: What Teachers Tell us About Pedagogy and the Profession

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Abstract

Independent music teaching is steeped in centuries of tradition and engages millions of students worldwide. Nevertheless, the work of independent music teachers has been scarcely noticed as an area worthy of research. Consequently, the purpose of this research study was to ascertain an understanding of the characteristics and professional practices of contemporary Canadian studio music instructors. A survey of closed- and open-ended questions was placed in the conference bags at the Canadian Federation of Music Teachers Association biennial conference in July 2013. Survey items included questions about demographics, instruments taught, age and level of students, lesson components, and teachers' perceptions of their students' practice habits. The survey responses were analyzed using descriptive statistics. Most of the teachers reported teaching 30 -40 students each week, who were generally between the ages of 7 and 17 years. Typically, students stay with these teachers for 5 to 7 years and lessons ceased when students finished high school or become too busy with other activities. Nearly all teachers reported that they teach students repertoire from notated music and conservatory system in Canada were also reported as prominent, with frequent citations of music technique, ear training, sight reading, and theory and additional skills such as playing by ear, composing, or improvising were also included in the lesson. When asked about the respective roles of teachers, parents, and students in supporting musical growth, a rich picture of complementary roles emerged such parents, teachers, and students setting annual goals, the teacher and student choosing repertoire and critiquing performances together. Teachers reported that over half of their students were "good practicers"—that is, they often completed the tasks assigned at lessons. The most commonly cited reason for lack of practice was that students are busy with other activities, the inability to properly self-assess their playing, or unmotivated to play their

instruments outside of lessons. Teachers indicated notes from their lessons written by the teacher, the metronome, parental supervision, and recordings of performances by others were recommended practice supports. Digital technologies have enhanced their teaching, with many making reference to the value of YouTube recordings. Digital applications were used to access recordings, to communicate with students and parents between lessons, to reinforce ear training or theory concepts, and to find repertoire. Findings from this survey illuminate how teachers practicing are steeped in tradition while at the same time incorporating contemporary ideas and resources.

Literature review

Independent music teaching is primarily centred on learning to play one's instrument by mastering notated music composed by the Western masters. And the Western canon is a powerful one. Scholars and pedagogues have debated what repertoire and genres should be included in music education, concluding that the canon needs to be substantially broadened (e.g., Harwood, 2007; Sloboda, 2001). These debates are having a direct effect on contemporary studio teaching. Repertoire lists for music examinations increasingly reflect contemporary and world musics, including music from movies and television, and popular selections arranged for various instruments (RCM Piano Syllabus, 2008).

Described as “largely an oral tradition, which involves transmission of knowledge and experience from teacher to student in an imitative way,” (Zhukov, 2007, p. 113) imitation is a major pedagogical driver in independent music teaching. Nevertheless, recent research suggests that some independent music teachers devote instructional time to creative activities like improvisation and composition. In a research study examining four group-piano lesson

contexts, Pike (2013) described how teachers embraced a comprehensive approach to curriculum, which included solo and ensemble repertoire, games, harmonization, and ear training and transposition.

The one-on-one teacher-student relationship

A feature of studio teaching that is highlighted in nearly every anecdotal or research account is the close personal relationships that develop between students and their teachers (e.g., Davidson & Burland, 2006; Upitis, 1990). Teachers are variously described as coaches, mentors, and pseudo-parents. There are distinct advantages to a one-on-one model for music learning. Learning to play an instrument is an exceedingly complex task, requiring knowledge to be built gradually (Davidson & Jordan, 2007). The undivided attention of a single teacher can ensure that basic technique and an understanding of music notation are relayed, as well as more stylistic knowledge. However, it should be noted that when the teacher-student relationship is problematic, students often give up their music studies (Davidson, Howe, & Sloboda, 1997).

Characteristics of music teaching

The literature tells us that the most effective music teaching involves assigning repertoire within a student's technical capabilities, modeling segments of the repertoire, and giving technical feedback in terms of the musical effect (Duke & Simmons, 2006; Kennell, 2002). These characteristics rely on the teacher's knowledge of the student's abilities that the intimacy of the teacher-student dyad reveals.

Further, Kostka reported that most of the lesson time consisted of student playing or performance (57%) and teacher talk (42%)—with the implication that students rarely get

a word in edgewise (Kostka, 1984)! This finding was also prevalent in Hepler's (1986) study of 20 college-level studio teachers. But even though students may not speak often, this does not mean that the student role is a passive one. Rather, the lesson is jointly guided by both the teacher and student (Kennell, 1992), based on the teacher's understanding of the student's musical capabilities and interests. In referring to the work of Vygotsky (1934/1978), Kennell (1992) claimed that independent music teachers are extremely attuned to shaping the lesson so that it occurs in what Vygotsky (1978) famously termed the Zone of Proximal Development, where the task is neither too difficult nor too easy, thus allowing the student to be challenged and to be guided by the more capable teacher.

The role of teachers, parents, and student during practising

While the lesson setting consists of the teacher responding to the playing of the student, the practice setting involves the student responding to his/her own playing. How can the learning during practice be characterized? We suggest it is more complex than Kennell's observation that "the student works independently throughout the week to prepare his or her lesson assignments" (Kennell, 1992, p. 8). Rather, as students implement the lesson assignments, they rely on parental oversight, interactions with other musicians, as well as practice aids developed by their teachers to help with the process.

McPherson, Davidson and Faulkner (2012) document the link between self-regulation and persistence with lessons and musical attainment. As students become more experienced at music making, there is a change in the level and types of support that they need to practice. The process of shifting responsibility from external regulation to self-

regulation has been called co-regulation by some (Hadwin & Oshige, 2011) and transactional regulation by others (Sameroff, 2010).

Drawing on Sameroff's theory of transactional regulation, McPherson and his colleagues claim that in music learning we do not move linearly from external regulation to self-regulation, but rather self-regulation includes other elements of regulation, including the ideas and strategies suggested by teachers during lessons, and support from parents and peers in the time between lessons. McPherson, Davidson, and Faulkner (2012) followed 157 students in Australia over a 14-year period and found that having supportive parents, a variety of performance opportunities, and positive peer interactions served to regulate and enhance student learning.

Music pedagogy supported by technology

While not all teachers embrace technology with enthusiasm, technology is nevertheless a strong force shaping independent music teaching. Digital technologies have become so ubiquitous that teachers and students have almost seamless access to musical resources. Further, technology can reduce isolation for both music students and their teachers by providing the means for communicating between weekly lessons. And technology can be a catalyst in exposing teachers and students to new genres. At the same time, it is important to understand that it is not the technology *per se* that influences teaching and learning, but the underlying shifts in pedagogy that the technology may instigate and/or support that influences teaching and learning.

Method

This paper describes the results of the first phase of a three-part study, designed to describe the practices and characteristics of contemporary independent music teachers. The 193 teachers who attended the Canadian Federation of Music Teachers Association (CFMTA) annual conference in July 2013 were invited to complete a survey that was placed in their conference bags; prizes were offered as incentives to fill out the survey.

During the second phase (2013–2014) we will distribute a revised version of the survey through conservatories and schools throughout Canada. The third phase of the work will involve surveying independent teachers in other countries.

The teacher survey was developed with 26 music teachers in the Greater Toronto Area, by gathering information about teaching practices through interviews and observations as informed by the research literature. Of the 53 questions, six were open-ended, inviting teachers to think back to their own experiences as students, to describe some of their current teaching challenges, and to describe how they used technology in their teaching. The closed-ended items included questions about demographics, instruments taught, age and level of students, lesson components, and teachers' perceptions of their students' practice habits. The survey responses were analyzed using descriptive statistics.

Results

A total of 51 teachers completed the survey (26.4% response rate). These teachers came from eight provinces and one territory. There were no teacher respondents from Quebec, Newfoundland and Labrador, Northwest Territories, or Nunavut.

The survey results are described based on the four sections of the survey, namely, (a) demographics, (b) music studios, (c) use of technology, and (d) professional development.

Demographics

Nearly all (98%) of the responding teachers were female. Most (92%) indicated that they had completed had music conservatory training, with 75% at the Grade 9 level or beyond. Over 75% of the respondents had post-secondary degrees or diplomas in music or other fields. Years of experience ranged from less than 5 years to over 40 years in the profession. A third of the respondents had been teaching for 31-40 years, with another 28% teaching for over 40 years. Most of the teachers surveyed taught piano and/or theory (96%), with others teaching strings, woodwinds, early childhood music, and electronic keyboard.

In describing their most influential teachers, many talked about the importance of the relationships they developed with their teachers and the ways in which their teachers instilled, for them, a lifelong love of music. Respondents described how their own teachers had exhibited a passion for music, kindness, and devotion to the profession. Many reported trying to emulate the qualities they observed in their own teachers.

Music studios

Most of the teachers reported teaching 30 students each week, and nearly a third of the teachers reported teaching over 40 students a week. With the exception of teachers

specializing in the early years or the adult learner population, most students were between the ages of 7 and 17 years. The teachers overwhelmingly reported that they enjoyed sharing their love of music with others and in meeting the challenges that teaching presents. The two greatest challenges teachers identified were motivating students to practise (70%), and keeping up with technology (47%).

Typically, students stay with these teachers for 5 to 7 years (45%), with 30% studying for 8 or 9 years, or even 10 years and beyond (17%). Lessons cease when students finish high school (74%) or become too busy with other activities (68%). Only 6% report that they stop taking lessons because they have learned all they need to know to be independent musicians.

Most students were described as elementary and intermediate level musicians, and teachers reported that over half of their students were “good practicers”—that is, they often completed the tasks assigned at lessons. The most commonly cited reason for lack of practice was that students are busy with other activities (96%). Over a third of the teachers (37%) claimed that students do not have the ability to properly self-assess their playing, and another quarter (26%) reported that students are not motivated to play their instruments outside of lessons. The lack of parental support was also identified as an important limitation on practising (46%). One respondent wrote, “Piano is expected (by parents) to be a once a week activity (like soccer or karate) and the importance of practise or the fact that music is an academic subject is not understood.”

Teachers reported that the most valuable resources that students use to help them practice are notes from their lessons written by the teacher (93%), the metronome (66%), parental

supervision (62%), and audio or visual recordings of performances by others (53%)(see Table 1).

Table 1: Practice Resources Used By Students

Resource	Percentage	n ⁵
Notes from their lessons that you write	93%	42
Metronome	66%	30
Parental supervision	62%	28
Recordings of performances by others	53%	24
Student's aural memory from lesson	51%	23
Checklist generated by teacher/student/parent	44%	20
Audio/visual recordings of their own practising	22%	10
Games/apps	18%	8
Calls or emails between lessons	18%	8
Notes from their lessons written by students	18%	8

When asked about the respective roles of teachers, parents, and students in supporting musical growth, a rich picture of complementary roles emerged, supporting the notion that the transactional regulation model might be appropriate for understanding the development of self-regulation in musicians (see Table 2). Over a third of the respondents

4 46 of the teachers responded to this question

indicated that teachers, parents, and students were *all* involved in setting goals for the year, with another 45% reporting that students and teachers set yearly goals together. Half the respondents reported that both teachers and students were involved in critiquing recordings of the student playing and identifying lessons learned from reaching a performance level for notated repertoire. Fully 85% of the respondents indicated that the choice of repertoire was made by teacher and student together. The activity that was most likely to be teacher led was defining expectations for learning notated music, with 70% of the respondents indicating that they directed this activity. Some of the activities that were identified as parent and student activities were setting practice schedules (15%) and setting goals for the time between lessons (13%). These results indicate that the “play and talk” characterization is too simple to describe the process of learning to play an instrument, especially when the context is broadened beyond the music lesson to the time between lessons.

Table 2: Teacher, Student, and Parent Transactional Regulation

	<u>T¹</u>	<u>S²</u>	<u>P³</u>	<u>T-S</u>	<u>P-S</u>	<u>T-P</u>	<u>T-P-S</u>	<u>N/A</u>
<u>Setting goals for the year</u>	<u>13%</u>	<u>0%</u>	<u>0%</u>	<u>42%</u>	<u>0%</u>	<u>7%</u>	<u>38%</u>	<u>0%</u>
<u>Setting goals for the time between lessons</u>	<u>33%</u>	<u>2%</u>	<u>0%</u>	<u>42%</u>	<u>13%</u>	<u>0%</u>	<u>9%</u>	<u>0%</u>
<u>Choosing repertoire</u>	<u>14%</u>	<u>0%</u>	<u>0%</u>	<u>84%</u>	<u>0%</u>	<u>2%</u>	<u>0%</u>	<u>0%</u>
<u>Defining expectations for learning notated music</u>	<u>69%</u>	<u>0%</u>	<u>0%</u>	<u>24%</u>	<u>4%</u>	<u>0%</u>	<u>2%</u>	<u>0%</u>
<u>Identifying strategies for learning difficult passages</u>	<u>71%</u>	<u>0%</u>	<u>0%</u>	<u>29%</u>	<u>0%</u>	<u>0%</u>	<u>0%</u>	<u>0%</u>
<u>Breaking down a complex task into smaller parts</u>	<u>62%</u>	<u>2%</u>	<u>2%</u>	<u>31%</u>	<u>0%</u>	<u>0%</u>	<u>2%</u>	<u>0%</u>
<u>Creating a practice schedule</u>	<u>11%</u>	<u>7%</u>	<u>4%</u>	<u>42%</u>	<u>13%</u>	<u>2%</u>	<u>20%</u>	<u>0%</u>
<u>Critiquing recordings of the student playing</u>	<u>9%</u>	<u>0%</u>	<u>2%</u>	<u>48%</u>	<u>0%</u>	<u>2%</u>	<u>2%</u>	<u>36%</u>
<u>Locating video/audio recordings for students</u>	<u>42%</u>	<u>2%</u>	<u>2%</u>	<u>36%</u>	<u>0%</u>	<u>2%</u>	<u>7%</u>	<u>9%</u>
<u>Identifying lessons learned from reaching performance level</u>	<u>38%</u>	<u>0%</u>	<u>2%</u>	<u>47%</u>	<u>0%</u>	<u>0%</u>	<u>4%</u>	<u>9%</u>

<u>Sharing a student's work with other students</u>	<u>25%</u>	<u>11%</u>	<u>2%</u>	<u>30%</u>	<u>5%</u>	<u>2%</u>	<u>16%</u>	<u>9%</u>
<u>Encouraging students to improvise or compose</u>	<u>60%</u>	<u>5%</u>	<u>0%</u>	<u>21%</u>	<u>0%</u>	<u>2%</u>	<u>5%</u>	<u>7%</u>
<u>Helping students become independent musicians</u>	<u>49%</u>	<u>0%</u>	<u>0%</u>	<u>29%</u>	<u>0%</u>	<u>7%</u>	<u>16%</u>	<u>0%</u>

1 Teacher

2 Student

3 Parent

Nearly all teachers (98%) reported that they teach students repertoire from notated music. The components that are part of the conservatory system in Canada were also reported as prominent, with frequent citations of music technique (98%), ear training (94%), sight reading (98%), and theory (89%). Half (49%) reported that they teach students to play by ear and 43% percent of respondents taught composition and improvisation.

Use of technology

Based on a rating scale from 1 to 10, with 10 indicating ease and facility with technology, the average rating was 5.1 (SD=2.88), indicating that the range of comfort with technology was considerable. Most (78%) reported having internet access in their teaching studios, and nearly all students had internet access at home (96%).

Most of the respondents incorporate at least one form of technology in their teaching, with 42% using desktop computers, 42% using laptop computers, 21% using tablets, and 20% using iPods and Smartphones. Some teachers use students' devices (e.g., 17% report using students' iPods), and some use both their own devices and student devices.

Teachers reported that digital technologies have enhanced their teaching, with many making reference to the value of YouTube recordings. Others explained how they used

technology to keep in touch with students during the week or communicated with students who could not physically attend lessons. Teachers also reported using technology to find new repertoire, reinforce ear training through apps and games, and for online theory.

Some teachers described their difficulties in keeping up with the latest developments and in managing student expectations have formed as a result of the prevalence of digital tools. Other challenges associated with technology included “students imitat[ing] amateurs on YouTube” and the time that it takes to “locate and prepare” technology resources for students.

Teachers reported that about a quarter of their students use desktops, laptops, tablets, and iPods to support their home practising. Most of the teachers (74%) agreed or strongly agreed with the statement that using technology to support their pedagogy improves student learning. When asked how they use technology in teaching, the most common responses were to compare performances by different musicians (54%), to share performances and links (47%), and to keep a record of student practising and/or performances (28%).

Professional development

Given that the survey was distributed through a teachers’ conference, it is not surprising that the respondents regularly take part in professional development activities. These activities included workshops, courses, reading articles and books about music teaching, reading blogs, viewing webinars and online videos, and conversing with colleagues about teaching issues. Listening to music—whether of professional artists in recital or students

at the local festival—was also a common form of professional development. While 77% of teachers indicated that they regularly reflected on their teaching, one of the least popular forms of professional development was viewing videos of one’s own teaching (60% of the respondents answered “never” to this question). Yet, watching videos of one’s own teaching is an approach that has been identified as exceedingly helpful in the professional development of classroom teachers (Borko, Jacobs, Eiteljorg, & Pittman, 2008). It is quite possible that independent music teachers would benefit from this form of professional development, but their isolation from other teachers makes it difficult to do so.

Conclusions

At the outset of this paper, we noted that independent music teaching is underrepresented in the research literature. The profession itself, as Uszler (1996) claims, is “regarded benevolently, yet often patronizingly” (p. 20). Brand (1992) suggests that independent music teaching is shrouded in a “veil of mystery” (p. 3), despite the fact that it is the most prevalent form of music study worldwide. Consequently, it is important that the results from the present paper help broaden, deepen, and demystify our understanding of independent music teaching.

We have confirmed that teachers still focus on notated music in time-honoured ways, but that they also engage in creative pursuits with their students. We have also learned that many teachers embrace technology, but cautiously, always keeping the musical study at the forefront of their intentions.

We close with the words of Kennell, who wrote that independent music teaching is “a deceptively simple term that represents an extremely complicated professional practice” (2002, p. 244). The results reported here suggest that indeed this is so. And it is a professional practice that affects the lives of millions of children. For that reason alone, it is worthy of deeper study.

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An Evaluation of Children's Instrumental Learning in the Every Child a Musician (ECaM) Programme

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Abstract

The paper reports on a research evaluation of children's instrumental learning in the opening two years of a new programme, Every Child a Musician (ECaM). The ECaM programme provides free instrumental tuition for all children aged 9+ for three years living in an area of East London, UK. In the past academic year 2012-2013, over 10,000 children have participated. Data are reported on instrumental tutors' assessment of children's learning in terms of key variables that relate to instrumental choice, age, ethnicity and sex, as well as on how the ECaM-derived data compare with official measures of academic development in reading, writing and mathematics for a sub-set of the same children.

Keywords: children, instrumental learning and teaching, ECaM.

Introduction

There has been widespread international interest in children's instrumental learning and its potential impact on other aspects of children's development. One early example that has caught the popular imagination is the Venezuelan national instrumental music education programme *Fundación Musical Simón Bolívar*, commonly known as *El Sistema* (cf Sánchez, 2008). Since the programme's genesis by Maestro Dr José Abreu in 1975 as a way of using the learning of classical instrumental music as a force for social change, various organisations and Governments in other countries have adapted and applied the concept as a rationale for the provision of instrumental tuition for underprivileged children. In England, for example, the *El Sistema* concept has inspired a closely related initiative called *In Harmony*. This was piloted in 2008 and is funded currently (2012-2015) by the Department for Education through the Arts Council England in a small number of Primary schools in six urban areas that have marked social and economic deprivation. A similar programme in the East of England (and originally part of the earlier *In Harmony* pilot) is overseen by a charity, *Sistema England*, which also has an overview of work in the other six locations.

Another related, but somewhat larger, instrumental programme is being organised in Newham, the London Borough that hosted much of the UK Olympic Games and Paralympic Games in 2012. Newham is situated in East London and is one of the poorest urban areas in the country. It has the second most diverse population in the UK and 70% of citizens are non-White, with Asian (43%) and Black (26%) pupils together making up more than two-thirds of the school population (Newham, 2011). The Newham 2008 census data revealed that 144 languages were recorded as home languages, with English being the most common, but only

for a minority (35%) of pupils. Newham Local Authority is considered to have the highest population of refugees and asylum seekers in London and also has an employment rate of only 56%.

This cultural diversity and challenge is part of the socio-economic context in which the Mayor of Newham, inspired by the *Simón Bolívar Symphony Orchestra* and *El Sistema* concept, initiated a local council policy commitment to provide free instrumental music tuition to all children in the Borough aged nine and ten (i.e., Primary school Years 5 and 6). Following an initial pilot programme in ten Primary schools in 2010-2011, the *Every Child a Musician* (ECaM) programme was made available to all Newham Primary schools in the following year (2011-2012) and has since been extended (2012-2013) into the first year of Secondary school (Year 7). The £2m+ core funding from Newham enables children to experience up to three years' school-based instrumental tuition and also to keep their choice of musical instrument if they continue their studies across two consecutive years. Children have weekly lessons throughout the school year and are taught in small groups by experienced musicians, drawn from a large team of ECaM instrumental tutors. Nominally, pupils have a choice of studying one of eight instruments (clarinet, flute, guitar, keyboard, trombone, trumpet, viola and violin), although each school normally selects three types of instrument in any one school year. The schools are encouraged to change their choice of instrument in subsequent years, thus allowing them to create diverse instrumental ensembles over time. By the end of ECaM's second full year in the Summer 2013, over 10,000 children were learning to play a musical instrument on a weekly basis.

Aims of the research

At the beginning of the 2011-2012 – the first full year of the ECaM programme – a team of researchers from the Institute of Education (IoE), University of London, led by the first

author, were appointed to assist Newham in undertaking an extensive and ongoing research-based evaluation of the quality and impact of the programme (see Welch, Saunders, Himonides & Purves, 2012 for an overview of the first year's evaluation). This research paper summarises key findings concerning children's instrumental learning from across the first two years of the ECaM evaluation (2011-2013). It has also been possible to explore any evident correlations for a sub-set of children in Year 6 between their instrumental learning and their scores in national assessments for core curriculum attainment in tests at age 11.

Method

The Newham school census data for January 2013 indicated that there were N=11,655 children in school Years 5, 6 and 7 (aged 9+ to 11+) that were eligible to participate in the ECaM programme. Across the two years of research data collection (2011-2013), the IoE team collected ECaM-related data on n=6,253 individual children, based on matching the children's statutory Unique Pupil Numbers (UPNs) against the available school census data, using a specially designed questionnaire. The research population represents 54% of the total Newham school population for school Years 5, 6 and 7 in 2013, and over three-quarters of those children actually in the ECaM programme in 2012-2013, given that a small number of Primary schools chose not to participate because they already had their own instrumental learning provision. In total, across the two years of ECaM (2011-2013), we collected n=10,051 tutor assessments of children's instrumental learning, including n=9,542 full data sets which have been used for the reported analyses below.

The paper also reports sub-sets of the main dataset concerning: (a) instrumental learning progression for children new to the ECaM programme within one school year (e.g., n=2,071 Year 5 children in 2012-2013) and (b) longitudinal data across two school years for children progressing from Year 5 to Year 6 (i.e., there were originally n=1,580

tutor assessments in 2012 when the children were in Year 5, followed by n=2,020 assessments for the same cohort as Year 6 in 2013; within these two datasets, we have n=1,010 individual assessments that we can match across two school years as children progressed from Year 5 to Year 6). In addition, in the second year (Summer 2013), ECaM instrumental tutors from 60 schools reported on the instrumental learning of n=4,713 children that can be compared to n=2,562 similar assessments at the end of the previous academic year. Finally, we were also able to cross match data from n=2,020 Year 6 pupils for their instrumental learning against their 2013 National Key Stage 2 (age 10+) assessments in reading, writing and mathematics.

Main findings

(a) Children's choice of instruments

Across the opening two years of the ECaM programme, children's preferences in their choice of instrument have been relatively consistent, with guitar (25%) and keyboard (25%) being the most popular, followed by flute, trumpet and violin (each 12%), then clarinet (9%), viola (2%) and trombone (2%). Some small gender effects are evidenced, with proportionately more boys learning the guitar, trumpet and trombone, whereas girls appear to favour the keyboard, flute, clarinet, and strings (violin and viola). In terms of ethnicity and instrumental choice, data reveal that there are also some small differences in the relative proportions of instruments selected by different ethnic groups. For example, although each instrument is represented in the learning choices of children from each of the main ethnic groupings, a smaller proportion of Asian children are learning the viola compared to Black children. In contrast, a higher proportion of Asian children are studying the violin, trombone, keyboard, flute and guitar. Proportionately more Black children are studying viola, trumpet and keyboard; whereas, trumpet and clarinet figure as slightly larger proportions in the choices of

White children compared to the other instruments available. Some caution is needed in the interpretation of these instrumental choice data because, as noted above, there are limitations in the range of instruments available for study at an individual school level. On average, during the 2012-2013 year, schools were offering between four and five different types of instruments from the eight choices available.

(a) Children's instrumental learning

Instrumental tutors were provided with a specially designed on-line questionnaire to assess different aspects of each child's instrumental learning. Tutors were asked to express their agreement, using a seven-point scale, with twelve statements that were derived from a review of the content of the Federation of Music Services (FMS) instrumental curriculum 'A Common Approach' (2002) (see Appendix). This FMS learning package was being used by Newham to structure the ECaM instrumental curriculum. Inferential statistical analyses using one way between subjects Analyses of Variance (SPSS, 2011 [v20]) revealed:

- There were no overall demonstrable differences between major ethnic groups (Asian, Black, Mixed, Other, White) in terms of their reported instrumental learning across the two years ($F_{4,9537} = 1.85$, $p=.117$, n.s.).
- In terms of sex differences, there was a statistically significant difference in favour of girls across the two years 2011-2013 ($F_{1,9541} = 178.68$, $p=.000$). Nevertheless, both sexes scored comparatively highly across the twelve assessment criteria, with mean scores around five on a seven-point scale (i.e., boys' mean = 5.0; girls' mean = 5.4).
- However, no sex bias in instrumental learning was evidenced in terms of children's ethnicity ($F_{4,9094} = 0.46$, $p=.768$), nor in terms of instrumental choice ($F_{7,9094} = 0.70$, $p=.673$), nor in terms of learning gains over time ($F_{2,9094} = 0.20$, $p=.817$).

- Significant differences were evidenced overall in instrumental learning between the eight different instrumental groups ($F_{7,9534} = 20.06, p=.000$) and also over time between Autumn 2012 and Summer 2013 ($F_{7,4705} = 10.01, p=.000$). Post hoc comparisons (Tukey HSD) indicated that there was a relative homogeneity between the mean instrumental scores at the beginning of the academic year (Autumn 2012), but evidence of a greater diversity at the end of the year (Summer 2013, see Figure 1). Statistically significant improvements were evidenced for five of the eight instrumental groups (clarinet, flute, guitar, trumpet, violin). Differences for trombone and viola were non-significant, but keyboard scores were statistically lower overall (although still averaging 5 out of 7).
- In terms of the evidence for children's instrumental learning within a school year, it was possible to compare each opening term's dataset (treated as a 'baseline') with the end of school year dataset (treated as a 'post-intervention'). Analyses revealed a significant difference according to the tutor ratings across the two years ($F_{2,9539} = 58.97, p=.000$), as well as for 2012-2013 ($F_{1,7273} = 55.37, p=.000$). Post hoc comparisons using the Tukey HSD test indicated that the mean scores for the end of academic year, Summer 2013 ($n=4,713, M=5.20, SD=1.37$), were significantly higher than in the opening term, Autumn 2012 ($n=2,562, M=4.94, SD=1.48$), but similar to those at the end of the previous year, Summer 2012 ($n=2,267, M=5.36, SD=1.29$).
- A related assessment that used more stringent analyses of matched pairs of children across each school year using UPNs also revealed significant in-year improvement, both in 2012 ($t[1861] = 24.88, p=.000$) and also 2013 ($t[2129] = 9.23, p=.000$).
- There were also statistically significant mean learning differences between school Year groups, with overall Year 6 assessments ($n=2,940, Mean = 5.4$) being

significantly higher than those for Year 5 (n=6,490, Mean = 5.1) ($F_{1,9428} = 74.83$, $p < .01$).

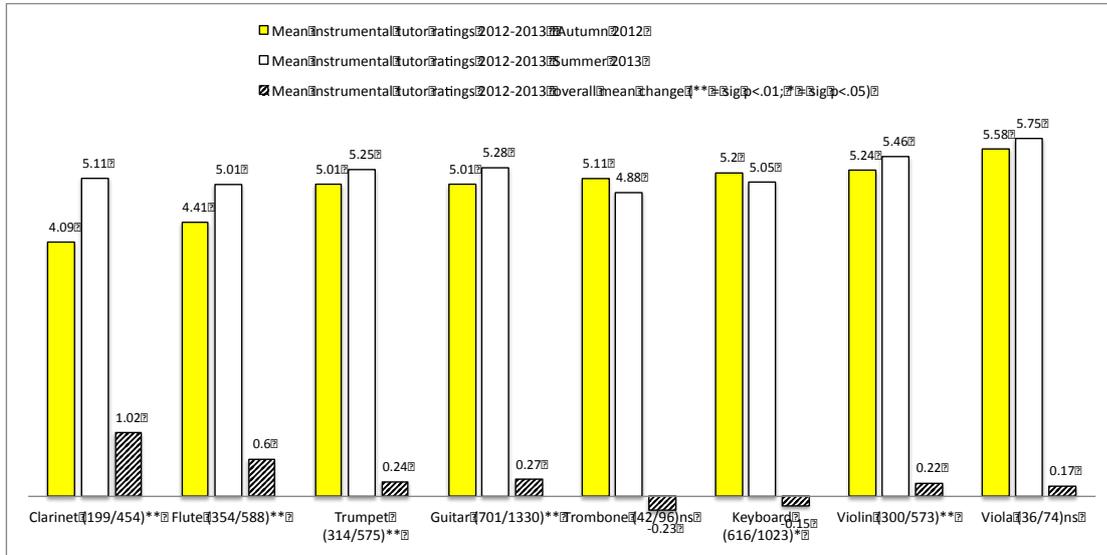


Figure 1: Comparison of mean instrumental tutor ratings between Autumn 2012 (Y5) and Summer 2013 (Y5&Y6) for each instrument

(c) Possible links between instrumental learning and academic achievement

The academic performance of children in school Year 6, as reported in their national Key Stage 2 National Curriculum tests for reading, writing and mathematics, can be compared to ECaM tutors' ratings of their instrumental learning, the latter using children's mean scores across the twelve assessment criteria (as reported in (b) above). Two main types of comparison were undertaken.

Firstly, (i) the official median school-level ratings of children achieving National Curriculum Level 4 or higher (the 'expected' attainment level for children aged 10+ years) in the DfE's National Curriculum median KS2 scores for Newham primary schools (data reported against the KS2 provisional 'floor target' for N=58 schools) were compared against (ii) ECaM tutor assessment data of pupils' instrumental learning collated at a school level for

the same schools. There is no evident statistical correlation between the two data sets ($r = .17$, $n = 57$, $p = .217$, see Figure 2). This school level KS2 measure which is treated as a proxy measure of school effectiveness does not appear to be related to the quality of children’s instrumental learning. Consequently, given that tutors assessed the children as making good or very good progress overall (as reported above), the inference is that, at a school level, ECaM is being equally effective, irrespective of the KS2 reported outcomes.

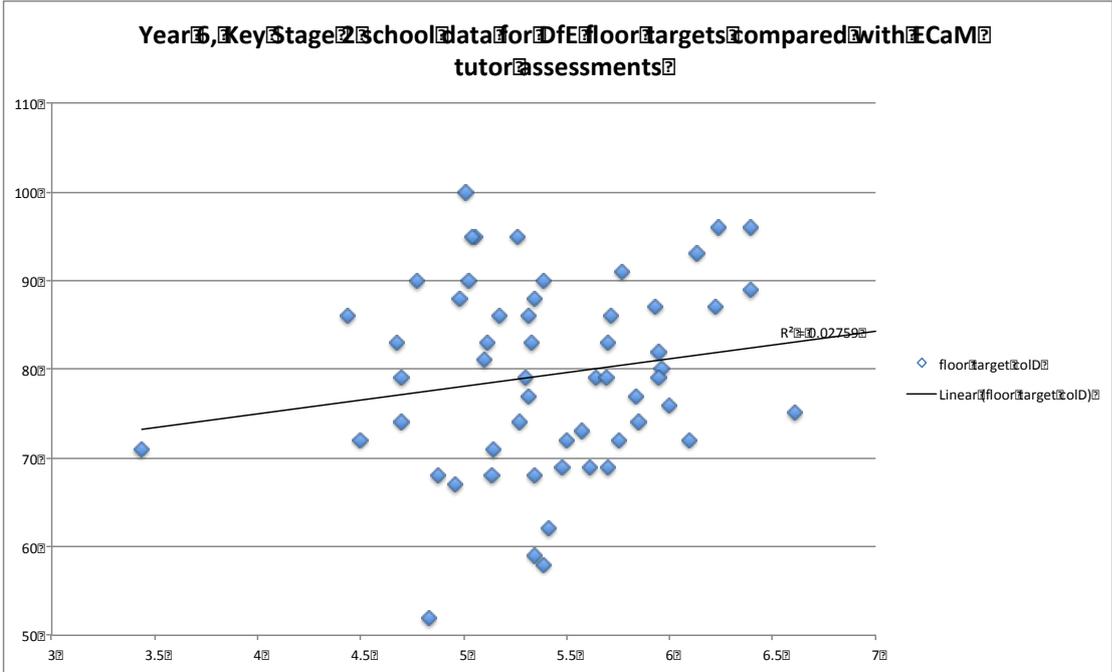


Figure 2: A weak relationship is evidenced between Key Stage 2 school level data for children achieving Level 4/Level 4+ in reading, writing and mathematics (y scale), compared with ECaM school level tutor assessments of the same children’s instrumental learning clustered at school level (x scale)

Secondly, individual pupils’ achievements in the KS2 assessments for reading, writing and mathematics (SATs) were compared with the same children’s instrumental learning ratings by their tutors. Using the children’s Unique Pupil Numbers (UPNs), it was possible to

match n=1,732 Year 6 pupils. There are three main findings: (i) The data analyses reveal a strong correlation between children's KS2 SATs scores (using Newham's FFT [Fischer Family Trust] data) and the tutors' ratings of pupils' instrumental learning (a mean score of twelve separate assessment criteria, as reported earlier); and (ii) this strong correlation is evident in all three FFT subject areas, i.e., writing ($r = .302$, $n=1732$, $p=.000$), reading ($r = .313$, $n=1732$, $p=.000$) and mathematics ($r = .281$, $n=1732$, $p=.000$). However, (iii) those children who do not achieve Level 4 (the expected level for this age group) in their KS2 Year 6 assessments ($n=131$) appear to be polarised in terms of their ECaM learning outcomes. Approximately one-third of these children are reported to have relatively low ratings (i.e., less than the mid point) for their instrumental learning as well as for their SATs scores, which is in line with the overall correlation between FFT data and ECaM instrumental learning data. However, two-thirds of this lower attaining group on FFT measures demonstrate contrastingly more positive levels of instrumental mastery, with some achieving the highest ratings, notwithstanding their official writing, reading and mathematics scores.

Conclusions and implications for music education

Overall, the data analyses on tutor ratings of children's instrumental learning in the Every Child a Musician (ECaM) programme across its opening two years (2011-2013) suggest that many children are already mastering key features of basic instrumental technique, developing their understanding of musical form and (based on other available data) finding communal musical learning both worthwhile and enjoyable. Although there appear to be some gender effects in favour of girls, children from all major ethnic groups are learning equally well, such as evidenced in the within-year data for children in successive years. Also, each instrumental family has examples of successful learning, especially string players (viola and violin) in the Summer 2013 data – which is noteworthy because children initially had found these two

instruments more difficult one year earlier compared to the other types of instruments (as reported in analyses of the opening ECaM year, see Welch et al, 2013).

Although there is a positive correlation evident between children's success in their instrumental learning and their overall academic profile, as measured by the Year 6 National Curriculum tests (SATs), some children were able to demonstrate growing instrumental mastery despite their personal challenges with reading, writing and mathematics. This does not negate the overall trend in the data, but suggests caution in inferring that one type of learning predicts the other.

With regards to the quality of teaching, recent research into effective instrumental and vocal learning by the authors and colleagues (e.g. Burwell, 2013; Saunders et al, 2011; Saunders & Welch, 2012; Welch & Papageorgi, 2008; Welch et al, 2012[a][b]) confirms that effective 'teachers' – whether in the classroom, concert hall, studio, or school practice space, and almost irrespective of whether or not they are officially qualified teachers or not – situate the 'students' and their own learning in active, reflective practice that provides opportunities for demonstration, rehearsal and foci on skill development. They also give feedback around tasks that have appropriate challenge, with opportunities to experience success and a sense of growing mastery, and with a sense of belonging to a musical community of fellow practitioners. Observational data of n=38 ECaM group instrumental sessions over the past two years confirm these general features of teaching and learning quality and imply that Newham is establishing a strong community of instrumental learners.

Although the ECaM programme might be considered to be relatively small if compared to the *El Sistema* global initiative, ECaM demonstrates equally what is possible where there is a strong political commitment by (local) government towards children's instrumental learning.

Acknowledgements

The authors are indebted to the instrumental tutors, children, teachers and Newham Local Authority colleagues in the Every Child a Musician team, led by Norma Spark, for their close involvement in the research evaluation process.

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Appendix

ECaM instrumental tutor assessment of children's level of observable competency

	Not Evident						Evident
	1	2	3	4	5	6	7
• The pupil listened to music with concentration	<input type="radio"/>						
• The pupil's comments demonstrated an understanding of the music played	<input type="radio"/>						
• The pupil was able to recognise/discriminate between musical elements (e.g. pitch, rhythm, dynamics)	<input type="radio"/>						
• The pupil was able to recognise when melodic or rhythmic patterns were repeated	<input type="radio"/>						
• The pupil was able to make links between sounds and symbols	<input type="radio"/>						
• The pupil was able to adopt an appropriate posture for playing	<input type="radio"/>						
• Using the instrument, the pupil was able to produce sounds that were musical (e.g. tone quality, intonation)	<input type="radio"/>						
• The pupil demonstrated physical co-ordination in relation to instrument specific skills	<input type="radio"/>						
• The pupil was able to repeat melodic phrases on the instrument by memory	<input type="radio"/>						
• The pupil was able to repeat rhythmic phrases on the instrument by memory	<input type="radio"/>						
• The pupil was able to sing back a heard melodic phrase	<input type="radio"/>						
• The pupil was able to listen, watch and respond appropriately to the playing of others	<input type="radio"/>						
Any other comments on the pupil's musical competencies or behaviours (please give a brief explanation in the box below)							
• <input type="text"/>	<input type="radio"/>						

A Content Analysis of Responses to Music Teaching Videos on YouTube

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Abstract

The purpose of this descriptive study was to determine the general characteristics and musical content of unsolicited comments and replies to comments for YouTube music teaching videos. A total of 7,332 comments were analyzed for general characteristics and musical topics. General characteristic categories included Self-Disclosure, Feedback, Factual Information, Help Related, and Irrelevant/Indecipherable. Using an inductive approach, we developed a list of musical topics discussed within comments. Inter-coder reliability equaled 93% overall. General category results revealed the largest number of comments were personal

experiences related to video content (33%); followed by hostile, angry, insulting, or negative feedback (29%); and expressing personal validation, acceptance, or admiration toward the video uploader or another commenter (26%). Fifty-one percent of comments were about music related topics. Results showed an interest in discussing instruments or equipment (15%), music pedagogy (6%), music literature (4%), technique (4%), and tone quality (4%). Music educators who choose to incorporate YouTube videos in their instruction should select videos carefully, keeping in mind that students may be exposed to negative comments, and both incorrect and correct information.

Keywords: YouTube, online music teaching, viewer responses, content analysis, video comments.

Review of literature

Spearman (1999) suggested technological advancements in the twenty-first century would lead to innovative and creative ways for individuals to procure information. One such source is the video-sharing website YouTube.com. Since 2005, YouTube provided a global forum for people to upload and view user-generated video. As of October 2013, YouTube had over one billion unique users visiting the site each month and 100 hours of video uploaded every minute, up from 60 hours in June of 2012 (YouTube, 2012, 2013). Adult use of video-sharing sites like YouTube increased from 33% to 72% since 2006, with educational and how-to videos among the most watched (Pew Research Center, 2013). Examination of children's computer use showed YouTube was their third most popular computer activity, averaging 15 minutes per day for 8- to 18-year-olds (Rideout, Foehr, & Roberts, 2010).

Given the rise in popularity of YouTube over the past few years, educational researchers began examining classroom use of the site and videos. Jones and Cuthrell (2011) described how material from YouTube could be used, and discussed related benefits and problems. Suggestions included using videos for introducing concepts, closing lessons, and classroom activities. Benefits included the ability to capture students' attention, and the ease and convenience of accessing material. A significant problem they identified was related to the material itself. They described YouTube as:

...a treasure trove of resources from around the globe and nostalgic video from the past. Such material has the ability to enhance learning by stimulating multiple senses and anchoring material to the prior knowledge of students. However, YouTube is also a vast wasteland of garbage and social parody that add nothing to the learning process. (p. 81)

Given the variety of content available on YouTube, the authors recommended critical prescreening of videos for credibility and quality. Mullen and Wedwick (2008) suggested educators increase efforts to incorporate video-sharing media from YouTube to enhance learning experiences and allow students to acquire skills related to the use of technology.

Webb (2007, 2010) proposed using videos from sites such as YouTube for enhancing music listening and analysis within the music classroom. He posited a theoretical and analytical framework for examining video clips as a means of merging common ways students engage with music in their daily lives (Webb, 2010). Rudolph and Frankel (2009) provided guidance regarding the incorporation of YouTube into the music classroom. Other researchers examined YouTube as a tool for music learning and teaching as part of online music communities. Salavuo (2006) found users participate in these communities to listen to other user's music, disseminate their own music, receive feedback, and learn about music.

Researchers studied the participatory culture of online folk music communities as well (Veblen & Waldron, 2012; Waldron, 2011, 2013a, 2013b; Waldron & Veblen, 2008). Salavuo (2008) suggested that using online sites such as YouTube for music education allows the learner more control over and increases ownership of the learning environment.

In addition to using YouTube as a music teaching and learning tool, researchers examined how musicians used the site in general. Cayari (2011) chronicled a teenage musician's experience creating a YouTube channel to promote his music and develop a fan base. Suhr (2010) suggested musicians are using posted comments to aid in making musical decisions, which in turn can improve the popularity of their music.

Other YouTube related music studies examined specific characteristics of posted videos. Kruse and Veblen (2012) studied video characteristics such as duration and location, instructor characteristics such as gender and age, musical content, and teaching methods for 40 instructional folk music videos. Gooding and Gregory (2011) analyzed 32 music therapy videos for video characteristics and music therapy practices. Whitaker, Orman, and Yarbrough (2012) categorized 1,761 videos from a "music education" keyword search. Results indicated most videos categorized as teaching videos ($n = 381$) were tutorials (65%) followed by classroom instruction (22%), lessons (6%), ensemble rehearsals (5%), and other (2%). Findings also suggested that users are uploading music education videos from all parts of the world.

While these studies provide a general idea of extant music related videos and musicians' use of YouTube, little is known about user's reactions to music education related videos. Researchers in other disciplines examined comments in order to determine the impact video content made on viewers (Hess, 2009; Lewis, Heath, Sornberger, & Arbuthnott, 2012; Neumayer, 2012; Thelwall, Sud, & Vis, 2012). With the use of an automated computer

software program, Thelwall et al. (2012) examined 38,628 comments from randomly selected YouTube videos. They found commenters were 29 years of age on average with a mode of 20 years. Comments tended to contain either positive or negative statements rather than neutral, and 23% of comments were replies to previous statements. Tolson (2010) found comments to be conversational in nature and relevant to the subject of the video and the creator.

When viewers respond to music teaching videos, do their comments indicate a knowledge and perception of music and music teaching? In addition, are viewer comments such that they might help or hinder the educational process? An examination of viewer comments could provide answers to these questions. Therefore, the purpose of this study was to determine the general characteristics and musical content of unsolicited comments and replies to comments for YouTube music teaching videos.

Method

YouTube videos categorized as teaching (Whitaker, Orman, & Yarbrough, 2012) were used to identify viewer comments. We searched YouTube for each music teaching video (e.g., tutorials, classroom instruction, lessons, and ensemble rehearsals) identified in the previous study ($n = 381$), resulting in 205 teaching videos available that contained viewer comments. A total of 7,332 comments were saved and transferred to a database. Additional information transferred included commenter username, whether the commenter uploaded the video, and whether the comment was in response to another posted comment.

A pilot study determined whether a coding system for analyzing responses to self-injury videos used by Lewis et al. (2012) could be modified and effectively applied to viewer comments on music teaching videos. General analysis categories included Self-Disclosure, Feedback, Factual Information, Help Related, and Irrelevant/Indecipherable. Using an

inductive approach, we developed a list of musical topics discussed within comments. All three researchers analyzed 208 randomly selected comments from the complete dataset ($N = 7,332$). Each comment was analyzed as a whole with rubric subcategories not being mutually exclusive. Therefore, one comment could fit multiple subcategories. Inter-coder reliability was calculated using the percentage agreement formula: agreements divided by agreements plus disagreements and multiplied by 100. Reliability ranged from 89% to 99% among subcategories. Given the result of this inquiry, we felt the modified coding rubric functioned well for analysis of comments to the music teaching videos.

The rubrics were then applied to all 7,332 viewer comments. Descriptors in the Musical Topics category were added throughout the analysis process. This inductive categorical development was identical to procedures used in other music content analysis studies (see Orman & Price, 2007; Price & Orman, 1999, 2001; Whitaker, Orman, & Yarbrough, 2012; Yarbrough & Whitaker, 2009). In order to establish reliability for the larger dataset, percentage agreement was calculated for 20% ($n = 2,450$) of all responses. Results indicated overall agreement at 93% with subcategory agreement ranging from 88% to 99%.

Results

We analyzed viewer comments ($N = 7,332$) for YouTube music instruction videos ($n = 205$) for general and musical characteristics. At the time of data collection, the number of views per video totaled 9,165,309; ranged from 50 to 992,236; and averaged 44,927.99 ($SD = 93,794.41$). Number of comments per video ranged from 1 to 443 with 35.77 comments on average ($SD = 60.61$). Number of Likes totaled 12,198, ranged from 0 to 780, and averaged 59.79 ($SD = 120.98$) per video. Dislikes totaled 2,307, ranged from 0 to 147, and averaged 11.31 ($SD = 22.40$).

Results showed comments were written by 5,255 unique viewers, 27 of which were uploaders. Number of comments per viewer ranged from 1 to 143 and averaged 1.31 ($SD = 2.74$). Most viewers posted only one comment ($n = 4,526, 66\%$). Ninety-two comments were statements in non-English languages such as Dutch, Filipino, French, German, Korean, Portuguese, and Spanish. Thirty-one of the comments contained self-disclosure statements indicating viewers' country/location of origin, the most frequent being Brazil ($n = 6$); followed by the United Kingdom ($n = 4$); Australia, Columbia, the European Union, France, Germany, and Mexico ($n = 2$ each); and Canada, Greece, Holland, Ireland, Israel, Netherlands, Philippines, Spain, and Venezuela ($n = 1$ each). After removing irrelevant and indecipherable comments ($n = 459$), 6,873 relevant comments remained ($n = 5,075$ unsolicited responses, $n = 1,798$ replies). Comments were to both video uploaders/participants ($n = 5,117$) and other commenters ($n = 1,774$). Most statements were positive ($n = 2,783$), followed by negative ($n = 2,339$) and the fewest were neutral ($n = 1,801$).

General category results revealed the largest number of comments were personal experiences related to video content ($n = 2,296, 33\%$). For example, one commenter for a piano lesson on basic note reading stated

Man, less than 2 minutes into the video and I'm already thinking that this is really helpful. o.O I'm a musician myself, I play everything from classical to baroque to dance music, but can't read notes to save my life. I'll have to come back to this and check out the other videos. :)

Many responses asked factual questions or requested additional information ($n = 1,087, 16\%$) such as “What are the 3 best alto sax reeds?” and “Could you by any chance be able to do a tutorial on reading sheet music?”

Examination of feedback subcategories showed that many comments were hostile, angry, insulting, or negative ($n = 2,019$; 29%; e.g., “You are horrible, geez, your arm is on the table your tone is disgusting, why would anyone in their right mind listen to this? How can you take it upon yourself to teach?”), and 869 (13%) contained profanity. While negative remarks were frequent, other comments expressed personal validation, acceptance, or admiration toward video uploaders or other commenters ($n = 1,782$; 26%; e.g., “You are so talented.”) and gave thanks ($n = 1,168$, 17%). Approvals of the teacher’s pedagogy occurred more frequently than disapprovals ($n = 284$, 4% and $n = 158$, 2%, respectively). The majority of comments were unsolicited rather than replies to other viewers. Table 1 contains complete results regarding general characteristics.

Fifty-one percent ($n = 3,486$) of all relevant comments contained music specific statements. The largest percentage related to instruments or equipment ($n = 1003$, 15%). Questions such as “What kind of guitar is that?” and “Should I start on a plastic clarinet?” were frequent. Comments regarding pedagogy ($n = 419$, 6%) included

I hate when people tell me what they are going to be teaching me, and also do a lot of preliminary talking and description. Step 1: show me the final product. Give me an example of the ultimate goal FIRST. Then I have an idea, and I can decide if this is what I want to do. Step 2: break it down for me.

Several comments focused on music literature ($n = 289$, 4%), technique ($n = 268$, 4%), and tone quality ($n = 244$; 4%). All remaining music topics occurred in less than three percent of comments (see Table 2).

Discussion

Several findings from this study support previous results from research examining comment responses. Only 26% of relevant comments were a reply to a previous comment, which reinforces the 23% reply rate found by Thelwall et al. (2012). Comments tended to be positive or negative rather than neutral (Thelwall et al., 2012) and were relevant to the video subject and its creator (Tolson, 2010).

While Thelwall et al. (2012) found the average age of viewers posting comments was 29 years, many comments in this study seemed to be written by younger school aged people. Many of the videos were specifically for beginners so responses from younger viewers are not surprising. Whitaker et al. (2012) found music education videos were posted from around the world. This study also showed an international viewership that posted comments.

Specific instruments or equipment was the most frequent musical topic and generally reflected a fascination with or desire to know more about the musical instrument or equipment in the video. The next largest group of comments related to pedagogy. Since these were music teaching videos, this seems reasonable but given the breadth of musical topics covered, it is interesting that so many of the comments focused on teaching effectiveness. Data show there is a fascination with or desire to know more about specific literature, performance technique, and tone quality more than other musical categories.

One of the more surprising findings was the large number of viewers who shared personal experiences related to the video content. Viewers seem to have a need to talk about themselves and their own experiences. This could be related to the fact that music is a performing art; thus, musicians even at the amateur level have a desire to share their experiences with others. Viewers also use the comment section to ask factual questions and request additional information. However, once posted, the uploader did not always answer questions. Instead other viewers answered them.

At the outset, we asked two questions. The first concerned whether comments indicated a knowledge and perception of music and music teaching. A beginner's knowledge and perception of music was evident in comments regarding their age and experience, e.g., "I play tuba and I am 12." Comments also showed that advanced students, professional performers, and seasoned music teachers provided their opinions and expertise. A general concern was the lack of oversight by some of the teachers in the video. We think more feedback from the uploader could enhance learning by correcting misinformation.

The second question concerned whether the comments might help or hinder the educational process. As outlined in the above discussion, we saw many positives in viewer comments. Viewers shared information about music (both correct and incorrect), instruments, pedagogy, literature, performance technique, and other musical topics. In fact, 51% of the comments were about music. The big negative we observed was the amount of profanity (13% of comments contained some).

It was surprising that the volume of negative feedback and positive comments were similar. In fact, when combined with "thanks" the frequency of positive comments is much higher than negative. However, throughout the analysis process much of the negative feedback was so hostile, offensive, profane, and in many instances vulgar that it seemed to dominate. YouTube acknowledged this as a general problem and recently decided to aggressively address the concern (Kelly, 2013). Music educators who choose to incorporate YouTube videos in their instruction should be aware of the potential for students to be exposed to those types of negative comments.

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Table 1. General category frequencies and percentages for relevant responses

Category	Total (<i>N</i> = 6873)		Unsolicited Responses (<i>n</i> = 5075)		Replies (<i>n</i> = 1798)	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Self-Disclosure						
Shares personal experience related to video content	2296	33	1908	38	388	22
Solicits viewers for their own or other videos	131	2	80	2	51	3
Indicates s/he wants to or is learning music in video	83	1	77	2	6	< 1
States s/he doesn't understand video content	53	1	49	1	4	–
Feedback						
Gives hostile, angry, insulting, or negative feedback	2019	29	1559	31	460	26
Expresses personal validation, acceptance, or admiration toward uploader/commenter	1782	26	1520	30	262	15
Thanks the uploader/commenter	1168	17	1066	21	102	6
Statement contains profanity	869	13	385	8	484	27
Statement contains humor or laughs	453	7	328	6	125	7
References/quotes a specific occurrence in video	329	5	298	6	31	2
Provides general words of encouragement	118	2	72	1	46	3
Acknowledges compliment or contribution	104	2	–	–	104	6
Compares uploader/commenter to another musician/person	98	1	85	2	13	1
Factual Information						
Asks a factual question or requests additional info	1087	16	907	18	180	10
Comments on factual info	760	11	217	4	543	30
Corrects information in video	456	7	226	4	230	13
Help-Related						
Offers to connect outside of YouTube	19	< 1	8	< 1	11	1
Audio-Video						
Comments on audio-video quality	58	1	53	1	5	< 1
Pedagogical Quality						
Approves of pedagogy used	284	4	271	5	13	1
Disapproves of pedagogy used	158	2	146	3	12	1
Emoticons						
Positive	691	10	540	11	151	8
Negative	129	2	106	2	23	1
Multiple	77	1	61	1	16	1

Table 2. Musical topic frequencies and percentages for relevant responses

Category	Total (<i>n</i> = 6873)		Unsolicited Responses (<i>n</i> = 5075)		Replies (<i>n</i> = 1798)	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Instrument/Equipment	1003	15	623	12	380	21
Pedagogy	419	6	373	7	46	3
Literature	289	4	216	4	73	4
Technique	268	4	185	4	83	5
Tone Quality	244	4	193	4	51	3
Breath Support	226	3	176	3	50	3
Intonation/Pitch	224	3	154	3	70	4
Posture/Hand Position	208	3	149	3	59	3
Fingerings	187	3	124	2	63	4
Articulation	182	3	134	3	48	3
Theory	152	2	81	2	71	4
Embouchure	96	1	53	1	43	2
Style	86	1	61	1	25	1
Aural Skills	83	1	51	1	32	2
Range	80	1	56	1	24	1
Scales	71	1	41	1	30	2
Harmony	67	1	53	1	14	1
Vibrato	64	1	49	1	15	1
Note Reading	56	1	41	1	15	< 1
Rhythm	54	1	34	1	20	1
Practicing	54	1	31	1	23	1
Improvisation	49	1	40	1	9	1
Voice	35	1	25	< 1	10	1
Dynamics	28	< 1	22	< 1	6	< 1

Student Perceptions of Choral Festivals in China and the USA

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Abstract

The purpose of this study was two-fold: (1) identify student perceptions of the choral festival experience in relation to enjoyment, education, and inspiration; (2) determine to what extent student perceptions regarding enjoyment, education, and inspiration are affected by culture, gender, age, and musical background. High school choral students (N=153) in China (n=71) and the USA (n=82) completed an open-ended investigator-designed survey following participation in a choral festival in their country. Responses were compiled and tabulated by the investigator. Perceptions regarding enjoyment included singing in the mass choir (23%), social aspects (17%), educational aspects (14%), the performance (11%), the director (8%), and food (6%). Perceptions regarding education included musical skills and knowledge (59%) affective development (13%), personal growth (12%) and social aspects (8%). Perceptions regarding inspiration included personal musical goals (34%), other participants (26%), musical aspects (20%) and singing (13%). Chi-square tests of Independence revealed significant differences for culture regarding the perception of enjoyment ($p < .001$), education ($p < .001$), and inspiration ($p < .001$). Significant differences were also found for age levels ($p < .006$) and musical background ($p < .001$) regarding the perception of enjoyment. No significant differences were found for gender regarding the perception of enjoyment,

education, or inspiration. Perceptions of high school choral students are varied and multi-faceted regarding the enjoyment, education, and inspiration of the choral festival. Cross-cultural similarities and comparisons provide additional insight into international experiences and exchanges.

Keywords: choral festival, student perception, singing, cultural differences, secondary music education.

Introduction

Thousands of choirs attend choral festivals, contests, and competitions each year because music educators believe such opportunities contribute to the musical development of their students. Yet relatively few researchers have explored student perceptions of these experiences to effectively plan and present meaningful opportunities. Battersby (1994) found that students believe choral competitions greatly benefit their musical achievement and motivation. They identify performance improvement as the greatest musical benefit, and developing responsibility, discipline, and teamwork as the greatest non-musical benefits. Stamer (2004; 2006) surveyed high school students to discover which aspects of choral competitions were most valuable. Sophomores were most excited, motivated, and challenged by the competition, and they valued competition ratings. Upper classmen valued the musical experiences, but not the competitive aspects.

Robinson & Parsis (2007) examined journals recorded by 160 high school singers during rehearsals of a three-day all-state choral experience. Student comments were categorized as technical, emotional, or social, with technical comments prevailing. While research on student perception of the non-competitive choral festivals is minimal, researchers have found

perception of the high school general choral experience to be multi-dimensional and deeply meaningful (Adderley, Kennedy, & Berz, 2002; Hylton, 1980; Kwan, 2002).

Hylton (1980; 1981) found six underlying factors in student perception of high school choral experience: achievement, spiritualistic, musical-artistic, communicative, psychological, and integrative. Modest relationships were found between musical ability and the musical-artistic dimension, and between musical background and the musical-artistic dimension. Kwan (2002) used a modified version of Hylton's Choral Meaning Survey (1980) and found no significant effects of gender, grade level, or musical experience.

McCreary (2001) identified rationales for membership and continued participation in college choral ensembles based on Madsen and Kuhr's (1994) constructs of motivation as "good" and "real" reasons. According to McCreary, "good" reasons for choral participation were aesthetic/altruistic, and "real" reasons were social. College students tended to favor "real" reasons in joining ensembles, but continued participating for "good" reasons. Fredrickson (1997) viewed "good" and "real" reasons for music participation to be mutually inclusive: students value both aesthetic/altruistic and social benefits.

Conway and Borst (2001) found that both musical and non-musical factors motivate middle school students to value choral experiences and continue participation throughout high school: knowledge, self-expression, social, enjoyment, performance, identification with school programs, and aesthetic. These seven categories of meaning for middle school choral students are somewhat similar to those identified by Hylton (1980). According to Gates (1991), extra-musical values provide social foundations for music participation.

To perpetuate voluntary membership in choral ensembles, directors would do well to consider and routinely evaluate student perceptions of specific choral events, such as choral festivals. Additional research might enhance understanding of the intrinsic value of choral singing by considering student perceptions of non-competitive experiences, and exploring international student perceptions.

Purpose

The purpose of this study is two-fold: (1) identify high school student perceptions of the choral festival experience in relation to enjoyment, education, and inspiration; (2) determine to what extent high school student perceptions regarding enjoyment, education, and inspiration are affected by culture, gender, age, and musical background.

Method

Sample

High school choral students (N =339) in China and the USA completed a survey after attending a non-competitive choral festival held in their respective country. Students in China were not native to China, but came from more than 20 countries, the greatest percentages from Korea (30%), Japan (20%), England (10%), and the USA (8%). Students in choral groups (n= 167) from these international schools traveled an average of 800 miles to attend the two-day choral festival in central China. Students in the USA attended private school or were home-schooled, and participated in choral groups in PA. The USA students (n=139) traveled an average of 15 miles to attend a one-day choral festival in southeast PA. A total of 153 students completed the survey: 71 from China (31 males, 40 females) and 82 from the

USA (24 males, 56 females, one undisclosed). Students ranged in ages from 12 to 20; the average age for both choirs was 16 (one age undisclosed).

Instrument

The open-ended, investigator-designed questionnaire generated a wide range of responses, similar to the Hylton (1980) pilot study. Choral teachers, music education professors, and high school students not involved in the study reviewed the questions.

Students were asked by their choral directors to complete and return the survey at the first rehearsal following the choral festival. Choral directors then sent the completed surveys to the investigator. Some students provided more than one response to each question, generating 202 responses for the question about enjoyment, 186 for education, and 152 for inspiration. The investigator categorized responses for each question after reading through all responses. To establish reliability of the survey findings through triangulation, the investigator had two other music educators review the responses. They agreed on the identification of categories and the assigning of responses to categories.

Results

Question 1

To identify student perceptions of enjoyment, education, and inspiration, the investigator tabulated frequencies of the responses as described below. The total percentage of responses in each category falls short of 100% due to responses that were incidental.

Responses to the item, “What did you enjoy most about the choral festival experience?” were grouped by the investigator in the following categories with the resulting percentages:

1. Singing in the Mass Choir (23%)
2. Social Aspects (17%)
3. Educational Aspects (14%)
4. Performance (11%)
5. Director (8%)
6. Food (6%)

Student perception of enjoyment encompassed much more than musical experiences. While the most cited response was singing together, social and educational experiences were cited more frequently than was the performance, the culminating experience of both festivals.

Responses to the item, “What did you learn from this experience?” were grouped in the following categories:

1. Musical Skills and/or Knowledge (59%)
2. Affective Development (rewards of practice) (13%)
3. Personal Growth (cooperation, patience, concentration)(12%)
4. Social Aspects (8%)

As expected, students cited obvious educational goals of learning musical skills and knowledge, but they also cited learning about their emerging values of singing, and learning about themselves and others.

Responses to the item, “In what ways were you inspired?” were grouped in the following categories:

1. To Pursue Musical Goals (34%)
2. By Other Participants (the director, accompanists, other singers) (26%)
3. By Musical and Aesthetic Aspects (20%)

4. By Singing (13%)

While a third of the responses focused on the result of inspiration: setting musical goals, the other two-thirds focused on the inspirational moment: students were inspired by others, by musical features, and by the choral experience.

Question 2

To determine to what extent student perceptions regarding enjoyment, education, and inspiration are affected by culture, gender, age, and musical background, the investigator used Chi-square tests of Independence to compare responses for all four aspects: culture, gender, age, and music background.

Culture

Significant differences ($p < .001$) between the responses of international and USA students were found regarding perceptions of enjoyment, education, and inspiration as shown in Table 1.

Table 1. *Perceptions of Enjoyment, Education, and Inspiration: Cultural Differences*

Category	Responses	Percent of Responses from	
		Total Number (%) of responses (N=202)	International students (n=115)
Enjoyment ($\chi^2=65.3, p < 0.001$)			

Singing in Mass Choir	46 (23%)	16%	32%
Social Aspects	35 (17%)	21%	13%
Educational Aspects	28 (14%)	4%	28%
Performance	22 (11%)	15%	6%
Director	17 (8%)	4%	15%
Food	13 (6%)	8%	5%
Education ($\chi^2=31.4, p < 0.001$)			
Music	110 (59%)	39%	79%
Skills/Knowledge	24 (13%)	21%	4%
Affective Development	22 (12%)	16%	8%
Personal Growth	15 (8%)	12%	4%
Social Aspects			
Inspiration ($\chi^2=23.4, p < 0.001$)			
To pursue musical goals	52 (34%)	24%	44%
By other participants	40 (31%)	21%	31%
By musical aspects	26 (26%)	21%	19%
By singing	20 (13%)	21%	3%

For perception of enjoyment, international students favored social aspects more than singing, whereas singing was the most frequent response for USA students. Educational aspects were cited seven times more frequently by the USA group. Both groups favored social aspects more than performance.

For perception of education, both groups identified musical skills and knowledge as what they learned most. The USA students overwhelmingly reported this response (79%), with only 16% of responses describing the other three categories, while 49% of international student responses were distributed over the other categories.

For perception of inspiration, students from both cultures were most inspired to set and achieve personal musical goals: USA students were more likely to be inspired to set personal goals (44%), and least likely to be inspired by musical aspects (3%), whereas international student responses were more evenly distributed among all categories.

Gender

No significant differences between the 55 males (37%) and 96 females (63%) were found. Gender was not a factor in perceptions of enjoyment, education, or inspiration.

Age

The two groups were similar in average age: the international students mean age was 16.8; USA students, 16.1. Significant differences between the responses submitted by younger students, ages 12-15, and older, ages 16-20, were found regarding enjoyment ($p < .006$).

Results are shown in Table 2. No significant differences in age were found among responses describing education or inspiration. Age was not a factor in perceptions of education or inspiration.

Table 2. *Perceptions of Enjoyment: Differences in Age*

Category	Responses	Percent of Responses from Students		
		Total Number (%) of Responses (N=202)	12-15 years old (n=59)	16-20 years old (n=143)
Enjoyment ($\chi^2=18.0, p = 0.006$)				
	Singing in Mass	46 (23%)	24%	22%
	Social Aspects	35 (17%)	17%	18%
	Educational Aspects	28 (14%)	25%	9%
	Performance	22 (11%)	7%	13%
	Director	17 (8%)	14%	6%
	Food	13 (6%)	5%	7%

In identifying the most enjoyable experiences of the festival, the two groups similarly enjoyed the mass choir experience and social aspects. Younger students favored educational aspects, while older students favored the performance.

Music background

Musical background was obtained, as in previous studies (Hylton, 1980; Kwan, 2002), by having students record their years of private music lessons on the survey. The number of years of private study was used to identify the student's musical background. If students studied multiple instruments, the sum of the years for all instruments was used.

Of the 153 total students, 104 (68%) had taken private lessons; 49 (32%) had never taken private lessons. Students from China averaged 3.4 years of private study; students from USA

averaged 4.8 years. Students were assigned to one of three groups according to their reported total years of private study: (1) no private study, (2) 1-3 years of private study, and (3) 4 or more years of private study.

Significant differences ($p < .001$) among the three groups of music backgrounds were found only for the perception of enjoyment. Results are shown in Table 3. No significant differences among the three groups were found for education or inspiration. Music background was not a factor affecting perceptions of education or inspiration of the choral festival.

Table 3. *Perceptions of Enjoyment: Differences in Music Background*

Category	Responses Total Number (%) of Responses (N=202)	Percent of Responses from Students with		
		Private study for 0 years (n=68)	Private study for 1-3 years (n=50)	Private study for 4+ years (n=84)
Enjoyment ($\chi^2=40.0, p < 0.001$)				
Singing in Mass	46 (23%)	24%	20%	24%
Social Aspects	35 (17%)	25%	10%	16%
Educational Aspects	28 (14%)	9%	12%	19%
Performance	22 (11%)	10%	4%	16%
Director	17 (8%)	7%	4%	12%
Food	13 (6%)	3%	6%	10%

Singing in the mass choir was among the most cited for enjoyment by students from all music backgrounds. Students with the least musical background cited social aspects more than students in the other two groups, but social aspects was a factor of enjoyment regardless of music background. Students with the most musical background cited educational aspects, the performance, the director, and food more frequently than other groups.

Discussion

Student perception regarding enjoyment, education, and inspiration of the choral festival encompass more than expected musical outcomes. Multi-dimensional perceptions of enjoyment, education, and inspiration revealed in this study are consistent with those reported in prior studies (Hylton, 1980; Kwan, 2002; Stamer, 2004, 2006). Musical and non-musical benefits are valued by high school students as in other studies (Conway & Borst, 2001; Frederickson, 1997; McCrary, 2001).

Because students enjoy various aspects of the choral festival, choral directors may be wise to appeal to these preferences when planning. Students perceive educational benefits as accruing from more than music learning opportunities: their responses indicate that the experience also promotes affective development, self-awareness, and social reflection. Students perceived inspiration to have both a cause (students were inspired by other participants, musical aspects, and singing) and an effect (they were inspired to pursue goals). Goals were both general (“to do my best”) and specific (“to pursue choral singing in college”). Interestingly, the students were inspired by other singers as well as the director and accompanists. Students were inspired by the process (singing) as well as the product (the performance), and other aesthetic qualities such as the sound, blend, and harmony.

Cultural differences in perceptions of enjoyment, education, and inspiration were expected in light of the differences between the choral festivals. Perhaps the over-night experience of the international students provided more social aspects as a source of enjoyment for these students than was experienced in the one-day festival by the USA students. The USA student enjoyment of educational experiences may be due to the nature of the specific workshop experience provided during this festival. Perhaps learning musical skills and setting personal goals were objectives emphasized in the one-day local USA festival, whereas varied objectives may be promoted in the two-day, regional international festival. Further study is needed to explain these cultural differences.

As prior studies revealed in student perception of the high school choral experience (Kwan, 2002; Stamer, 2004), gender does not significantly affect perception of choral experiences. Perceptions of enjoyment, education, and inspiration are similar for both genders.

Age significantly affects perception of enjoyment: younger students favor the process of learning (the educational aspects), whereas older students favor a product of learning (the performance). Perhaps maturity allows for enjoyment in the delayed gratification of the performance. Students perceive similar educational and inspirational aspects of the choral festival regardless of age. These findings conflict with perceptions of choral competitions reported by Stamer (2006), but the non-competitive nature of the festivals in this study might account for the disparity.

Music background affected perception of enjoyment, but not perceptions of education or inspiration; results support similar findings of Hylton (1980). Social aspects were cited more

frequently as most enjoyable by students with the least music background; these findings correspond with previous studies on “good” and “real” reasons for participation (Fredrickson, 1997; McCrary, 2001).

Choral directors might infer from this study that culture, age, and musical background affect student perception of the enjoyment of choral festivals. Cultural differences (but not age, musical background, or gender) appear to affect perceptions of educational and inspirational benefits as well. Further research is necessary to apply these findings to other populations.

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A Model of Musical Home Environment, Parenting Style, and Psychosocial Maturity Predicting Academic and Musical Success

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Abstract

The purpose of this study was to test a hypothesized model of parental involvement-home environment in music, parenting style, and psychosocial maturity that influence academic success and musical success. Participants ($N=1223$) were enrolled in music programs (grades 4-12) in six regions of the United States. Measures of Parental Involvement-Home Environment in Music (PIHEM), Parenting Style (PS), psychosocial maturity (PSM), academic success (AS) and musical success (MS) were verified through confirmatory factor analysis to represent latent variables. The model using these variables obtained an adequate measure of fit (standardized RMR=.078), indicating a good model fit. A large total effect for AS was found with MS and moderate total effects with PS, PSM, and PIHEM. A large total effect for MS were found with PIHEM, with moderate effects with both PS and PSM. The PIHEM with AS and PD with MS effects were both entirely indirect. PS's largest total

effects were with PIHEM and PSM, and a small but meaningful non-significant effect was found for PIHEM with PSM.

Keywords: home musical environment, parenting style, psychosocial maturity, academic success, musical success.

Introduction

A positive educational home environment (EHE) has been widely recognized by researchers to impact upon academic and musical outcomes (see reviews by Fan & Chen (2001), Zdzinski (1996, 2001). However, research results indicate a mixed picture when it comes to the role of EHE on either musical or academic success. A number of factors have contributed to these contrasting results.

A major limitation found in the EHE literature (in both music and education) is that a lack of a consistent operational definition for the construct makes direct comparisons among studies difficult. In both education and in music, researchers have attempted to more clearly define the construct. Keith and Keith's (1993) literature-based model has been used by a number of education researchers, and includes *parental educational expectations*, *parental involvement in school*, and *parental involvement at home* (including home environment and structure, home learning activities), and *personal support*. In a path analysis verifying their literature-based model, both expectations and participation in school activities and programs were included in their final model, while home structure and parent-child communication were not included. For Trivette and Anderson (1995), expectations also obtained the strongest relationship, while home structure was negatively related. Fan and Chen's (2001) meta-analysis of bivariate and regression findings among 2000 articles over a 10-year period found

that five types of parental involvement examined varied in correlation strength with educational outcomes: Expectations (.40), School Participation (.32), General Parental Involvement (.30), Parent-Child Communication (.19), and Home Supervision and Structure (.09).

Brand (1985) first examined the multi-dimensional construct of parental involvement in music with a sample of elementary music students, and identified 4 musical home environment factors: parental attitude towards music/musical involvement with child, parental concert attendance, parental/child ownership of musical materials, and parental musical instrument participation. Another factor-analytic study using a preschool population (Wills, 2011) identified six musical home environment factors: family musical interactions, concert attendance, musical materials, and music listening, adult music experience, and adult attitudes towards music. A recent study (Zdzinski, In Press) of music students in grades 4-12, identified 7 distinct music-specific parental involvement factors, including home musical environment, home musical structure, parental expectations about music study, parental attitudes about music, music program support, family musical background, and family musical participation.

In addition to contrasting definitions of the parental involvement construct in music, a number of variables interacting with EHE have influenced study results. Grolnick, Benjet, Kurowski, and Apostoleris (1997) found that family structure & socioeconomic status also are related to various levels of parental involvement and EHE. Culture and gender also are suggested as a source of EHE variation, influencing how parents relate to boys and girls in various cultural groups.

Parenting style and psychosocial maturity also have been found to mediate the impact of parental involvement in education. Steinberg, Lamborn, Dornbusch, and Darling (1992) have found that authoritative parenting practices have increased the impact of parental involvement on school achievement and school engagement. Another variable interacting with parenting style and educational outcomes is psychosocial maturity (Steinberg, Elmen, & Mounts, 1989). Three aspects of psychosocial maturity examined in the parental involvement literature (work orientation, self-reliance, and identity) have been linked to academic achievement, mediating between EHE and school success.

A recent investigation by Zdzinski et al. (In Review) examined how selected aspects of parental involvement, family structure, and parenting style influence psychosocial outcomes, school outcomes, and musical outcomes among music students ($N=1114$) in six geographic regions in the United States. The authors found all PIHEM factors were related to each outcome measure (accounting for 50% of the variance with musical outcomes, and 17.6% and 17.5% of the variance in school outcomes and psychosocial outcomes, respectively). Musical home environment, and both socioeconomic status and school level showed significant direct effects for all outcomes, while parental expectations about music study and family musical participation showed direct effects only for musical outcomes. Musical home structure and family musical background obtained direct effects for musical and school outcomes, while attitudes towards music study obtained a direct effect for musical and psychosocial outcomes. The variables of student gender and parenting style obtained direct effects only for psychosocial and school outcomes. It should be noted, however, that only direct effects were examined in this study, and indirect effects were not examined.

Recent research (Wills, 2011; Zdzinski, In Press, In Review) suggests that Parental

Involvement-Home Environment in Music is a multi-faceted construct, and that PIHEM factors are related to different outcomes in varying strengths. The structure of EHE in music is similar, but not identical to existing EHE models in general education, and the types of parental involvement and musical home environment that may be most important for both musical outcomes and academic outcomes is yet to be fully determined. Although existing in the general education literature, model building research examining parental involvement in the context of parenting style and other mediating factors has not yet been undertaken with music.

Purpose

The purpose of this study was to test a hypothesized model of family characteristics, parental involvement-home environment in music, parenting style, and psychosocial maturity that influence academic success and musical success, using the data set created by Zdzinski et al. (In Review). Specific research questions posed by this study included: 1. Do the first-order factors of socioeconomic status, ethnicity, gender, family structure, musical home environment, musical home structure, family musical background, family musical participation, parental attitudes about music, parental expectations about music study, parental acceptance, and parental strictness, parental psychological autonomy granting adequately represent the second-order factors of family structure (FS), parental involvement-home environment in music (PI-HEM), and parenting style (ParS) according to the hypothesized model? 2. Do the first-order factors of work orientation, identity, self-reliance, educational expectations, academic achievement, home study, music grades, music attitudes, and music achievement represent the second-order factors of psychosocial maturity (PSM), academic success (AS) and musical success (MS) according to the hypothesized model? 3. What are the relative contributions of Family Structure (FS), Parental Involvement-Home Environment

in Music (PIHEM), and Parenting Style (PS) to Psychosocial Maturity (PSM), Academic Success (AS), and Musical Success (MS) according to the hypothesized model? How well does the proposed model fit the data collected?

Method

Participants ($N=1223$) from upper elementary ($n=318$), middle school ($n=355$), and high school ($n=550$) levels were selected from a variety of music programs in urban, suburban, and rural settings, and came from a variety of socioeconomic and ethnic groups. The participants came from six regions of the United States: Northeastern ($n=280$), Southeastern ($n=142$), North Central ($n=166$), South Central ($n=207$), Midwestern ($n=239$), and Western ($n=189$). After accounting for missing data, a total of 1124 complete cases were deemed suitable for analysis.

Zdzinski's (In Press) *Parental Involvement - Home Environment in Music* measure (PIHEM) was used to assess 6 aspects of parental involvement-musical home environment (musical home structure, parental expectations for music study, family musical participation, musical home environment, parental attitudes towards music study, and family musical background). Since students in general music were included in the sample, the music program support subscale of the PIHEM was not used. The Cronbach's *alpha* reliability for the measure was .88, and subtest reliabilities were .82 (home structure), .79 (expectations), .76 (attitudes), .73 (participation), .64 (background) and .59 (home environment). Parenting style (PS) was measured by the *Authoritative Parenting* measure of Steinberg et al. (1992). Cronbach's *alpha* reliability for the measure was .75.

Family Structure (FS) was defined by a) the number of parents in the home, b) SES,

c) Ethnicity and d) school grade level. SES was operationally defined as a composite of parent education and occupation. Ethnicity was operationally defined as Not-At-Risk (Caucasian & Asian students) or At-Risk (all other ethnicities), as per Keith and Keith (1993).

School Music Success (MS) was defined as a composite of music class grades and musical achievement scores. Selected subtests of Colwell's (1968) *Music Achievement Tests* (MAT) were used to assess music achievement. Alpha subtest reliabilities ranged from .90 (Auditory-Visual Discrimination), .85 (tonal memory, and major-minor mode recognition), .80 (Feeling for Tonal Center), .78 (Melody Recognition), .76 (Instrument Recognition), to .72 (Musical Style Recognition).

School Academic Success (AS) was defined as a composite of math and English grades, self-reported time doing homework and reading, and self-reported educational expectations. Nonacademic growth (i.e., psychosocial maturity, or PSM) was defined as a composite of three subtests (work orientation, self reliance, and identity) of the *Psychosocial Maturity Inventory* (Greenberger, Josselson, Knerr, & Knerr, 1974). Respective Alpha reliabilities were .84, .82, and .90 for the three subtests.

Data were collected in intact music classrooms during the second semester of a single school year following approved IRB protocols. All measures were combined in a single packet, which students completed in several sessions over approximately three hours. After the completion of the measures by the participants, student grades were obtained from school records.

Results

To answer the first two research questions, confirmatory factor analyses were conducted. Second-order factors of Parental Involvement-Home Environment in Music (PIHEM), Parenting Style (PS), psychosocial maturity (PSM), academic success (AS) and musical success (MS) were found to adequately represent their related measured variables. The second-order family structure (FS) factor did not produce an adequate solution, and was dropped from further consideration in the model.

The third research question examined the fit of the hypothesized model to the data collected, and determined the relative contributions of the various latent factors within the model.

Results of the model (see figure 1) indicate an adequate measure of fit with a standardized RMR=.078 (Kline, 2005). The direct, indirect, and total effects of PS, PIHEM, and PSM on MS and AS are found in Table 1.

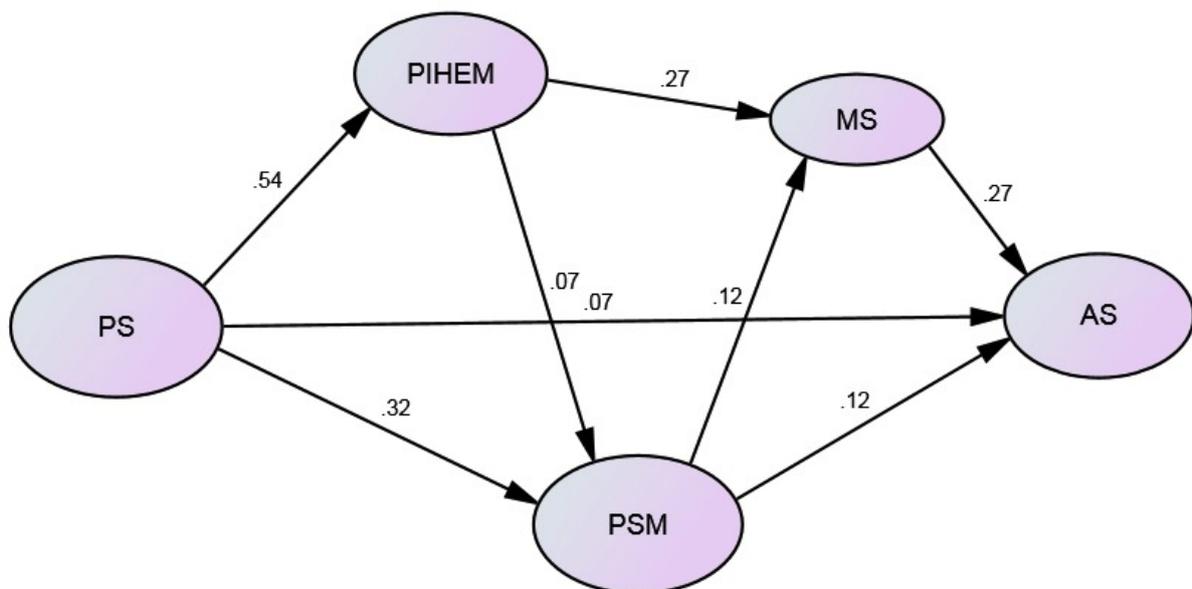


Figure 1. Results of the SEM Model: Influence of parental involvement-home environment in music, parenting style, and psychosocial maturity on musical success and academic success.

Using Keith's (1999) rule of thumb regarding magnitudes of *beta* weights, for academic success (AS), MS had strongest total effect (standardized *beta* of .27), followed by PS (.17), PSM (.15), and PIHEM (.08). As expected, the strong direct effect in the model for musical success (MS) was PIHEM (.28 total effect), followed moderate effects for PS (.19) and PSM (.12). It should be noted that the effects with PIHEM for AS and PS for MS were both entirely indirect. PS's largest total effects were for PIHEM (.54) and PSM (.35). A non-significant effect between PIHEM and PSM (.07) was a small but meaningful effect.

Table 1. Standardized Direct, Indirect, and Total Effects of Independent variables on Academic Success and on Musical Success.

Variable	Outcome	Direct Effect	Indirect Effect	Total Effect
MS	AS	.27	.00	.27
PS	AS	.08	.09	.17
PSM	AS	.12	.00	.15
PIHEM	AS	.00	.08	.08
PIHEM	MS	.27	.01	.28
PS	MS	.00	.19	.19
PSM	MS	.12	.00	.12
PIHEM	PSM (ns)	.07	.00	.07
PS	PSM	.32	.04	.35
PS	PIHEM	.54	.00	.54

Discussion

The goal of this study was to test a hypothesized latent model of family characteristics, parental involvement-home environment in music, parenting style, and psychosocial maturity that influence academic success and musical success. A review of the home environment research literature suggested that these variables may predict both musical success and academic success, and that musical success may also be linked to academic success.

Confirmatory factor analysis verified measurement models for five of six possible latent variables (PIHEM, PS, PSM, MS, and AS), but did not yield a satisfactory solution for a latent family structure (FS) variable. FS was eliminated from the Latent Path Model. A model using parenting style, parental involvement home environment in music, psychosocial maturity, musical success, and academic success was successfully created and tested.

The model analysis revealed some interesting findings. PIHEM had a large direct effect with MS, but no direct effect on AS. However, PIHEM had a moderate indirect effect on AS, which suggests that music-specific parental involvement and musical home environments do impact academic success. In addition, the large direct effect found between MS and AS also suggests that musical success is beneficial to academic success, similar to the results of Johnson and Memmott (2006).

Zdzinski et al. (In Review) found that 3 individual PIHEM factors (musical home structure, musical home environment, and family musical background) had large or moderate effects for academic success, and all 6 PIHEM individual factors obtained large (musical home structure), moderate (parental attitudes, family music background, family music participation,

or small meaningful effects (home musical environment, parental expectations) for musical success.

PIHEM had a very strong direct effect with PS, and PS had a strong direct effect with PSM. Zdzinski et al. (In Review) found that 2 individual PIHEM factors (musical home environment and parental attitudes) had moderate and small total effects, respectively. PSM had moderate total effects with both MS and AS, similar to the findings of Zdzinski et al. The non-significant effect between PIHEM and PSM was most likely due to the large age range of the sample (e.g., grades 4-12), which caused variations in psychosocial maturity.

The results of this study clearly indicate that musical success and academic success can be predicted using a SEM model including parental involvement-home environment in music, parenting style, and psychosocial maturity. Further research should examine the measurement models in more depth to refine constructs, and to examine the model with larger samples and with more varied samples to determine the stability of the model examined.

Acknowledgments

The Sounds of Learning Initiative of the NAMM Foundation sponsored this project, with additional support from the Grammy Foundation and the Fund for Improvement of Education of the U.S. Department of Education. Colleagues who contributed to the project included Alan Gumm, Central Michigan University; Douglas Orzolek, University of St. Thomas; Shelly Cooper, University of Arizona; Charlene Dell, University of Oklahoma; Nathan Rinnert, Mansfield University and Ching Ching Yap, University of South Carolina.

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