Peer Review Corner

Edited by Lee Willingham

Musical Experiences in a Visually Biased World

By John L. Vitale

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Abstract: *This article investigates the visual bias in our world, including examples of visual bias, where it came from, and how it impacts auditory learning and musical experiences. Moreover, an examination of how musical experiences ironically and paradoxically perpetuate the visual bias in our world is also provided. This article also articulates that music education suffers as a result of the visual bias in our world since music is by its very nature, primarily auditory. Lastly, this article argues that music educators should provide more opportunities for experiential forms of learning that foster auditory perception through play, exploration, and discovery, and less focus on established music notation, which is inherently visual.*

Introduction

The presidential state of the union address on September 20, 2001, by George W. Bush was a significantly important speech at the time given the recent terrorist attacks on the World Trade Center towers nine days before. Immediately following Bush's speech, I found myself tuned in to *Larry King Live* on CNN television (Walker, 2001). One of his guests that particular evening was Michael Hingson, a blind man who escaped from one of the World Trade Centers by walking down seventy-eight flights of stairs with his guide dog. Even though it has been over nine years since this broadcast, I clearly remember Larry King asking his blind guest: "Did you *see* President Bush's speech earlier tonight?" Larry King's oversight was not only extremely embarrassing, it was also a watershed moment for me—one that validated how language reinforces visual bias.

In fact, this visual bias has been the basis for many personal and professional discussions over the years with colleagues, students, family, and friends, which ultimately served as the impetus to write this article. Since music is by its very nature, primarily auditory, it has been my experience as both a parent and music educator that visual bias has affected the way we learn music, and has also inhibited our ability to discover and explore our auditory world. Although formal Western music education has a long and institutionalized past, music education (particularly in elementary and secondary schools across Canada) should provide more opportunities for experiential forms of learning that foster auditory perception through play, exploration, and discovery, and less focus on established music notation, which is inherently visual.

Contextual and Philosophical Framework

There are many scholars that corroborate the notion that the world around us is dominated by visual stimuli. Musical scholar Wayne Bowman (1998), for example, has stated: "Western thought has constructed the world and reality in visual terms. . . Sound constitutes a backdrop, an occasional punctuation for a world that is first and foremost given to the eye" (pp. 334-335). Larry King's remarks, therefore, would not have been as much of a blunder if his guest was not blind. That is, society has accepted the notion that sight has become our primary sensory instrument, as Bowman has adeptly noted. After all, a phrase like "I see what you are saying" is relatively commonplace during face-to-face communication and even in a telephone conversation where there is no visual element. In the example of the Larry King blunder, one need look no further than the television set, as the vast majority of people who heard President Bush's speech on the evening of September 20, 2001, heard it on television—a highly visual medium that perpetuates visual bias (Noam, 2009). This is supported by the research of Liff and Posey (2004), for example, who argue that the reliance on "visual cues" is paramount to the "proper and rapid transmission and receipt of messages" (p. 19). Related to this are the ideas of Schultz (2005), Watson (1998), and Eadie (2009) who argue that news reports on television are visually biased, often emphasizing stories that have a great deal of visual appeal. In sum, the television and, more recently, the Internet have become significant sources of knowledge and understanding of the world. O'Loughlin (2006) states: "the world is now presented to us most convincingly

through the lens of the camera, by means of television footage, or via images on the Internet" (p. 22). This excessive attention to the eye was investigated and proven by Colavita (1974). In this study, Colavita provided a random series of auditory, visual, and audiovisual stimuli to participants. These participants were instructed to make one response whenever they observed a visual target and another response whenever they heard an auditory target. What he discovered was that most participants failed to respond to auditory targets when they were simultaneously presented with audiovisual targets (known as bimodal stimuli). This phenomenon transpired even though these same participants had no problems in responding to auditory and visual stimuli when they were presented individually. In other words, sight blocked out sound, and the propensity to respond to sight over sound is known as "The Colavita Effect."

History of Visual Bias

Has the visual bias in our society always been there? The answer is simply no. Many Native American and African cultures, for example, maintain centuries of knowledge through rich and explicit historical oral traditions (not literary), such as the Kuba in the republic of Congo in central Africa (Vansina, 1978). Moreover, some oral traditions in customary African cultures even use music to assist them in some capacity. Davis (2003) has stated:

> In traditional African societies, griots were as much oral historians as musicians . . . [griots] sang the praises of their social leaders, committed to memory epic genealogies which became the oral history of their culture, sang and played in groups to set rhythms for farmers and others at their work. (pp. 111-112)

Even Western societies were once rich in oral traditions before visual bias was acquired. Bouvier (2003), for example, has stated: "It is today a well recognized fact that the Homeric poems, the *Iliad* and the *Odyssey*, derive from an oral tradition" (p. 59). In fact, a copy of Homer's Odyssey sits on my bookshelf, and I have taken for granted that the story of Odysseus and his long journey home following the fall of Troy started out as oral tradition in ancient Greece. The salient question is, however: What has spawned and cultivated the domination of the visual world in ancient Greece—the cradle of Western civilization? The answer to this question can be found with a new sect of medical practitioners in ancient Greece who preferred to rely on the observation of phenomena as perceived in experience. This new sect was known as the Empiric School, who rejected the accepted norms of the dogmatic medical practitioners at the time, which was more multisensual (Sini, 2004). Hence, there was a clear paradigm shift towards vision as the dominant sensory perception in ancient Greece, which probably spawned the expression "seeing is believing." The view is also supported by Martin (1994): "Because of their favoring vision, a number of its apparent inclinations influenced Greek thinking" (p. 24). This Empiric school spawned the term "empirical" which would become a major component in scientific thinking during the age of enlightenment and also instrumental in establishing the philosophy of pragmatism.

In addition to empirical thinking, advanced literary systems also helped to create the visual bias in Western society. Logan (2004) who coined the phrase "the alphabet effect" argues that the development of literary systems (eventually mass marketed with the invention of the printing press by Gutenberg in the 15th century), allowed vision to become the dominant sense amongst humans in the West: "The alphabet by separating the sound, meaning, and appearance of a word separated the eye from the rest of the senses, especially the ear. Preliterate man is multisensual whereas alphabetic man is highly visual" (p. 123).

> visual bias has affected the way we learn music, and has also inhibited our ability to discover and explore our auditory world

Further evidence of visual bias being an acquired trait in the West can be found in the economic systems of post industrialized societies in the West. Adorno and Eisler (1947) contend that visual bias in sophisticated free enterprise markets is ultimately the product of how society constructs reality through material goods, which hearing is unable to do. Basic principles of bartering, trading, buying, and selling are inherently visual. Hence, the expression: "show me the money." In sum, visual bias is not innate in humans, but rather an acquired trait of Western civilization (Jonas, 1982) via empirical thinking, advanced literary systems, and sophisticated economies.

Music as a Vehicle to Perpetuate Visual Bias

I find Logan's (2004) "alphabet effect" extremely ironic since music (the melody to Twinkle Twinkle Little Star) is the primary vehicle used to teach formative years children the alphabet in the English-speaking world. In fact, the Boston-based music publisher Charles Bradlee copyrighted the "Alphabet Song" as far back as 1835 (Paquette & Rieg, 2008). In fact, Parquette and Rieg argue that "enhancing literacy instruction through music is vital in today's diverse early childhood classrooms" (p. 227). A quick visit to YouTube.com generated numerous alphabet songs (not the melody to Twinkle Twinkle Little Star) in a variety of languages, such as Spanish, Italian, Russian, and Turkish to name a few.

Similar to the phenomenon of the Alphabet Song, music within media applications (film, television programming, video games, and computer/online applications) also helps us with context and understanding. In film, music is used to help the audience understand and cultivate the visual stimulus on a much deeper level. Consciously, music is employed to generally amplify and

heighten a film sequence. Subconsciously, however, music is primarily used to allow the viewer to process the visual stimulus into a meaningful and realistic text. Lipscomb and Kendall (1994) have so adeptly stated:

> Film composers have made a fine art of manipulating audience perception and emphasizing important events in the dramatic action without causing a conscious attentional shift. In fact, when watching a film, it is quite possible that perception of the musical component will remain at a sub-conscious level. (p. 90)

Subsequently, it is no wonder that a significant part of a film's budget is set aside for music, as the chance for success without music is slim. Or, as Handzo (1985) stated, "Film without music is deadly" (pp.1-2). This relationship was known long ago, as an ancient shaman did not cure by medicinal herbs and tonics alone, but also with the aid of a rattle or the beat of a drum. That is, people instinctively knew that "sound, when it is combined with pictures, imposes a psychological state on the receiver which helps him [her] deeper believe or better understand what is happening around him [her]" (Wastor, 2010, p. 1). Music plays a virtually identical role in television programming, video games, and computer/online applications. This concept is connected to Attali's (1985) global perspective that society is generally fashioned by sounds (music) and their arrangements. Music, therefore, ironically plays a role in promoting the visual bias in our society.

Visual Bias within Musical Literacy

Even within Western music, the emergence of sophisticated literary forms of musical notation has affected an individual's ability to listen to, respond to, explore, and expand the auditory world. I see examples of this with my own children, particularly my eldest child who studies piano at RCM level six. At eleven years of age, he is now starting to learn his favourite songs on his iPod through listening and old-fashion lifting—no music reading or notation. When I asked him about his experience, he indicated that he enjoyed it very much, because he did not have his teacher over his shoulder correcting his posture and telling him what fingers to use. He clearly sensed independence and freedom to explore his auditory world that he never received in his formal music education. Even as a secondary school music teacher for twelve years, I have come across numerous piano-playing students who were more concerned with the rules and regulations of performing than actually making and emoting music. Moreover, many of these students could only play a song with the sheet music in front of them. They were more emulators—a conduit of the composition—rather than free agents capable of exploring the auditory world around them. Moreover, I learned how to perform on several instruments years before I had achieved a respectable level of musical literacy in the classical tradition. Through self-teaching, I became proficient at exploring the auditory world. Learning to read and perform from standard notation, however, actually suppressed my own ability to explore my auditory world. Being told what to play, how to play it, and having no voice in the process was not particularly interesting. It felt as if the raw emotion, passion, and creativity had been taken out of my musical experiences. Music is more interesting, artistic, and much more of an emotive experience for me when I play by ear. This phenomenon is also supported by the work of Wigginton (2010), who argues that vocal music educators need to understand that traditional methods of vocal training are antiquated and not in tune with the vocal aspirations of many modern-day vocal students who want to sing for the sake of singing and emoting music and not have to worry about proper technique and procedure:

> Somewhere outside the classical paradigm of perfect posture, pure vowels, and forward placement exists a vast universe of musicmaking singers. These artists pour their souls into each note, their voices shaking you, moving you to your very core. These singers have never heard of the zygomatic arch or the ligament vocalis; they have never even considered raising their soft palates. . . Many of them have never had a voice lesson in their lives-and see no reason to. (p. 1)

Even the term "musical literacy" perpetuates visual bias, suggesting that a musically literate person is an individual who can read music. This excludes millions of individuals who can competently create and perform music without the ability to read music, with The Beatles being the most prominent example in Western music. In fact, The Beatles were arguably the best songwriters of the 20th century and one of the most influential entities in all of pop culture. John Lennon stated: "None of us were technical musicians. None of us could read music. None of us can write it" (Roberts, 2002, p. 22).

Visual Bias and General Musical Experiences

In my experience, visual bias still dominates daily life and education in the West, particularly for elementary-aged children who are exposed to a variety of visual stimuli during primary grades. In fact, most children in grade one can identify colors, and are also given ample opportunity to express such colors (e.g., painting, cutting, and pasting, etc.) several times a day. Moreover, Richford (2010) states that most kids learn to identify colours between three to five years of age, well before the start of grade one. This behaviour is in tune with Martin's (2009) argument that the majority of elementary age learners are visual and only twelve percent are auditory learners (p. 281). The large number of visual learners is not surprising as much of Western curriculum in public education institutions are based on the scientific and empirical notion of lived experience through acute observation dating back to ancient Greek times, as previously mentioned. This is also supported through my own personal experiences, as the vast majority of curriculum that I have been exposed to as a student, educator, and parent does not foster intuition, instinct, and multiple sensory perception, but rather a curriculum that is bias towards vision.

What would a grade one classroom, however, look and sound like if teachers cultivated auditory cognition as they do visual cognition? Would students be encouraged to bang on the piano or drums? This would surely help them understand the difference between notes, pitch, and timbre in addition to promoting free exploration and associations between music and emotion. That is, improvisatory music-making can be a means to understanding technical aspects of music and a means to freely explore and emote, which, ultimately, helps to build character and shape community. This is one of the fundamental components of the Improvisation, Community, and Social Practice (CASP; 2011) organization at the University of Guelph, which "investigates

the ways in which improvised music plays a role in shaping notions of community and 'new forms' of social organization." After all, we encourage primary students to paint whatever they feel, regardless of what the end product looks like, because it allows children to emote and help find their place in the world. In my experience, I have seen many of these end products taped or magnetized to the refrigerator for proud display in the homes of primary-aged children. Even my three-year-old daughter consistently comes home with a myriad of paintings and arts and crafts from the preschool she attends three days a week. Ultimately, we encourage the artistic efforts of our children and, subsequently, reward them by putting their works of art on display. Yet, if musical equivalents were brought home by our children (i.e., a 20-second recording of a child banging a piano or a drum set), they would not be played very many times. Even in a live setting, how many parents let their three -year-old tickle the ivories or bang on the drums for experimentation beyond a few minutes? In my experience, most parents would want their three-year-old coloring or drawing, which is a much more agreeable and amenable experience for parents. When comparing visual and musical creations from an average elementary student, it has been my experience that the process of creating visual art is not nearly as distracting as the creative process of performing music, simply based on the fact that we cannot block our hearing. Schafer (1986) stated:

> The ear, unlike some other sense organs, is exposed and vulnerable. The eye can be closed at will; the ear is always open. The eye can be focused and pointed at will; the ear picks up all sound right back to the acoustic horizon in all directions. (p. 46)

Bowman (1998) has similar views: "Noise is sound that imposes, interferes, intrudes, forcing us (since one cannot turn away from sound) to experience the uninvited and unwanted" (p. 287). It is no wonder that our television converters have a mute button for the sound, but not for the image.

I have taught many students over the years that were denied opportunities to practice their instrument at home because of parents and older siblings who refused to be subjected to the auditory experience. I can even remember one student who was forced to practice his trumpet in the garage because of his mother's inability to tolerate the sound anywhere inside the home. This acute sensitivity of our ears is also kinesthetically linked to our entire body as adeptly noted by famous Romantic Composer Hector Berlioz (as cited in Savan, 1999). Savan, for example, described Hector Berlioz's reaction to a piece of music as: "increased blood circulation, violent pulse rate, muscle contractions, trembling, numbness of the feet and hands and partial paralysis of the nerves controlling hearing and vision" (pp.138-139). Perhaps this is the reason why movement and dance to music is an essential component of life in cultures that still maintain oral tradition. In sum, the human ear in its "exposed and vulnerable" state (Schafer, 1986) has helped perpetuate the visual bias in the Western world.

What would the world be like if auditory perception was deeply cultivated in our education system? Would average children between three to five years of age eventually be able to distinguish pitch (both relative and perfect pitch) as they do colours? Although it would take decades and perhaps even centuries for such phenomenon to manifest itself, I do believe it could someday be possible if our current education system placed more emphasis on auditory learning. I have first-hand experience with my own two children who studied music for four years in a group setting at the Yamaha School of Music in Toronto between the ages of three and six. Although neither of them have perfect pitch, they could both aurally identify I-IV-V chords in the keys of C major and G major. In sum, the need for musical experimentation equivalent to artistic experimentation in the visual arts needs to be implemented in music education at the elementary level. This will not only cultivate aural knowledge and skills, it will also allow students to discover the world of sound and music and set a positive platform that welcomes and warrants future musical study. Wiggins (2001) summarized this notion: "As students begin musical study for the first time, it is important that the experiences they encounter both establish a basis for further study and invite and intrigue them to be motivated to pursue further study" (p. 114).

Music Education and Visual Bias

Children (from a very early age) become formally and informally indoctrinated into the visual bias of our world. Despite the fact that music helps young children develop a propensity for visual learning (such as singing the alphabet song), musical processing in this capacity remains an ancillary benefit, as the raison d'être is visually motivated (learning the alphabet as a building block for reading). I argue, therefore, that the visual dominance of our society is one of many barriers that music education faces right from the onset of elementary school. Even in latter years of learning, music continues to play marginal and ancillary roles in middle school and secondary school education (Jorgensen 2003; Pio, 2007), and I believe that visual bias is one of the reasons that help to perpetuate this phenomenon. There is also evidence, however, to support the claim that visual arts also play marginal and ancillary roles in public education (Danaher, Moriarty, & Danaher, 2009; Sikes, 1987), and there is certainly no visual bias in visual arts (Hickman, 2010). I contend, however, that visual arts do not play a marginal role in public education. If we examine art (particularly at the elementary level) as an entire entity across the curriculum and within an entire school outside of the curriculum, it is evident that students engage in a plethora of visual art experiences that highly outnumber musical equivalents. As a classroom teacher for almost a decade and a half, and a parent of two school-aged children, I have witnessed this phenomenon first hand many times. My two boys, for example are constantly drawing and engaging in visual art activities for a myriad of subjects outside of Art. They are constantly creating title pages for every unit they begin in virtually every subject—they even draw title pages in music class. The art does not end here, however, as they are constantly creating graphic work in Language Arts (i.e., drawing characters and settings) and Social Studies (i.e., drawing landscapes, places, colouring maps, and creating dioramas), for instance. Clement, Piotrowski, and Roberts (1998) have stated: "Traditionally, art has always had a high profile in cross-curricular work . . . because making images has been seen by teachers as a useful way for chil-

dren to illustrate what has been learnt in other subjects" (p. 87). Although there are opportunities for musical experiences across the curriculum as well, they are significantly fewer in number. In the overall curriculum, therefore, visual arts take precedence over music in a child's education. Further evidence of this precedence is the role that visual art plays with early literacy skills, particularly through the use of picture books in early reading teaching and learning settings (Loop, 2009). Moreover, Loop also posits that connecting theme-based literature to artistic activities helps with student literacy:

> Although book reading is important as a stand-alone instructional tool for early childhood educators, linking special or themed books to art activities can increase the benefits of literacy-based lessons. Integrating book reading with a similarly themed art project can help the young child to further understand the narrative, increase representational thought, and improve the fine motor skills that are necessary for printing and later writing. (p. 1)

Outside of the curriculum, the propensity for students to engage in visual arts experiences still outweighs musical ones. Students have numerous opportunities to engage in visual art activities to help with school decorations for special events, open houses, and parent/teacher interviews, for example. I can distinctly remember my second child in third grade who said they spent the whole week leading up to parent-teacher interviews drawing and colouring pictures to hang up in the classroom because the teacher wanted the room to look good for parents. Hurwitz and Day (2007) have stated:

> Children's art on display has its decorative purpose. The classroom is usually a barren place when the teacher enters it before the beginning of the school year. Likewise, the halls of many schools are dull, institutional places until suitable decorations have been arranged. The artwork of children humanizes the character of the school. (p. 376)

If we principally cater to the dominant learning style (visual) in an attempt to bolster student success, then we are ignoring the opportunity to teach students alternate learning styles (auditory)

All of these extraneous opportunities to engage in visual art are not part of the visual art curriculum, but they are still valuable minutes within the school day for children to engage in visual arts experiences—valuable minutes that musical experiences do not equally share, thus causing music to lag behind right out of the gate in elementary school. I also posit, however, that music education does not have to lag behind. It can be argued that the elementary curriculum should foster more auditory learning since the majority of students are not auditory learners. If we principally cater to the dominant learning style (visual) in an attempt to bolster student success, then we are ignoring the opportunity to teach students alternate learning styles (auditory) that should be part of a comprehensive and broad educational experience.

The Orff Approach, which is used by teachers to encourage their students to enjoy making music as individuals as well as in groups, is one approach that tries to break through the visual bias in our world. In this approach, children are encouraged to learn music the same way that they learn language. Children in the Orff approach are, thus, encouraged to listen to music, sing, chant rhymes, clap, dance, and play percussion instruments. According to the American Orff-Schulwerk Association (2011), these instincts are directed into learning music by hearing and making music first, then reading and writing it later, similar to the way we all learned our language. Other early childhood forms of music education offer a somewhat similar approach, such as the Kodály Method, The Dalcroze Method, and the Suzuki Method. Although there are differences between all of these methods, they ultimately expose young children to musical experiences through hearing music, performing music, and moving to music well before standard musical notation is introduced.

The major issue, however, with these early learning music education programs (i.e., Orff, Kodály, Dalcroze, and Suzuki) is one of social justice. Many of these programs are offered in private music education institutions outside of the regular school day, requiring extra time and money that some parents cannot afford. Hence, many early learners do not get an opportunity to participate in these programs. Moreover, music curriculum in many elementary teacher-training programs across Canada does not provide sufficient training for teacher candidates simply based on lack of instructional time in an overall Bachelor of Education program. I find this particularly true for general primary/junior teacher preparation programs. The institution that I work for only provides 24 hours of music instruction for primary/junior and junior/intermediate teaching candidates. Since the majority of these teaching candidates are not music majors, their future students are not getting highly qualified music teachers, which I can personally attest to as a former student, music teacher, and parent. This leaves teachers across the country to rely on music curriculum guidelines set by provincial authorities. Although such guidelines may have some aspects of Orff and Kodály education, for example, many teachers are not qualified to teach such principles.

There are teacher-training institutions in Canada that place emphasis on these early music education programs. For example, Orff training can be found at the University of Toronto and the University of British Columbia and Kodály training can be found at Laurier University and Western University. These institutions have graduated thousands of graduates over the years who have gone on to successful careers in music education and have helped children explore their auditory world and challenge the visual bias in Western education. The problem, however, is

that this musical experimentation tends to discontinue as students reach middle school age. It is at this time that Orff instruments get replaced with orchestral instruments, and traditional and formal music curriculum imbued with note reading and transmission/rote learning takes over. This shift away from self-discovery and peer-directed learning is also perpetuated by the demands of public performances, competitions, and music festivals. In sum, there is a concerted movement from process-oriented learning (where students have a voice and a say in their own learning) to product-oriented learning (where students are being told what to play and how to play it).

Practical Applications that Challenge Visual Bias in the Music Classroom

As music educators, it is important that we tap into the essential power of music, which is by its very nature, primarily auditory. Music education at all levels should provide more opportunities for experiential forms of learning that foster auditory perception through play, exploration, and discovery, and less focus on established music notation, which is inherently visual. This can be done by incorporating more self-teaching and peer-directed learning environments in the music classroom (Green, 2001; Rodriguez, 2004; Soderman & Folkestad, 2004). At the elementary level, particularly in the primary grades, I have experience as both a teacher and a researcher with instrumental music stations. Teachers can set up various music stations around the classroom, with each station having different instruments for students to experiment with, such as percussion instruments (e.g., maracas, wood blocks, bells, whistles, djembes, triangles), small keyboards, and ukuleles, for example. Teachers can have activity cards at each station, which would help guide the students based on the objectives of the lesson. Lessons can range from a number of topics, such as experimentation with dynamics, pitch, timbre, and musical creation, for instance, all of which are part of basic music curriculum guidelines across the country. Moreover, such musical experimentation can be done without focusing on traditional musical notation, but rather through hearing, feel, emotion, and passion. This type of pedagogy is rooted in the basic principles of cooperative learning, where the music teacher should be a facilitator of learning, not a director of learning, as is typical of many traditional music classrooms (Ebersohn & Eloff, 2004; Williams, 2008). Although cooperative learning as a pedagogic tool was not designed to address visual bias in the curriculum, there are many aspects of cooperative learning that music educators can utilize as a means to challenge visual bias. Moreover, much of the Orff and Kodály curriculum is also suitable for musical experimentation, discovery, and play at the elementary level. In addition, many of the large cities in Canada also offer a plethora of opportunities to engage in music education in non-Western ways through a highly multicultural student population. Hess (2009), for example, investigated a Ghanaian dance and drum ensemble in a Toronto area elementary school and found that students actually preferred being taught aurally (in the Ghanaian oral tradition) instead of through notation. Moreover, there are over 70 schools in the Greater Toronto area with a steel band program (Woodall, 2011), which is reflective of the large number of students from a Caribbean background. Mark Mosca, the arranger for the Silhouettes Steel Orchestra, who took first place in last year's Pan Alive competition (Toronto premiere steel band competition), says that: "Most pan players don't read music. I teach them what to play" (as cited in Woodall, 2011 p. 1). These multicultural approaches to music education not only help to challenge the visual bias in our society, they are also a great way to celebrate and appreciate diversity in our classrooms.

At the secondary school level, music students have far more musical ability with a much more rapid learning curve. I have had many successful secondary instrumental music classes where musical notation (sheet music) was never used. I found that students particularly enjoyed the warm-up at the beginning of instrumental music classes more than the class itself. Through deliberate facilitation, I fostered and cultivated this warm-up, which became known as "jam time" by my students. Evidence of this was the natural flow of student islands (i.e., groups of two, three, four, and more) that became so organized that it looked like a planned co-operative learning workshop. Students of like-minded musical tastes joined together and experimented with different instruments, playing popular songs, and even creating their own songs. These musical experiences were also shared with the larger community during the holiday and spring music concerts twice a year. This music making was done without the use of musical notation—just old-fashioned emotion, passion, and the desire to create/perform music.

One of the challenges with musical experimentation is that children authentically and sincerely experiment with music and learning in their own private spaces, where they feel safe and comfortable, and are not afraid to take risks. Littleton (1998) states: "Often children's play with music takes place outside the presence of adults and inside the child's world of make-believe" (p. 8). In my public school experience as a student, teacher, and parent, children get very few opportunities to musically experiment in a meaningful and amenable environment, even though the curriculum guidelines might be amenable to such experimentation. This perspective is supported by Gordon (2003) who states that "most young children are not given adequate opportunity to acquire listening and performing vocabularies in music" (p. 8). The reason for such a dearth of opportunities to musically experiment is the very institution of schooling and the presence of form and structure, even when instructors promote self-teaching, peer-directed learning, and cooperative learning. It takes a very confident and seasoned educator to create a safe classroom environment where students experience trust, are respected, and are cared for. Without this cordial learning environment, creativity can be suppressed, as Robinson (2001) and Holt (1995) have argued. When such creative opportunities are provided, such as discovering new and colourful sounds, children can cultivate and expand their musical minds (Glover, 2000).

Conclusion

I challenge all music teachers to cultivate and foster a classroom environment where students are encouraged to play with music, discover music (Bruner, 1961), and take risks. At the end of the day, music education is an exceptional tool for our students to learn and foster creativity, and also an excellent tool to chal-

lenge the visual bias in our society. In sum, educators need to tap into the power of learning music through nontraditional ways and embrace the fact that music is first and foremost an auditory phenomenon. CME

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Dr. John L. Vitale is currently an Assistant Professor of Education inthe Schulich School of Education at Nipissing University (Brantford Campus) where he instructs teacher candidates in the Bachelor of Education Concurrent Program. In addition, Dr. Vitale has also taught for both Public and Catholic School Boards in Ontario for 14 years,including two years at the elementary level and 12 years at the secondary school level, and also served as Department Head of the Arts at Victoria Park Collegiate Institute in Toronto. As a bass player, Dr. Vitale has toured and professionally recorded with Juno Award winner Robert Michaels and has over 500 professional performances with 2-time Juno Award winner Liberty Silver. He also has numerous compositional credits, including the score to award-winning children's animated film Attic-in-the-Blue (first place winner at the Chicago International Children's Film Festival).