# Music, Education, and Influencing Modern Society

by

Jerry L. Jaccard EdD Keynote Address for the Utah Chapter of ASTA UMEA Annual Professional Development Conference 7 February 2015

### Introduction

The Queen Elisabeth of Belgium Prize for Music is one of the most coveted and difficult to obtain. The Queen herself was a fine violinist, and today, the competition years rotate between violin, piano, voice, cello and composition. One of my best friends is the former director of the Antwerp Royal Conservatory of Music and a longtime friend of the Belgian royal family. A member of the family told him that a guard new to front door duty at the palace in Brussels became alarmed by a suspiciously rumpled man with a foreign accent, wild hair, and carrying a strange black case who insisted that he had an appointment with Queen Elisabeth. As the man became more and more agitated the poor young guard decided he had better call the Captain of the Guards, who began to laugh on hearing the problem: "Oh, that's Einstein; he's here to play in the Queen's string quartet! Let him in, they're waiting for him."

Ironically, that seemingly insignificant incident in the life of one of the world's great scientists demonstrates three useful insights into teaching and learning music:

1) Making music should be something we do *with* people, not *to* people; 2) although most of our students will end up in other professions, we hope that like Einstein, *all* of them will be lifelong amateurs and patrons; and 3) musical participation was apparently a significant force in Einstein's life, which causes us to wonder how and why.

Einstein himself actually provided some answers. In one interview he said, "If I were not a physicist, I would probably be a musician. I often think in music. I live my daydreams in music. I see my life in terms of music." And, in another conversation, he essentially revealed that his scientific discoveries were influenced by his musical way of knowing: "After a certain high level of technical skill is achieved, science and art tend to coalesce in esthetics, plasticity and form. The greatest scientists are artists as well." Especially telling is that for years, Einstein had the following quotation from sociologist William Bruce Cameron posted on his office door at Princeton: "Not everything that can be counted counts, and not everything that counts can be counted." Apparently the Cosmos, like music, is not the statistically tidy matter some think it ought to be in the same way that all of us who teach know that the exact impact of our teaching can neither be predicted nor controlled.

Meanwhile across the Atlantic while Einstein was busy at Princeton, a world-class European composer was elected as president of the Hungarian Academy of Sciences. In his inaugural speech before this august body, Zoltán Kodály (who held a doctorate in linguistics) stated:

Science and art cannot do without one another. The more of the artist there is in the scientist the more fitted is he for his calling, and *vice versa*. Lacking intuition and imagination, the work of a

scientist will at best be pedestrian; without a sense of inner order, of constructive logic, the artist will remain on the periphery of art.<sup>4</sup>

These two artist-scientists validate what we already suspected; teaching music is simultaneously an *art*, a *craft*, and a *science*. With that description in mind, I will address the assigned topic of music, education, and influencing modern society.

## What does music require of us?

The most obvious task, and the one most often overlooked, is to help our students literally fall in love with great music! It is crucial for us to continually reflect on our teaching in order to make sure that we stay focused on this top priority. If we don't accomplish this at the outset, lessons and practicing become a three-way parent-teacher-student struggle that tends to produce a frightful dropout rate, bruised family relationships and worst of all, a feeling in far too many people that they are neither musical nor successful. A few hints may be helpful for all three parties: find joy in the journey rather than fretting over the arrival (aka "my child the concert violinist"); sincere unconditional love is infinitely more motivating than criticism and labeling—the key is to engage students in describing what the music is asking them to do and then to gently guide them in doing it; and, there is more to life than music—in fact, music is a reflection of life—implying that we have to *have* a life in order to be a musician. Albert Lavignac of the Paris Conservatory stated it this way, "'The pianist who is *only* a pianist is not a *good* pianist.' This of course applies to every instrument."

Whether vocal or instrumental, becoming a musician is a matter of balance built up from an unhurried, nurturing childhood that includes developing four interrelated musical attributes defined by Kodály: "The characteristics of a good musician can be summarized as follows: 1) A well-educated ear; 2) A well-educated intelligence; 3) A well-educated heart; 4) A well-educated hand. All four must develop together, in constant equilibrium." His close friend Pablo Casals explained it this way, "Imagine that! They call me a great cellist. I am a great *musician*—It's much more important!" What these greats are saying is that *music* is the first principle subject; instruments are secondary to it. As Belgian-Swiss music psychologist Edgar Willems explains,

In the first stages of musical education, one can never give too much care to the roots of the young plant. One must be wary of superficial results, particularly of those obtained through instrumental practice. Progress in connection with instrumental technique separated from musicality produces more flowers than the roots can feed. Thus, sensitive students often have the impression that they are engaged in work that surpasses them and which requires the help of a teacher in even the smallest details. They have been trained rather than educated.<sup>8</sup>

Apparently, musicality is a pre-instrumental aspect we must attend to. Unfortunately, there is much resistance to this concept in our country, an attitude that produces many "I used to play" adolescents and adults who go through the rest of their lives believing that only a minute segment of the population is musical and they are not. Two of the most damaging effects of this belief are the endless struggle to keep quality music teaching in the schools, and the creeping closure of top-tier ensembles in our country due to declining audience patronage.

#### What is a *musical* education and how do we deliver it?

One particular thought persists through the centuries: musical development should start early and progress systematically based on childrens' natural inclination to sing, move and hear. There is simply no other secure pathway to lifelong musical growth for the general population (yes, of course there are occasional exceptions). Writing almost 500 years ago, Jan Amos Comenius, the "Father of Modern Education," set forth the fundamental principles of teaching and learning, only a few of which are cited here. It is easy to see how each of these apply to music (as do the others not included in this writing for the sake of brevity):

- 1. The whole range of the arts and sciences should be represented in schools;
- 2. Systematic teaching toward short- and long-term goals fosters successful learning;
- 3. Proper instructional pathways to those goals must be known and followed;
- 4. Mixing methodologies within a single subject and using too many methodologies confuses students . . . 'causing hesitation and delay, the distaste for and lack of confidence in new subjects;'
- 5. Good teachers carefully guide students through literature and the choice of literature because *too much* diversity causes lack of mastery of all of the branches of study; and
- 6. Every subject should be taught in carefully graded steps, that the work of one day may thus expand that of the previous day, and lead up to that of the morrow. 9

Such a common sense intuitive framework also solves the sticky problem of "method." I have come to regard "method" as one of the most confusing and destructive words in our pedagogical vocabulary, only partly because it means different things to different kinds of music teachers. Frank Smith defines method as "the systematic deprivation of experience" with the result that "people who do not trust children to learn—or teachers to teach—will always expect a method to do the job." In sharp contrast, Comenius's principles give us wide latitude while also setting some reasonable boundaries. As practitioners, you and I know that we each develop our own methodology (the *how*) based on the content and meaning of music (the *what*) and where our students are along their own developmental continuum (the *when*). In other words, after completing our coursework, doing our student teaching, attending workshops and conference sessions, and reading the latest trending "how to" books, *our teaching-learning process is fundamentally a purposeful, constructive, interactive, and creative journey through the vast body of literature we call music.* 

As to the main purpose of this journey, I have always loved Edgar Willems's tragic-comic description of it:

Bad musicians *cannot* hear what they are playing; Mediocre ones *could* hear it, but they don't listen; Average musicians hear what they *just* played; Only good musicians hear what they are *going* to play<sup>11</sup>

The core of such high musicality is a well-formed inner hearing driven by one's own musical sensitivity, concentration and imagination. These are most easily developed in children through carefully molding their singing and hearing ability as the essential foundation for all other musical learning. In my corner of the profession, we believe that *all* children are born musical and that singing in tune is a simple developmental matter

rather than a talent possessed by a blessed few. Once children are singing well, it is another easy matter to gradually introduce them to the *phonics* of music, its representation as staff notation, and its many cultural-stylistic possibilities. We accomplish this by consistently applying Comenius's principles of organizing the curriculum (a truly useful one reveals the interrelationships among its elements), discerning its sequences and subsequences, and consistently providing meaningful handson experience with it over a sufficient span of time. In many countries, this begins at least one year before instrumental study then continues alongside it. In some cases, it begins years ahead with amazing choral and instrumental results lasting well into mature adulthood.

A thousand years ago, a brilliant teaching musician named Guido and his young students co-constructed our present notation system through daily trial and error in their monastery choir. At some point during Guido's 30-year teaching career, they came up with the *phonics* of music—relative solmization (aka moveable-do sol-fa)—by singing names to scale degrees thereby also describing their functional relationships within a given tonality in any pitch system. Guido observed that within months, his students became able to notate songs heretofore trapped in oral transmission as well as to sound out new ones he was composing for them. Further, they soon discovered that sol-fa could be abstractly symbolized on a two-line, then three-line, then four-line staff, the latter becoming the standard for several centuries after Guido's death in the year 1030. The staff then allowed for representing pitch through the use of clefs—also invented by Guido and his young charges—when combined with the alphabetic names inherited from the Ancient Greeks. So, in a very short span of time, the dual relative-absolute notation system we still use today came into widespread use. 12 It was at once intuitive and precise, formal and informal, vocal and instrumental, and it opened the floodgates of composition that shows no signs of slowing these thousand years later. The historical record affirms that notation came into being as a dynamic balance of *orality*, *aurality*, and *literacy*. 13 The current imbalance among them is one of the sources of our frightful dropout rates and general lack of lifelong societal inclusion and knowledgeable participation in serious musicking whether as a performer or audience member.

One of my mentors was the late László Dobszay of the Institute for Musicology of the Hungarian Academy of Sciences who told me, "So, music is relationships, nothing other. An organic unity of relationships—and just those relationships, the richness of those relationships—is the content of music." And that is the *true* purpose of relative solmization, to hear relationships among tones in any pitch system using just twelve names. Is any "true purpose" because all too often it is mistakenly regarded as a sight-singing "method." It is so much more than that! Properly learned and applied, sol-fa reveals the inner structure of music up to the highest levels of analysis, stylistics, interpretation and creation, and can be applied at astounding levels of virtuosity by schoolchildren and adults.

Please don't misconstrue my meaning in terms of instrumental study: we never attach sol-fa names to fingerings, because then they would be different in every key. Rather, we attach fingerings to absolute pitch names where they are indicated by whatever clef. In

this way, children grow up able to interiorize the relative-absolute duality of musical notation: solmization tells how it sounds (mind-ear); the staff indicates in which pitch system (eyes-hands). Because relative solmization teaches relationships among tones and staff notation places them within pitch systems, young people find it very logical that if one tone moves to a different pitch system, then the rest of them must also move in order to maintain the same relationships. Teachers of my ilk routinely begin developing this intuitive transposition sense in First Grade using age appropriate melodic materials. There is, of course, much more that is taught and learned over the course of a child's seven years of elementary school music. Just as in all other subjects, the elementary grades should be where children acquire the musical tool skills, attitudes and passions that will last them for a lifetime. The point I am making is that we do have seven years in which to guide as many young people as possible well along on this essential musical path! Let us teach music on its own terms rather than those driven at us by market forces with their unclear motives. Commercial music will always make itself known without any effort on our part, but who will nourish our students in the higher forms of our art and craft if we neglect to do it?

A simple analogy illustrates why singing-hearing musicianship is so important to lifelong instrumental retention, choral singing, and audience participation. Imagine that you are hired as a Russian language data input technician. After a certain period of time on the job and much practice, you become quite proficient at looking at Cyrillic characters and hitting the right keys. You even arrive at being able to input them into the database without looking at the keyboard. You are moved to higher pay levels and training positions because you can do this with ever increasing rapidity and very few errors. However, one problem remains: you don't really know what those characters mean because you haven't learned to speak or read Russian beyond a few daily survival phrases. In other words, you really don't understand the language, let alone its nuances and deeper meanings. This very same thing happens to far too many of our music students: they learn to "play" without fully learning to "speak" the language of music or understanding what it means in its great richness of intervallic, structural, stylistic and cultural relationships. Even so, we continue to stick those who want to major in music into the torture chambers of Freshman theory, sight-singing, keyboard harmony, and everybody's favorite, "guess what is in the music history professor's head today?" Those foundation skills should be in progress long before college, and for more than just future music majors. Why else would we call we what do "music education" in the first place?

Another of my mentors and dear friends is Erzsébet Szőnyi, a student of Nadia Boulanger and Olivier Messiaen, the first woman to win the Paris Conservatory Prize for Composition, as well as the chief architect of the pre-school through post-graduate musicianship core curricula for which Hungary is so well-known. She remembers how under communism, all police and military band members were sent to the Liszt Academy to improve their musicianship and take private lessons. "They played their instruments in a certain way but could not sing a perfect fourth or a minor third." Like so many of our own students, they were technically proficient musicians with underdeveloped aural abilities who could not aurally identify or vocally reproduce tonal relationships without their instruments. In her words, "It was tough work, especially because the requirement in

those bands was not the ability to play the instrument, but the number of players." My own wonderful high school band teacher, a fine classical clarinettist who had also played saxophone in Jimmy Dorsey's band, used to yell at us in mock anger, "Don't be a bunch of button-pushers!" Just think how having students who hear *before* they sing or play, who can artistically shape a melodic line (or follow one and what happens to it), and who are rhythmically and tonally secure would change how we teach voice and instruments!

Years ago, I witnessed what one such student could do, an 11-year-old pianist who had just won first prize in her age group in the all-Soviet Bloc young musician competition. This was her first lesson upon returning and her teacher put her right to work learning a Beethoven sonata she had not yet played. Decades later, what transpired during that hour remains with me as the Holy Grail of studio lessons. The teacher *never once touched a key on the piano*; never said "play it like this" or "No, it's supposed to go like this" while scooting the student off the bench in order to demonstrate. Rather, this teacher applied the most critical axiom in all of education: "The learning process lies within.' Five little words. Learning is a drawing-out, not a pouring-in process. The word 'education' has its roots in the Latin word *educere*—to draw out." 17

## The lesson went something like this:

- T: "Let's discover the melodic shape of this first section. Can you solmizate it?"
- S: (without touching the keyboard, the student effortlessly solmizates the melodic line including its momentary modulations in and out of related keys).
- T: "What did you find out?"
- S: "It's a beautiful melodic line but it has phrases of irregular length."
- T: "What can that mean?"
- S: "Well, that's Beethoven isn't it? He's always pushing that *sonata-allegro* form around instead of staying exactly within it."
- T: "Now solmizate the same section vertically from the bottom of the chords up to the top voice, then tell me what you notice."
- S: (she flawlessly sight-sings through the chords reading both bass and treble clefs) "There is a half-cadence in an unusual place."
- T: "So what can we do with half-cadences?"
- S: "Well, stylistically in Beethoven's time, we do a slight *ritardando* without a full stop then move right on into the next period of the section."
- T: "Show me how that would sound."
- S: (she plays the phrase leading up to and through the cadence).
- T: "What do you think about how that sounded?"
- S: "Well, because that cadence occurs earlier than one expects, I wonder if I should use even less of a *ritardando* so as not to overemphasize it."
- T: "Well, give it a try and let's see how it sounds."

After the student played it, the teacher finally shared a stylistic trade secret in one or two sentences after which the student immediately applied it. Following on, the teacher asked the student to sight play through the entire section, they discussed what to practice without the teacher ever telling her exactly, and then moved on to other repertoire. In

other words, the teacher gave her student a voice, treated her as an equal, and they explored the music together with the wise teacher gently guiding her student in taking the lead as much as knowledge and experience would allow. This lesson illustrates why singing musicianship is so important, because it prepares the mind to *aurally imagine* what a musician will sing or play *before* they perform it, just as Willems said. There is no music in an instrument, that's why we call them "instruments." The music must first live within the person who is going to express it *through* an instrument. Being that the voice (singing), the ear (hearing), and the body (movement) constitute the *natural* instrument everyone possesses without regard to socio-economic status, it is clearly desirable to develop it in as high a proportion of the population as possible whether or not they all become instrumentalists. Those who don't will still be "musicians," as was Casals.

There is one more aspect we should consider in the development of relative hearing and tonal relationships, that of intonation. Edgar Willems, who was also an innovative acoustician, described his concept of "intratonal space" by saying, "Sound, like color, is infinitely divisible." <sup>18</sup> Fortunately, the voice, like a string or tube, is also such a space, and we begin exploring that vocal-aural space on the first day of preschool or kindergarten music classes, an exploration that continues for many years in ageappropriate and motivating ways. Helping young ones to hear and control slight variations in pitch are part and parcel of what well-qualified singing musicianship teachers do. 19 By extension, one of the most important musical experiences for children in the intermediate grades is to sing in a children's or youth choir that rehearses a cappella, because a cappella singing in parts requires the teacher and the students to operate within the realm of *just intonation* which both includes and surpasses facility in tempered pitch without being restricted to it. Such flexibility is actually the higher standard of aural development in many schools and studios around the globe. I have heard stunningly proficient young choirs in many countries who have mastered the art of aligning overtones as an organic aspect of choral interpretation. Consider how such welldeveloped hearing would help our students make musical sense of scales, technical exercises and studies, and the solo and ensemble masterworks they are intended to lead to.

## Conclusion: How May Musical Educators Influence Modern Society?

You must know by now that I have focused a lot of my studies on the famous multi-tiered Hungarian music education system still in place after 90 years, having survived the Nazis, the Communists and now the economic challenges of the European Union. It is the everevolving product of hundreds of musician-teachers in that country rather than of any one person. Kodály himself never wrote a teaching "method;" rather he cleverly leveraged his international status to be a thorn in the side of the Soviet-controlled Ministry of Education. His bold public advocacy for high quality music education inspired his students and colleagues to make fundamental changes in music education now being implemented around the world. As a string player himself—I'm sure you know about his extraordinary *Sonata in B Minor for Solo Cello*—he puzzled about how the Bohemian Quartet concerts in Pressburg (now Bratislava) drew large, enthusiastic audiences, but played to nearly empty halls in Budapest:

Now, the citizens of Pressburg played a lot of chamber music at home. Just who would go to a chamber music concert? Actually only those who themselves play some. The general public is not

interested in it . . . So it happened, therefore, that we reached all the way down into the primary schools because only there can one get in touch with mankind. What is omitted there cannot be recovered later<sup>20</sup>... And I would advise my young colleagues, the composers of symphonies, to drop in sometimes at the kindergarten, too. It is there that it is decided whether there will be anybody to understand their works in twenty years' time.<sup>21</sup>

His statements challenge us to be visionaries, to look beyond the moment of a single lesson, a single recital or concert, or even a single school year, to how to grow future generations of musicians, audiences, parents, policymakers and administrators. All of these societal roles are necessary for a self-perpetuating high quality musical culture that is able to rise above and transcend the fleeting trends of the marketplace.

Another of my close friends and colleagues is Gabriella Thész, former director of the Hungarian Radio Children's Choir who now directs the Children's Choir of the Hungarian National Philharmonic under Zoltán Kocsis. Her way of rehearsing a young ensemble reminds us once again how music is really more about life than about itself:

The main idea is to form their personality through their soul and their sensitivity, and that means they become different people through music. So the music helps me talk to them. The music is the instrument I'm using to change them and to give ideas to them from people like composers. Music doesn't give you words-music gives you more; it changes the soul. I teach them how to speak the language of music, and actually, we form their spirit, soul, and mind—their whole personality. It's part of the work belonging to the art of music. So art forms people and we would not be able to live without art.22

Violinist-composer George Enescu obviously had that very same influence on Yehudi Menuhin: "I helped him look into himself, and now he can see." 23

As professional music educators, we matter; what we do matters; society needs us in order to fully reach its individual and collective potential. It is time for us to reach higher than ever before. Reaching beyond our present state of being is what good music actually compels us to do everyday. We can change the system by working together in solidarity to be the other voice in the ears of our children and youth!

<sup>&</sup>lt;sup>1</sup> George Sylvester Viereck, "What Life Means to Einstein: An Interview by George Sylvester Viereck," Saturday Evening Post, (1929), npn.

<sup>&</sup>lt;sup>2</sup> A. Henderson, "Henderson Recalls Shaw, Einstein Association," *Durham Morning Herald* (1955) in Einstein Archives Online 33:257.00, accessed 3 July 2006.

<sup>&</sup>lt;sup>3</sup> William Bruce Cameron, Informal Sociology, A Casual Introduction to Sociological Thinking, (New York: Random House 1963), 13.

<sup>&</sup>lt;sup>4</sup> László Eősze, Zoltán Kodály—His Life and Work, (Boston: Crescendo Publishing Company 1962), 47.

<sup>&</sup>lt;sup>5</sup> Ferenc Bónis editor, *The Selected Writings of Zoltán Kodály*, (New York: Boosey & Hawkes, 1964), 188.

<sup>&</sup>lt;sup>6</sup> Zoltán Kodály, *Visszatekintés I* (In Retrospect, Volume I), (Budapest: Zeneműkiadó Vállalat 1964), 283.

<sup>&</sup>lt;sup>7</sup> David Blum, *Pablo Casals and the Art of Interpretation*, (New York: Holmes & Meier Publishers 1977),

<sup>&</sup>lt;sup>8</sup> Edgar Willems, Psychological Foundations of Musical Education—Fourth Edition, translated by Jerry L. Jaccard, (Provo, Utah: Brigham Young University Creative Works 2012), p. 4.

<sup>&</sup>lt;sup>9</sup> John Amos Comenius 1592–1670—Selections, edited by Jean Piaget et al, (Paris: UNESCO 1957), 61–64.

<sup>&</sup>lt;sup>10</sup> Frank Smith, "Learning to Read: The Never-Ending Debate," *Phi Delta Kappan*, (February 1992), 441.

<sup>&</sup>lt;sup>11</sup> Willems, *Psychological Foundations*, 68.

<sup>&</sup>lt;sup>12</sup> This synopsis was created from a variety of primary and secondary sources in several different languages centering around Guido's now fragmentary writings, such as Joseph Smits van Waesberghe, De Musico-

Pedagogico et Theoretico Guidone Aretino—Eiusque Vita et Moribus, (Florence, Italy: Leonis S. Olschki 1953). We also know that Guido was also hard at work on how to represent rhythm—his motus theory [notice its relationship to movement!]—a notational challenge resolved only centuries later. Guido's supreme achievement, however, was to teach his students to compose parallel and free organum using the notation system and a significant beginning to the ultimate uses of notation: creation, stylistics and interpretation. However, there is no documented proof that he is the author of the ubiquitous "Guidonian Hand" teaching device, which only appears in manuscripts written after his death.

<sup>13</sup> See, for example, Jacques Viret, "Actualité de la Musique Medievale: Oralité et Modalité," in colloquium proceedings of *Éducation Musicale: L'Oralité Retrouvée*, 2–5 April 2002, Geneva, Switzerland, 45–57.

14 László Dobszay, in discussion with author, 7 August 1993, West Hartford, Connecticut.

- <sup>15</sup> Intended as an instrumental shortcut, fixed-*do* solfège, largely practiced in countries where Latin-derived languages are spoken, is a much later invention growing out of a conflict of pedagogical and theoretical interests. Although it purports to develop perfect pitch, it is complicated by national variations in standardized pitch and its use of only seven syllable names, whereas the original moveable system employs a separate name for all 12 semitones of the Western scale system enabling it to account for all possible tonal relationships. The conflicted history of the fixed system is discussed at length in Jacques Chailley, *La Musique et Le Signe* (Music and Sign), (Lausanne, Switzerland: Éditions Rencontre 1967), 58–97.
- <sup>16</sup> Jerry L. Jaccard, A Tear in the Curtain: The Musical Diplomacy of Erzsébet Szőnyi: Musician, Composer, Teacher of Teachers, (New York: Peter Lang Academic Publishers 2014), 104.
- <sup>17</sup> Howard W. Hunter in Rex A. Wadhams, *Course Disclosure and Related Information—Curriculum and Instructional Science 603*, (Provo, Utah: Brigham Young University 1986), 9.

<sup>18</sup> Willems, *Psychological Foundations*, 27.

- <sup>19</sup> See Jerry L. Jaccard, "Intonation Begins in Kindergarten," *Kodály Envoy-Quarterly of the Organization of American Kodály Educators Special 40<sup>th</sup> Anniversary Issue*, (Spring 2014), 60–67.
- <sup>20</sup> Zoltán Kodály, *Mein Weg zur Musik—Fünf Gespräche met Lutz Besch*, (Zürich: Peter Schifferli Verlags AG «Die Arche»), 48.
- <sup>21</sup> Bónis, The Selected Writings, 151.
- <sup>22</sup> Gabriella Thész, in discussion with author, 11 July 1991, West Hartford, Connecticut.
- <sup>23</sup> Jaccard, A Tear in the Curtain, 115.