

The Factors that Influence Independent Instrumental Teachers to Use Improvisation and
Composition Activities or Music Technologies with Young Beginners

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Introduction

Music learning has changed radically over the past twenty years in response to the emergence of digital technologies and multimodal literacies (Kress, 2010), online participatory cultures (Jenkins, 2009) and informal music learning practices (Green, 2001, 2008). Furthermore, several researchers over the past decades have investigated the interest in and relevance of integrating into formal teaching pedagogical activities such as improvisation and composition that appeal primarily to the creativity of the pupil (e.g., Kenny & Gellrich, 2002; Koutsoupidou & Hargreaves, 2009; Lewis, 2012; Miller, 2012). Lastly, if technologies are greatly influencing the musical activities practised by today's youth (Després & Dubé, 2012), then their use ought likewise to have a real impact on the way in which music teachers exercise their craft and how they teach their students (Webster, 2012; Wise, Greenwood & Davis, 2011).

This aim of this article is to present the first findings of a study intended to garner information on the usual pedagogical practices of instrument teachers as they relate to improvisation, composition and technologies in the teaching and learning of music in Quebec. The article reports the various stages of this research and a number of the results obtained. But first an attempt will be made to explain the main benefits and impacts linked to the use of improvisation, composition and technologies on the learning and teaching of music.

Improvisation

Improvisation in music can be defined as an instrumental or vocal realization in which the

¹ This paper is **a work in progress**. It has been written for the Reflective Conservatoire Conference 2015.

musician generates the musical material in real time while being capable of anticipating the sonoral consequences of his actions on the basis of his past experiences (Dubé & Després, 2013). Integrating improvisation into the pedagogical practices of a music teacher ought to have positive effects on a number of the aspects of the student's development. In fact, learning to improvise ought to promote the acquisition of certain musical concepts (McPherson, 1993), precision in reading music (Azzara, 1992; Montano, 1983), a sharpening of the auditory perceptions (Teixeira dos Santos & Del Ben, 2004; Whitman, 2001; Wilson, 1971), creativity (Koutsoupidou & Hargreaves, 2009) and the quality of interpretation (Azzara 1992), as well as musicians' comfortable stage presence and motivation (Kenny et Gellrich, 2002). Finally, the exploratory nature of improvisation ought to improve the learner's expressivity (Sloboda, 1993), which is an essential component of both musical training and instrumental technique.

According to Thompson and Lehmann (2004), the learner's "talent" should not have any influence on her ability to improvise. Indeed, the development of improvisational abilities depends rather upon putting into action applied and creative instrumental work than upon an innate aptitude. Furthermore, several authors maintain that these abilities can be improved by structured, progressive training (Brophy, 2001 ; Kenny et Gellrich, 2002 ; Kratus 1995). In view of the positive effects of improvisation and its interdependence with the other competencies that the apprentice musician needs to develop, it would seem that improvisation ought to form an integral part of the classical music curriculum. Such, however is not the case (McPherson, Bailey, & Sinclair, 1997). In fact, improvisation is almost absent from Western classical instrumental teaching (Azzara 2002; Bitz, 1998; Burrows, 2004). According to Robidas (2010), various reasons could be given for this situation. First, the requirement of Western classical music set the highest value on the formation of interpreters with great technical skills (Biesenbender, 2001; Riveire, 1997), the acquiring of which leaves little time for working on other activities, such as

improvisation. Then, teachers do not always possess the knowledge that would enable them to teach improvisation to their students (Robidas, 2010), especially since they themselves may never have had experience with improvisation during their own training (Robidas, 2010) or because they associate improvisation with non-classical musical idioms, especially jazz (Riveire, 1997). To counteract this problem, a number of researchers have emphasized the necessity of making available to teachers the kind of pedagogical material that will guide them effectively in their practical teaching of improvisation (Azzara, 1999, 2002; Bitz, 1998; Della Pietra & Campbell, 1995; Riveire, 1997; Rosfeld, 1989; Townsend, 1998).

Composition

The term composition refers to an original piece of music, the structure of a musical piece, or the process of creating a new piece of music. The musical, social, intellectual and emotional benefits that young children gain from learning how to compose their own music are extensive (Barrett 2003; Hickey, 2003). Composition is a meaning-making process, a means of expressing one's self emotionally and creatively, promoting and demonstrating musical thinking and understanding and developing higher order thinking skills (Barrett 2003; Gromko, 2003; Hickey 2003; Kaschub & Smith, 2009; Lewis, 2012; Miller, 2012; Moore 2003; Stauffer, 2003). Composing also promotes curiosity, courage, openness, observation, interpretation, reflection and risk taking (Miller, 2012).

The composition process challenges students to think creatively (Barrett, 2003; Hickey, 2003; Miller, 2012; Moore, 2003). Stauffer (2003) says that young composers begin this creative process from a place inside of themselves that represents the whole of who they are at that particular moment. What students compose is meaningful to them as their work is directly related to their actions, feelings and thoughts – a reflection of their experiences (Gromko 2003; Stauffer,

2003). There is an authenticity about students' compositions that allows teachers the privilege of learning a great deal about their students through their work (Gromko, 2003). Creativity, self-expression and authenticity are natural to the work and play of children (Miller, 2012; Moore, 2003; Stevens, 2011). Children long to be creative, are naturally creative, and are excited when they receive affirmation of their creative works (Stevens, 2011). For this reason, it is not surprising that children want to participate in music not only as listeners and performers, but also as creators (Moore, 2003).

In any type of education, it is most effective when the acquisition of new skills is followed closely by the application of those skills in a way that demonstrates and reinforces the learner's understanding. Composing serves as an excellent means to demonstrate and reinforce understanding of musical concepts (Guderian, 2012; Miller, 2004; Miller, 2012; Stevens, 2011). Composing provides the most authentic opportunity for a learner to apply the skills developed in theory workbooks and exercises (Miller, 2012). Furthermore, every theory concept can be related to composition because every theory concept comes from composition (Stevens, 2011).

It seems evident that the benefits of including composing amongst music learning experiences are extensive, and that composition is an important component of a well-rounded music education (Barrett 2003; Gromko 2003; Moore 2003). Despite this, composition seems still little used in teaching music (Stevens, 2011). Research indicates that there are two primary factors hindering teachers from including composition in their core curriculum: time restrictions and lack of teacher confidence or experience with composing (Hickey, 2003; Lewis 2012; Robinson, Bell, & Pogonowski, 2011; Stevens, 2011; Winters, 2012). Many teachers feel, "ill-equipped to offer ideas and starting points for students" (Lewis, 2012, p. 160). This lack of experience and self-efficacy in teaching composing, exacerbated by the short amount of time available to spend with students, means teachers often push composing to the side.

Over the past decade, extensive research has been done on composing in the classroom (Armstrong, 2012; Bolden, 2007; Bush, 2007; Espeland, 2003; Gromko, 2003; Guderian, 2012; Hickey, 2003; Kaschub & Smith, 2009; Lapidaki, 2007; Randles & Sullivan, 2013; Rutlumann, 2007; Saetre, 2011; Strand, 2007; Strand & Newberry, 2007; Strand, 2009; Wiggins, 2003; Winters, 2012). Less research has been done on learning how to compose in individual music lessons with young children (Barrett & Gromko, 2007; Miller, 2012; Stevens, 2011). There is a need to explore this area further.

Music Technologies

According to Wise, Greenwood and Davis (2011), music technologies may be defined either in relation to their use or to the technological implement they employ. For example, those authors who define music technologies in relation to their use state that “‘Music technology’ can be usefully defined as any situation in which electronic technology is used to control, manipulate or communicate musical information” (Murray, 1997, as cited in Pitt & Kwami, 2002, p. 61) or as “inventions that help humans produce, enhance and better the area of sound organised to express feeling” (Webster, 2002, p. 416). Those authors who define music technologies in relation to their implement consider “music technology in the classroom by itemising the components of that technology. Thus, they include electronic keyboards, sound modules, multi-track recorders, synthesisers, hardware sequencers (such as those contained in the on-board sequencer in keyboards), and a wide range of software applications that allow sequencing, notation, editing and recording through MIDI-based³ and acoustic means” (Wise, Greenwood & Davis, 2011, p. 119). They also think that “the term ‘music technology’, when applied to a music classroom, can mean anything ranging from a simple electric keyboard through to a complete digital recording studio” (Shibazaki & Marshall, 2013, p. 348). Després and Dubé (2012) believe

that music technologies are “material tools or computer programs that allow listening to, manipulating, sharing or accessing sounds, music or information pertaining to music” (p. 27).

As in a number of other fields, technology plays a primary role in music (Webster, 2002). In the 1980s, digital electronic keyboards and MIDI technology came onto the market. They enabled musicians to create and use new sonorities (Wise, Greenwood, & Davis, 2011). More recently, compact disks, DVDs, MP3 players, smart phones, iPads and, especially, the Internet have greatly altered the musical environment of the younger generations. Indeed, these new technologies have radically changed the ways of playing, composing, sharing and purchasing music (Savage, 2007a, 2010). They have also permanently modified the relationship that young people have with music (Burnard, 2008). For example, at present technologies form an integral part of the musical environment of most young people from the moment they are born (Wise, Greenwood, & Davis, 2011), and this has created new challenges for music educators (Burnard, 2008). In fact, the inclusion of technologies in music teaching has given rise to an unprecedented situation in the field because it has reversed the usual hierarchy of knowledge (Wise, Greenwood, & Davis, 2011); young people often have a much greater mastery of technologies than do their teachers. To illuminate this phenomenon, Prensky (2001a, 2001b) has proposed two new terms: “digital natives” and “digital immigrants”. According to Prensky, a large proportion of young people are “digital natives,” that is, they have mastered technologies as though they were their native language: “[...] students today are all ‘native speakers’ of the digital language of computers, video games and the Internet” (Prensky, 2001a, p. 1). On the other hand, a large number of the teachers of these “digital natives” are “digital immigrants”. That is to say, they are people who learned when they were adolescents or even as adults to make use of digital tools (Prensky, 2001a).

In the view of Webster (2002) and of Hodge (2001), technologies ought to be considered as a means to improve learners' musical experience, and their utilization ought not to be thought of as an end in itself. Paynter (1997) holds the same position in stating "[...] IT [information technology] is a means not an end, supporting the quest for genuinely musical activities [...] this is not IT for IT's sake but rather technology in the service of music" (p. 107). Other authors, including Savage (2007b, 2010), think that the use of technologies can transform the ways of experiencing music and can present new possibilities for generating and exploring musical ideas. Indeed, the technologies can help learners overcome technical difficulties related to instrumental execution when they are when are discovering, creating and interpreting music (Savage, 2007b). Moreover, they present students with the possibility of experiencing types of aesthetics different from those of the traditional approach, which should also have a positive effect on their motivation (Savage, 2007b). Savage (2010) also states that the possibilities of networking, interactivity and collaboration offered by the technologies should potentially be able to help integrate students' abilities to interpret, compose, listen and evaluate.

Furthermore, music technologies should have the potential to influence to a great extent the ways in which teachers teach music. For instance, those who use technologies would probably be more open to traditions other than just Western music and less constraining in their pedagogical approach (Webster, 2012). In other words, their pedagogical approach would be more "student-centred" and less "teacher-dominant" (Savage, 2005b; Webster, 2012; Wise, Greenwood, & Davis, 2011).

On the pedagogical level, men and women show significant differences in their ways of learning music technologies. Since men are more familiar with technologies, they tend to be more confident than women in using them in their teaching (Bauer, 2003; Fung, 2003, as cited in

Webster, 2012). These differences could also be present among boys and girls learning music (Shibazaki & Marshall, 2013). For example, girls might be more critical about their musical production, while boys might be more critical about what they have accomplished technologically. Thus, girls might tend more to evaluate their musical results using technologies as compared to what boys could have achieved using a standard musical instrument. Finally, boys might attribute their difficulties to the equipment being used, whereas girls might rather attribute them to their own technological competence (p. 357).

In any case, even though music technologies have already been implemented in schools in a number of countries (Wise, Greenwood, & Davis, 2011), we still have very little information on their implementation and use outside of the schools. Considering their importance in the life of young people, this marks a significant gap in our knowledge that needs to be filled.

Problem

In Quebec, music teaching and learning that take place outside of the school system are not covered by the government or the municipalities. Instrument teachers of young people work most often in private studios or private music schools. They follow the instruction programmes offered by a number of organizations in Quebec (for example, the Anna-Marie Globenski Preparatory School of Laval University; the Music Preparatory School of the University of Quebec in Montreal; the Vincent d'Indy Music School in Montreal, etc.) to supervise the teaching and learning of their pupils between the ages of five and sixteen. These programmes are often divided into ten goal-oriented grades, and the pupil completes one grade per year. On the whole these programmes reflect a very traditional approach to music teaching: a classical music repertory from the Baroque period to the twentieth century; strong emphasis on instrumental technique (scales, arpeggios, harmony), sight-reading exercises, etc. The students of the teachers

who use these programmes can take an annual examination administered by an outside judge who evaluates their sight-reading ability, instrumental technique and interpretation. Almost all these programmes are designed to teach solo repertory and the technical instrumental skills it requires. For the most part, they do not include improvisation or composition activities. Moreover, they do not employ any learning activities involving music technologies. To a certain extent, these programmes reflect the Western classical music traditions based on ‘conservatory’ style.

Since these programmes of instruction do not encourage Quebec’s instrument teachers to integrate improvisation and composition activities into their pedagogy or to include music technologies in their teaching practice, it seemed important to discover whether these teachers were in fact making use of these activities and practices with their pupils. Since it has been shown that the integration of improvisation, composition and music technologies in pupils’ learning activities positively influences in many respects their motivation, acquisition of skills and musical and personal development, an investigation of this field of practice in Quebec appeared to be of some urgency. It is hoped that the results from this project will help in rethinking the pedagogical orientation of the current teaching and training programmes given by instrument teachers.

Objectives

The main objective of this study was to obtain a first level of knowledge about the use of improvisation, composition and music technologies in the teaching practices of instrument teachers in Quebec. More specifically, we targeted teachers who provide individual instruction outside of the schools to pupils five to ten years old who are beginning to learn a musical instrument. In order to do this, we formulated five sub-objectives:

1. To identify the extent to which these teachers had already experimented with improvisation and composition in their own instrumental practice;

2. To identify the degree to which they find improvisation and composition activities or the use of music technologies relevant in teaching five-to-ten-year-olds who are beginning a musical instrument;
3. To identify the extent which they use these approaches in teaching this student population;
4. To identify the factors that influence the adoption of improvisation, composition and music technologies with this population of students;
5. To identify the reasons why some teachers do not include these approaches in their pedagogical practice.

Method

The data was collected in the winter of 2014. We sent an online questionnaire to teachers of music instruments in Quebec who give individual lessons in a private studio or in the province's private music schools. To contact them, we sent an email message to all the organizations in Quebec that sponsor music programmes outside the schools and asked them to disseminate the information about the research project to their teaching members. To contact the targeted population, we also used the database of the *Centre d'excellence en pédagogie musicale* (Centre for Excellence in Music Teaching) of the Faculty of Music of Laval University, which includes the email addresses of about 500 teachers and music schools. At the beginning, there was a pilot questionnaire with five teachers in order to verify the internal validity of the collected data. The questionnaire was divided into four separate parts. The first part was designed to collect information about the personal profile of the teacher: age, sex, instrument taught, education and teaching experience, the teaching programme used, etc. The other three parts, namely those on improvisation, composition and music technologies, were designed to discover whether these teachers were already familiar with or had used these approaches and with what kind of

frequency, and whether they found them relevant to teaching beginning instrumental students and, if so, the frequency with which they used them. Lastly, for those who did not use these approaches in their teaching, we asked them to explain briefly why they did not use them.

Sample

130 instrument teachers filled in the questionnaire.

Table1. Demographic data of respondents

Age	20 to 30 years old: 26.9%	31 to 40 years old: 34.6%	41 to 50 years old: 13.8%	More than 51 years old: 24.6%	
Teaching experience	Less than 5 years: 10.8%	6 to 10 years: 25.4%	11 to 19 years: 22.3 %	20 to 29 years: 20%	More than 30 years: 21.5%
Sex²	Women: 80.8%	Men: 19.2 %			
Last academic qualification in music obtained	Diploma – Bachelor's Degree: 59.3%	Graduate studies: 38.5%	Other: 2.3 %		
Formal music education courses?	YES: 60.8%	NO: 39.2%			
Instrument taught	Piano: 62.3%	Other: 37.7 %			

Findings

The results presented depend essentially on descriptive statistical analyses and non-parametric tests (Chi-Square: Gamma and V of Cramer tests). The results have been divided according to the three themes studied: improvisation, composition and music technologies.

Improvisation

A large majority (78.9%) of the teachers questioned had already had experience with improvisation as musicians. Furthermore, 59.3% of these teachers engaged in it more than once a

² This division between men and women seems to be typical of the current situation in the field if one compares the list of the members of the *Association des professeurs de musique du Québec* (Quebec Association of Music Teachers). For this reason, it was decided to present the statistical differences between men and women as significant.

week or at least once a month. We nonetheless observed a significant difference ($p < 0.045$) between men and women as to the frequency with which they used improvisation, as shown in the following figure:

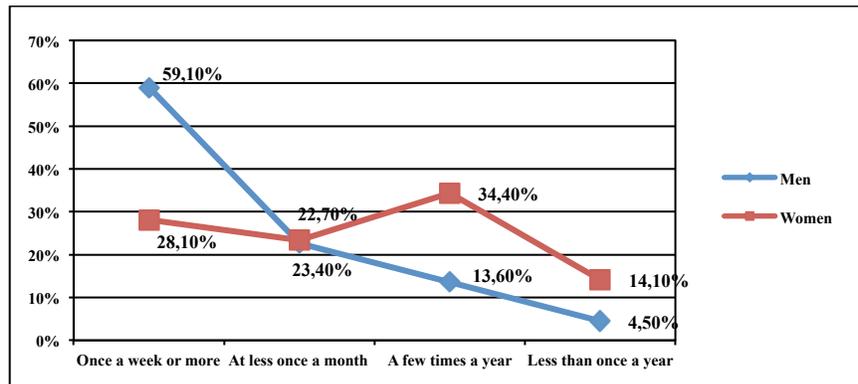


Figure 1. Relation between the frequency at which men and women improvise

This result reveals a significant difference between men and women as to the frequency with which they as musicians use improvisation. On a weekly basis, men improvise more than women.

On the level of pedagogy, a large majority of the instrument teachers (70.4%) think that it is very relevant or relevant to integrate improvisation activities into the teaching of young pupils who are beginning to study their instrument. This belief is also more significant for men than for women ($p = 0.004$). On the other hand, only 28.7% of the teachers questioned included improvisation activities each week or each month in their teaching of young pupils beginning the study of their instrument, as illustrated by the following figures.

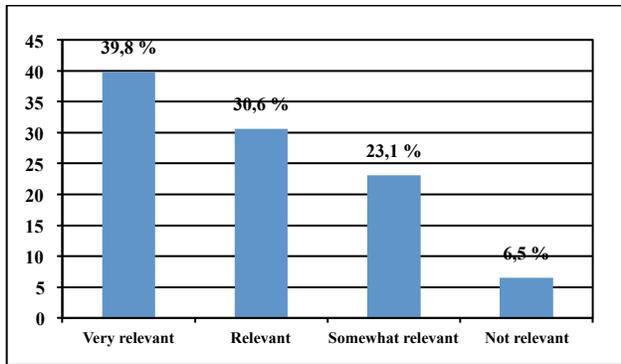


Figure 2. Relevance of integrating improvisation activities in teaching

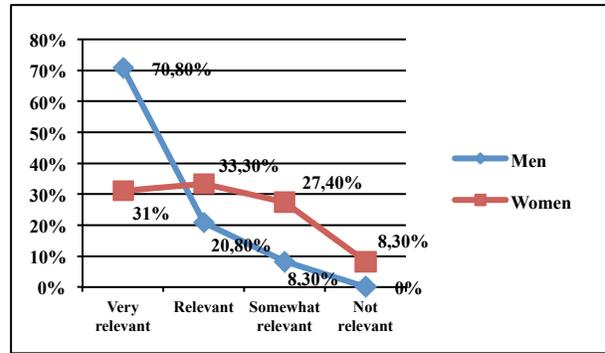


Figure 3. Comparison of men and women on relevance of using improvisation activities

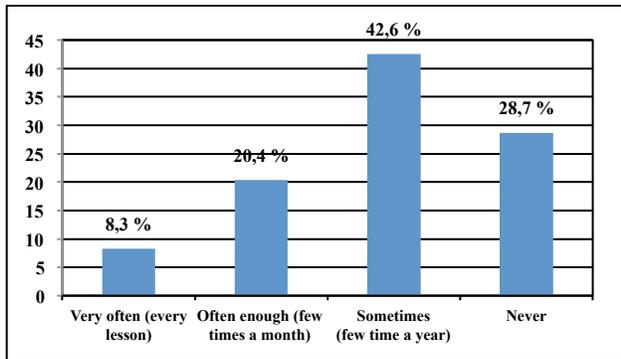


Figure 4. Frequency with which teachers use improvisation in their teaching

In order to identify the factors that lead some teachers not to integrate improvisation activities into their teaching, we asked those who *never* use them in their teaching (28.7% of our sample) to share their reasons for not doing so. Four main factors emerged from the qualitative analysis.

1st factor: They do not believe they are competent enough to integrate improvisation in their teaching.

- *Ex.: “Because I never learned to do it; therefore, I wouldn’t know how to teach it.”*

2nd factor: They do not have time to integrate improvisation activities into their lessons.

- *Ex.: “I already have enough difficulty getting them to learn the notes and rhythms, to get an interesting sound out of the piano, checking fingering, getting them to use the pedal correctly, making them aware of the methods of learning, and familiarizing them with the elements of theory. What time would be left for this activity of improvisation which requires in addition some ideas about harmony? Most of my students are taking only a thirty-minute lesson a week.”*

3rd factor: They are not interested in improvisation.

- *Ex.: “I don’t feel any need to do it; it doesn’t attract me at all.”*

4th factor: They do not believe that the student is at an advanced enough level on the instrument to improvise.

- *Ex.: “Before beginning to improvise, I believe that there has to be a sound basis, good control of fingering, thorough understanding of scales, skill in harmonizing chords, as well as ease in coordination, etc.”*

The first factor shows that the teachers do not have the means that would enable them to teach improvisation. The second factor reveals that the teachers place greater value on the concepts and skills necessary to reproduce well a written musical repertory than on improvisation skills that are based on playing by ear. The third factor informs us that the teachers surveyed do not see the usefulness of or have any interest in employing improvisation in their teaching. As for the fourth factor, it reveals that the teachers believe that their students ought to acquire a substantial amount of knowledge and skills on their instrument before being able to improvise.

Composition

As in the case of improvisation, the majority of the teachers questioned (83.1%) had already composed some music. On the other hand, their practice of composing was much less frequent than their improvising, as can be seen in the figures below.

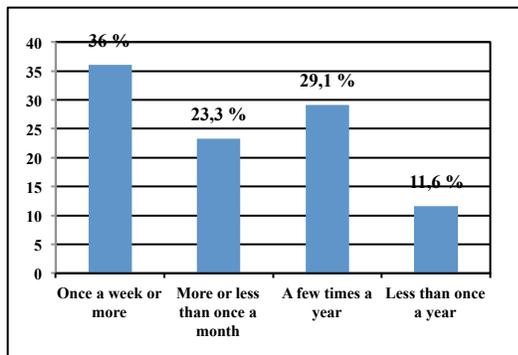


Figure 5. Frequency of teachers' improvising

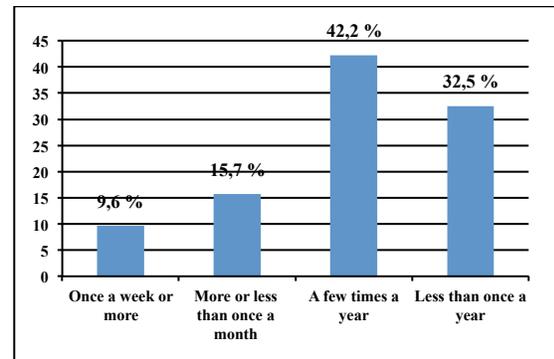


Figure 6. Frequency of teachers' composing

As figures 5 and 6 illustrate, 36% of the teachers questioned practised improvisation at least once a week, whereas this percentage drops to 9.6% for composition. Moreover, our analysis revealed a significant difference ($p=0.011$) between men and women in the frequency at which they compose.

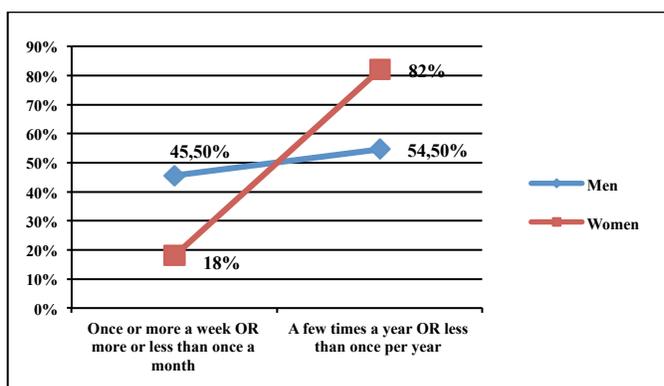


Figure 7. Relation between the frequency at which men and women compose

Figure 7 shows that the men in our sample compose more regularly than do the women.

On the level of pedagogy, 56.2% of the teachers questioned thought that it was relevant or very relevant to carry out composition activities with young students beginning on their instrument.³ This view was significantly higher ($p=0.034$) among the men than among the women.

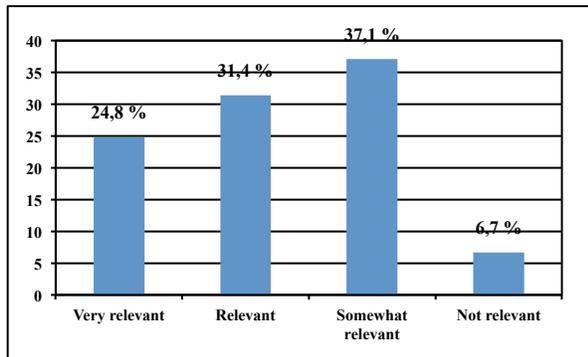


Figure 8. Relevance of integrating composition activities into teaching

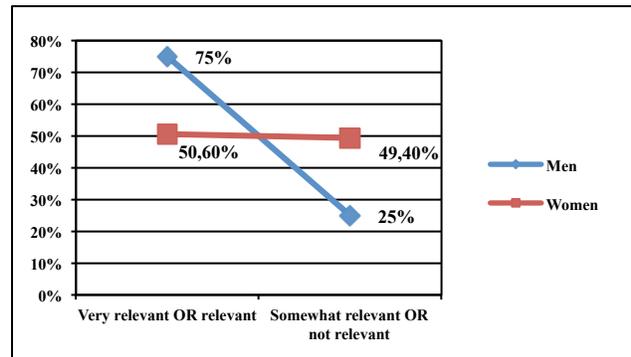


Figure 9. Relation between men and women on the relevance of integrating composition activities into teaching

As with improvisation, the teachers surveyed did few composition activities with their students beginning their musical studies. In fact, as can be seen in figure 10, 86.8% of our sample did them only a few times a year or not at all with this student population. However, 56.2% stated that it was relevant or very relevant for composition activities to be included in these students' programme of learning (figure 8).

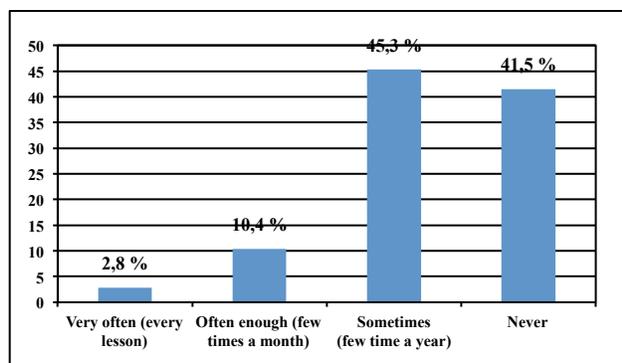


Figure 10: Frequency at which the teachers integrate composition into their teaching

³ The percentage was 70.4% for improvisation.

To understand the factors that lead some teachers not to integrate composition activities in their teaching, we asked those who *never* use them in their pedagogical practice (41.5% of our sample) to share their reasons for not including them. The factors emerging from our qualitative analysis are similar to those identified for not using improvisation.

1st factor: They do not believe they are competent enough to integrate composition in their teaching.

- Ex.: *“Since I do not have training in this, I feel I am ill prepared to transmit it my pupils.”*

2nd factor: They do not have time to integrate composition into their lessons.

- Ex.: *“Time! The lessons are very short (30 minutes). After scales, dozens a day, and reviewing the pieces, there would hardly be any time for composing!”*

3rd factor: They are not interested in composition.

- Ex.: *“I don’t think about it—it doesn’t appeal to me,” or “I’m giving piano lessons, not composition lessons,” or “It really doesn’t apply. It’s not the object of my lessons. I want them to learn, understand, and be able to perform a melody to the best of their ability before a public audience.”*

4th factor: They do not believe that the student is at an advanced enough level to compose.

- Ex.: *“They must begin by learning the concepts proper to their instrument and the basic principles of music before starting to compose!”*

The results obtained for composition were quite similar to those obtained for improvisation. Thus, the first factor shows that the teachers do not have the means that would

enable them to teach composition. The second factor reveals that the teachers place greater value on the concepts and skills necessary to reproduce well a written musical repertory than on practising composition with their students. The third factor informs us that the teachers surveyed do not see the usefulness of or have any interest in employing composition in their teaching. As for the fourth factor, it reveals that the teachers believe that their students ought to acquire a number of musical concepts before beginning to compose.

Music technologies

For the part of the research devoted to music technologies, we focused in the relevance of employing these technologies in teaching a musical instrument to young beginners as well as on the frequency teachers use these technologies when they use them. We also wanted to find out whether there were other factors that could influence the two variables of “relevance” and “frequency”. Finally, we tried to identify that factors that lead some teachers never to include music technologies in the teaching.

As with improvisation and composition, our analysis revealed that a large majority of teachers (74.3%) think that the use of technologies is either very relevant or relevant in teaching young pupils who are beginning to study their instrument. Furthermore, we observed a significant difference ($p=0.022$) in judging this relevance between those teachers who had received training in music education and those who had not, as shown in figure 11.

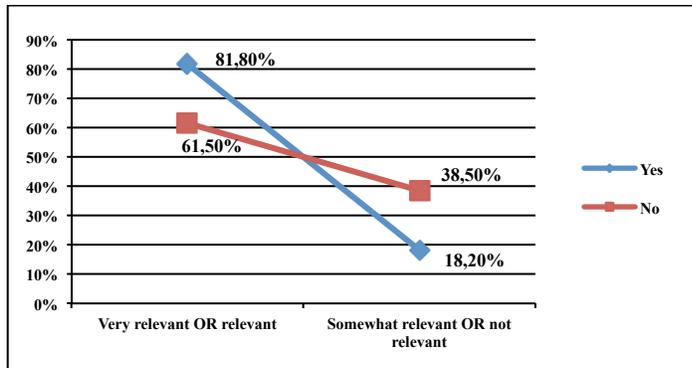


Figure 11. Relation between teachers who had or who had not received training in music education and the relevance of integrating music technologies into their teaching

This result shows that the number those teachers had previously received training in music education was significantly larger among those who believed music technologies to be relevant in teaching young pupils at the beginning of their studies than among those who had never received this kind of training.

Our results also revealed that the teachers surveyed use music technologies more frequently than improvisation or composition in teaching their students. In fact, 50.4% of them use these technologies several times a month, whereas only 28.7% of them integrate improvisation activities and only 13.2% use composition several times a month in their pedagogical practice. Here also it appears that having had training in music education significantly influences ($p=0.034$) the frequency with which they use music technologies, as illustrated in figure 12.

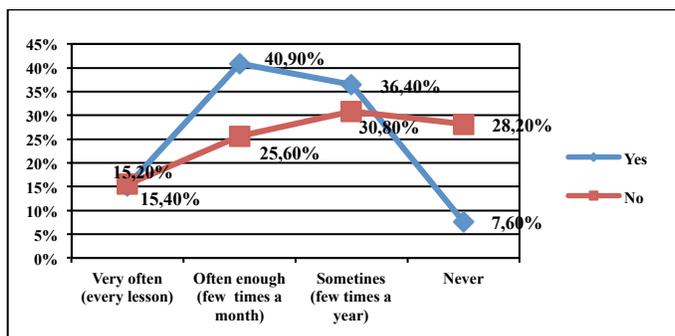


Figure 12. Relation between teachers who had or who had not received training in music education and the frequency of using music technologies in their teaching

As can be observed, teachers who had previously received training in music education are both more in number to use music technologies several times a month and fewer in number never to use them than are those who have not received that kind of training.

Finally, we sought to identify the principal factors that led 15.2% of our sample never to use music technologies in teaching young pupils who are beginning to learn their instrument. Of these, we were able to identify two.

1st factor: They work in a context or an environment that does not permit them to use technologies.

- Ex.: *“Because I teach at the homes of my pupils.”*

2nd factor: They have no interest in technologies.

- Ex.: *“I don’t see them as being important. I prefer that the student concentrate on his instrument rather than on external resources.”*
- Ex.: *“A process of learning without technologies seems to me thorough enough, and I find that technologies are already rather too present in the life of young people.”*
- Ex.: *“I have never really thought about it...”*

Conclusion and discussion

The objective of this study was to obtain a first level of knowledge about the use of improvisation, composition and music technologies in the teaching practices of instrument teachers in Quebec who give individual lessons outside of school to beginning pupils aged five to ten. Our results show clearly that these teachers rarely use improvisation and composition with

this student population, even if they consider these approaches to be relevant or indeed very relevant in terms of pedagogy. This tendency, however, is less prevalent in relation to the use of music technologies. The instrument teachers surveyed integrate these technologies more often than improvisation or composition in teaching of young beginning students. How are these results to be interpreted? Several explanations are possible.

First, in referring to the comments of the teachers who never use improvisation or composition activities with their pupils, it can be seen that these are the teachers who state that have not been trained to use these approaches with pupils. This finding supports the findings of previous studies (Azzara 2002; Bitz, 1998; Burrows, 2004; Robidas 2010). In fact, none of the Quebec institutions (faculties or departments of music, music conservatories) offer or require formal courses in improvisation or composition for students engaged in instrument study. Moreover, with the exception of the Faculty of Music of Laval University, which offers a seminar on teaching creativity (improvisation, composition) within its master's degree in instrument teaching, none of the Quebec institutions integrates training in improvisation or composition within their programmes from the point of view of pedagogy. Consequently, never having had experiences of this kind during their training, these teachers may have difficulty in forming a clear idea of these approaches or of understanding the kinds of interest and relevance they can have for pedagogy. This can be seen in the comments made by the teachers. Furthermore, this lack of training in creative forms of pedagogy traps the teachers in a "vicious circle" in which they tend to reproduce the kind of teaching they themselves received.

Furthermore, one of our initial hypotheses was that instrument teachers in Quebec who give individual lessons outside of the schools and who adopt any of the teaching programmes available as a basis for their teaching and the learning process of their students will be less likely

to integrate improvisation and composition activities or to adopt technologies for their teaching because these components are missing from these programmes, which are otherwise quite exigent in terms of their expectations (technique, repertory). Now, our statistical analyses reveal no significant relation between these two variables. In other words, we observed no significant difference between teachers who either use or do not use one of these teaching programmes and the frequency at which they employ improvisation, composition or music technologies in their instruction of young beginning students. Therefore, it is not the teaching programmes used to train their students that present the problem, but rather the value that the teachers ascribe to these kinds of activities or their lack of training or tools that would enable them to use these approaches with their students. These last hypotheses seem just as plausible when a more attentive analysis is done of the reasons given by some teachers why they never use improvisation or composition in their teaching. Indeed, some of the factors emphasized clearly reveal the importance of training musicians in improvisation and composition during their musical studies so that they will later be able to realize the relevance of them or integrate them into their pedagogy. In addition, other factors show clearly that these teachers place more value on the concepts and necessary skills that will reproduce well a written musical repertory than on improvisation based on playing by ear (without a score) or on activities involving composition.

Finally, one of the factors emphasized also shows that these teachers believe that it is difficult or indeed impossible to improve some of a student's instrumental skills through the use of improvisation or to practice composition with students who do not have a certain amount of theoretical background. In other words, the students must previously possess these skills in order to be able to improvise or compose. On the contrary, evidence shows that it is quite possible and even useful for beginning students to practise various kinds of improvisation or to compose

music, especially with the aid of music technologies; and, as was stated earlier, doing so can reinforce the acquiring of musical concepts (Guderian, 2012; Miller, 2004; Miller, 2012; Stevens, 2011).

The use of music technologies raises several additional questions. Even though the results of our study show that the teachers surveyed used technologies more frequently than improvisation or composition in their teaching, we do not have information on the ways in which they use technologies. Discovering that will require a more probing search to find out whether their use of technologies does or does not transform their way of teaching or of learning music.

In the end, the statistical analyses carried out demonstrated significant differences between men and women in their personal practices of improvisation and composition as well as in how they view the relevance of using them in teaching beginning students. The men appear to experiment more often with these kinds of activities in their personal practice of music, or they seem to find these activities more pedagogically relevant than do the women. Nevertheless, this finding should be treated with a good deal of caution for various reasons. Primarily because our sample comprised 80% women and 20% men. It is therefore possible that this strong representation of women within the sample influenced the result. Thus, it is essential that another study be done that will include a more equal distribution of men and women to confirm or disqualify this result. It is also possible that this result could be attributable to the respective experiences of men and women during their musical training rather than to their gender. Indeed, if the men had greater opportunities to use improvisation and composition during their training, it is quite likely that these experiences have had long-term effects on their teaching practice. One thing is certain. It will be essential to explore in greater depth these first quantitative findings with the help of rich qualitative data in a future study.

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