

PART I

Shapes

There is a brief article in the *Yale Alumni Magazine* entitled “The Geometry of Music” (Rhea Hirshman, July/August 2008). It describes a new theory that translates elements of music theory into contemporary geometry, thereby creating visual representations of music’s underlying mathematical structure. I was pleased to read this as it reassured me that I’m not completely out in left field with the following flow of thought.

We’ll begin with very young musicians – imagine 3rd graders singing “America”:

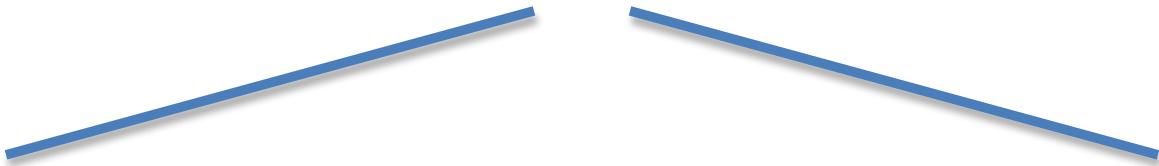


The concept of line or sustain isn’t present yet. It’s every syllable for itself, and don’t forget the huge pause to inhale (“My coun - try ‘tis – *gasp* – of thee...”). The joy of music making lies wholly in the discovery of the ability to make sound – often the louder, the better. The quality of the sound is immaterial.

For those musicians who decide to take their training a little farther, a new idea eventually hits home (perhaps 5th or 6th grade): the possibility of making a single line from multiple notes or syllables. The mantra of the music teacher shifts from simple, enthusiastic sound production to breath support and phrasing. Nothing fancy yet, but at least the gasp is placed at the end of the phrase rather than mid-stream.



Gradually (7th or 8th grade), quality of sound enters the picture, and with it a new world of possibilities. If you can make a line, you can move that line. Dynamics become all the rage, but technique is limited. So the line simply tilts up (crescendo) or down (diminuendo) even as the young musician continues to struggle to keep the gasp at bay.



Many young musicians (those who study music merely to fulfill a curricular requirement) achieve stasis at this point. They are able to create simple, recognizable shapes with some rudimentary ebb and flow of energy. “America” is now fit for a ceremony at the local VFW hall, if not Carnegie Hall.

For the musicians who continue to develop (9th and 10th graders generally), the next step is both magical and treacherous. It is the discovery of the most basic of mature musical shapes:



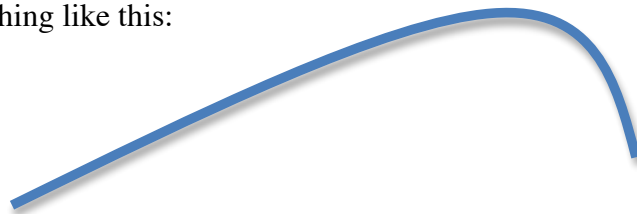
Innocent and pleasing as it may seem, the basic arch holds within itself the seeds of doom for sensitive young artists. It is a shape so alluring that developing musicians desperately apply it to everything they do in an orgy of sentiment fueled by hormones and burgeoning technical skill. The result is eerily reminiscent of the 3rd graders “My Country ‘Tis of Thee”, without the gasp:



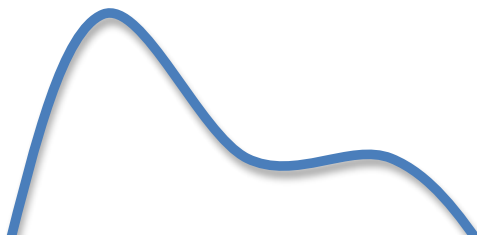
There are many names for this affliction: twa-twa, woofing, football notes... All refer to the teenagers’ desperate need to emote, *all the time*. Picture someone in a Karaoke bar singing something by Journey or Bon Jovi, or nearly any of the contestants on *American Idol*. Sadly, the need for perpetual drama is not exclusive to teenagers.

For those few musicians whose discipline and perseverance enable them to eventually navigate through the storm and repair the damage caused by chronic twa-twa (air flow issues, embouchure woes, articulation trauma), a bright future awaits. These happy few are so relieved to have made it this far that they begin to ponder majoring in music. Their next step returns to the arch, but with a much broader spectrum of possibilities gleaned through hours of practice.

Something like this:



Or this:

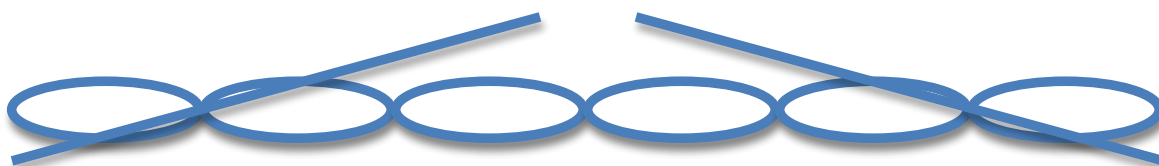


For most college music majors, this is their point of stasis. Sufficient technique to sustain the line through interesting dynamic shapes and varying flows of energy. Solid, but far from genius. Most college music majors will not succeed in the realm of professional performance because to progress beyond these shapes requires spectacularly variegated palettes of tone colors, densities, and articulations, plus an ever-increasing mental anthology of styles, plus supreme command of intonation and Olympic-quality technique. There's more, but I digress.

Puzzles

That most college music majors will not succeed as professional performers is not news. It is why the majority of college music majors aspire (or resign themselves) to a career in music education. This, also, is not news. However, most secondary music education in the United States is ensemble-based. That is to say, most music educators spend a significant portion of their instructional time conducting. Again, not news. But consider this: the typical music education major will graduate from college with one, or at most two semesters of conducting instruction. To be generous, this puts them at the equivalent, on the podium, of stage three above (tilted straight lines).

The image of undergraduates practicing beat patterns with “elevator” dynamic gestures comes vividly to mind. Now combine that image with the typical profile of high school musicians (twa-twa), and the result isn't pretty, let alone musical:

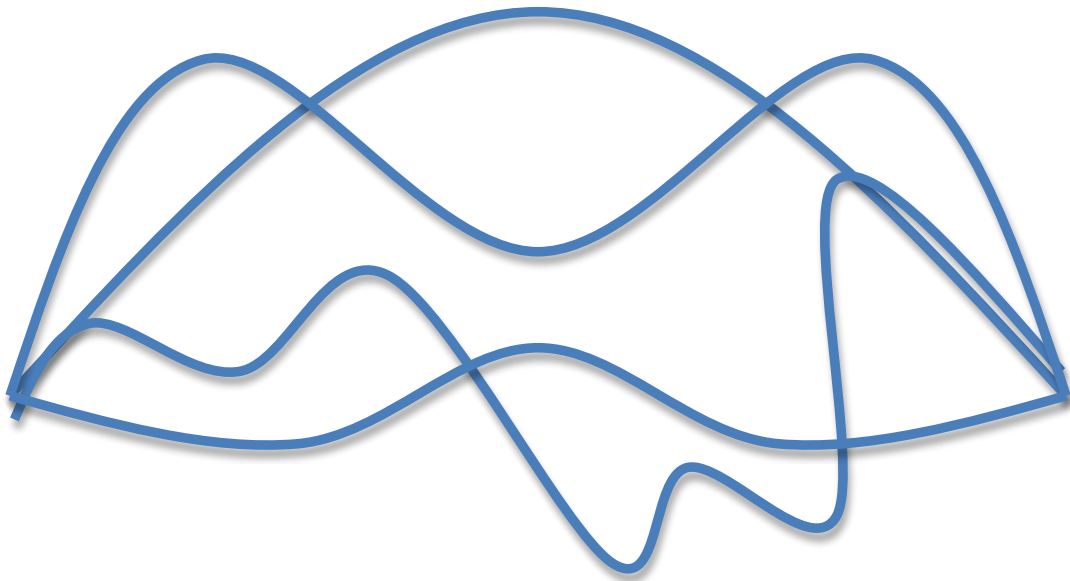


Fortunately, the typical college music major has achieved a more complex, post-twa twa stage of musicianship as an individual performer if not as a conductor. The key is to enable the individual to access this realm even as the body gains coordination. Sadly, for most people how we are perceived by others (or imagine we are perceived) overrides virtually every other aspect of our daily lives. If physical coordination is not present, it's game over. Also, it takes most musicians six to ten years to reach post-twa twa shaping as individual performers. Music educator/conductors have six to ten months.

And consider an even more daunting fact: conductors must deal with multiple complex shapes simultaneously. As musicians know, a single shape is difficult enough. The challenge of conducting compounds this simple truth with another: conductors neither make sound themselves, nor control the sound of others. Their job is to influence or provoke others through physical gestures to produce a shape such as this:



But that's just one-on-one. Now imagine a typical Sousa score with four strata (melody, counter-melody, harmonic rhythm, bass):



Now imagine that you have just ten months to achieve your goal, and as a musician you have never actually created a shape more complex than an asymmetrical arch, and to top it all off

you're worried that you're going to look like a fool in front of everybody. Welcome to the challenge of teaching conducting to college undergraduates.

Now imagine that most of the students in your class can't distinguish aurally among two, let alone four or five (or six...) strata, and their athletic abilities extend only as far as tying their shoes without falling over. And remember the spectacularly variegated palettes of tone colors, densities, and articulations, the ever-increasing mental anthology of styles, and supreme command of intonation? Yes, conductors need all that, too – in spades.

Is it possible to teach college undergraduates to succeed on the podium within these parameters? Thus far, in the vast majority of colleges and universities, the answer is no. Are we better at it than we were twenty or thirty years ago? Of course; but better isn't necessarily good. If you start at deplorable and move to egregiously deficient, nobody's going to throw you a party.

Furthermore, I would assert that the improvement we have experienced is physical (i.e. related to coordination) rather than musical (i.e. related to sound). We are better at teaching people to *move* in a more pleasing manner even though, as a former colleague of mine so colorfully stated, most aspiring conductors can't hear mother calling when it comes to aural skills. If you believe that conducting is about movement, then you'd be the one with the party hat and streamers wondering where everybody is.

Sure, you can become a competent dancer on the podium (the conductor's equivalent of Karaoke – not a bad idea for a Nintendo Wii game actually...) but it will be an empty accomplishment at best. Sadly, most conducting training is focused on movement. As proof I'll point out the sharp increase over the last two decades in the addition of mime techniques to conducting classes and workshops. Sadder still is the belief that conducting gestures have meaning...but that's a topic for another day.

Conducting is about *sound*, and if you can't deal with sound (hearing, imagining, evaluating, influencing...) you'll never succeed. Music education must also be about sound, or there's no point to it. Music *is* sound, bottom line, yet we spend a great deal of time and effort dealing with everything *but* sound when training music educators. Yet when we train performers, using admittedly a system that has not changed in centuries, the focus is much more directly oriented toward sound.

Perhaps this simple fact is at the core of the bias inherent in nearly every music school in the United States: performers are "real" musicians, music educators are somehow "less than." If one set of students is dealing with sound and another is not, the bias is based on more than a mere kernel of truth. Is it possible to train the musician and the educator simultaneously? Interestingly, if *Wikipedia* is to be believed (that's a big if, admittedly), Canadian universities offer a one- or two-year Bachelor of Education program that requires at least three (usually four) years of prior undergraduate studies. Our friends to the north are on to something. Our European counterparts are on the same track – train the musician first (bachelors degree), then train the teacher (graduate school). This model is precisely what the National Association of Schools of Music recommends for the training of conductors. The *NASM Handbook 2007-2008, 2nd edition* includes the following:

Section 3. Baccalaureate Preparation

Normally, the undergraduate years focus on achieving basic competence in the components of the common body of knowledge and skills.

A number of Bachelor of Music degrees can fulfill a good proportion of this need. However, when an institution wishes to offer a focused program preparing musicians for advanced studies in conducting, the appropriate curricular structure is the Bachelor of Music in Performance or Composition or Theory with an emphasis in pre-professional studies in conducting.

NASM does not advise an undergraduate major in conducting under any circumstances, and I know of no such program in the U.S. Yet we are determined to cram not only conducting, but also teacher training into an undergraduate degree program in spite of European common sense (an oxymoron in many cases, nevertheless apt in this instance) and our own prime accrediting organization's recommendation.

Certainly there is a difference between a major in conducting and a class or two devoted to the subject. One is sufficient preparation for work on the podium; the other is merely a preview or survey of a vast body of knowledge and skills. Similarly, teaching as a discipline involves no less vast a body of knowledge and skills distinct from the conductor's. Even NASM grasps the fundamental difference between conductors and teachers – each is a specialty above and beyond basic musicianship. Why, then, would NASM require the combination of three complete disciplines into one degree program? A baccalaureate degree in music education is the Frankenstein's Monster of academia. A leg from one corpse, a spleen from another, a little twine to stitch it together and off you go to mold the young, pliable minds of generations of students. If you have the intellect of Isaac Stern or Bobby McFerrin, you'll find a way to make it work. But to be frank, in most cases it's more like Marty Feldman bringing "Abby Normal's" brain to Gene Wilder in *Young Frankenstein*. Remember "Puttin' on the Ritz"? Exactly. The monster was a sweet guy but he couldn't hear mother calling either.

Expectations

According to NASM, "Students enrolled in professional undergraduate degrees in music are expected to develop the knowledge, skills, concepts, and sensitivities essential to the professional life of the musician. To fulfill various professional responsibilities, the musician must exhibit not only technical competence, but also broad knowledge of music and music literature, the ability to integrate musical knowledge and skills, sensitivity to musical styles, and an insight into the role of music in intellectual and cultural life." This excerpt is taken from Section VIII of the *NASM Handbook*.

The handbook subsequently enumerates specific expectations for all professional baccalaureate degrees in music and all undergraduate degrees leading to teacher certification. According to NASM, students holding a professional undergraduate degree in music are expected to have:

- (1) The ability to think, speak, and write clearly and effectively.
- (2) An informed acquaintance with fields of study beyond music such as those in the arts and humanities, the natural and physical sciences, and the social sciences.

- (3) A functional awareness of the differences and commonalities regarding work in artistic, scientific, and humanistic domains.
- (4) Awareness that multiple disciplinary perspectives and techniques are available to consider all issues and responsibilities including, but not limited to, history, culture, moral and ethical issues, and decision-making.
- (5) The ability to identify possibilities and locate information in other fields that have bearing on musical questions and endeavors.

The common body of knowledge and skills related to performance includes:

- a. Technical skills requisite for artistic self-expression in at least one major performance area at a level appropriate for the particular music concentration.
- b. An overview understanding of the repertory in their major performance area and the ability to perform from a cross-section of that repertory.
- c. The ability to read at sight with fluency demonstrating both general musicianship and, in the major performance area, a level of skill relevant to professional standards appropriate for the particular music concentration.
- d. Knowledge and skills sufficient to work as a leader and in collaboration on matters of musical interpretation. Rehearsal and conducting skills are required as appropriate to the particular music concentration.
- e. Keyboard competency.
- f. Growth in artistry, technical skills, collaborative competence and knowledge of repertory through regular ensemble experiences. Ensembles should be varied both in size and nature. Normally, performance study and ensemble experience continue throughout the baccalaureate program.

In the area of musicianship and skills analysis, students must acquire:

- a. An understanding of the common elements and organizational patterns of music and their interaction, the ability to employ this understanding in aural, verbal, and visual analyses, and the ability to take aural dictation.
- b. Sufficient understanding of and capability with musical forms, processes, and structures to use this knowledge and skill in compositional, performance, analytical, scholarly, and pedagogical applications according to the requisites of their specializations.
- c. The ability to place music in historical, cultural, and stylistic contexts.

There are an additional four areas covered by NASM, as follows:

Composition and Improvisation. Students must acquire a rudimentary capacity to create derivative or original music both extemporaneously and in written form; for example, the

imitation of various musical styles, improvisation on pre-existing materials, the creation of original compositions, experimentation with various sound sources, and manipulating the common elements in non-traditional ways.

History and Repertory. Students must acquire basic knowledge of music history and repertoires through the present time, including study and experience of musical language and achievement in addition to that of the primary culture encompassing the area of specialization (see Section III.L.).

Technology. Students must acquire the ability to use technologies current to their area of specialization.

Synthesis. While synthesis is a lifetime process, by the end of undergraduate study students must be able to work on musical problems by combining, as appropriate to the issue, their capabilities in performance; aural, verbal, and visual analysis; composition and improvisation; history and repertory; and technology.

Any reasonable individual devoted to the principles of undergraduate education in the liberal arts would be satisfied that the degree programs that meet these standards are rigorous and complete. This, they would say, is plenty to achieve in four years of study. With this degree you have earned a place among the ranks of professional musicians. The next question is how you wish to employ your musicianship – as a performer, or teacher, or historian, or theorist, or composer...? Again, any reasonable person would suggest that's what graduate school is for.

But since we live in a world where we must cram several degrees' worth of material into a single program in order to be accredited, graduate school has become devoted largely to remedial education to address the basic content that fell by the wayside in the frantic effort to earn a teaching license. The typical music masters degree program is simply the remainder of a bachelors degree disguised with higher numbers in the course catalogue. Imagine if the same were the case with medical training. Sure, your degree says you're a surgeon but you glossed over most of basic anatomy in order to fit in those courses in your specialty. Or you slept through most of physiology because you were exhausted from dealing with twice the course work of any normal student.

Actually, I suspect this *is* the case with medical study and many other fields as well. We're living in an age when the amount of information trumps the virtue of it. Perhaps the most vital skill we must impart to students in this day and age is the ability to discern and cherish quality in a sea of mediocrity and useless blather. But the degree programs we are required to offer to be accredited by NASM demonstrate precisely the opposite – particularly the Bachelor of Music Education.

It is chic among academics to bemoan grade inflation, but a far more insidious (yet related) problem is degree inflation. NASM is stuffing a greater quantity and de facto lesser quality of material into the bachelors degree ostensibly to meet the demands of the marketplace (i.e. public education). According to the National Education Association,

...historic turnover is taking place in the teaching profession. While student enrollments are rising rapidly, more than a million veteran teachers are nearing retirement. Experts predict that overall we will need more than 2 million new teachers in the next decade.

This teacher recruitment problem, which has reached crisis proportions in some areas, is most acute in urban and rural schools; for high-need subject areas such as special education, math and science, and for teachers of color.

To meet the shortage we have resorted to “quick and dirty” training to fill the gaps. In music education we’re not as quick as some (5 years for most BMEs), but we’re geniuses at dirty. And music education is not alone on this front. Our entire educational system is in peril because new teachers aren’t prepared to handle the job. The NEA reports “some 20 percent of all new hires leave the classroom within three years. In urban districts, the numbers are worse—close to 50 percent of newcomers flee the profession during their first five years of teaching.”

Two reasons are most commonly given when interpreting these statistics: insufficient salaries for beginning teachers, and lack of support on the job.¹ I believe the problem is even more fundamental. We’re not training teachers for the job society wants them to do. In fact, music educators can’t even agree on what the job *is* let alone the best way to do it.

Gene Pool

Music education is academia’s equivalent of Sybil (the gal with sixteen personalities, played by Sally Field in the 1976 film). Its ancient roots in the liberal arts placed it with the sciences of measurement, along with geometry, arithmetic, and astronomy – purely theoretical – even as the general public viewed it as a craft – purely functional. In religion, music has ranged from angelic inspiration to anathema. Leap ahead several centuries and the confusion is compounded by the relatively modern concept of art, which is neither science, nor craft, nor tool of god/the devil (your choice).

Enter Lowell Mason, an antebellum church musician and educator in Boston, who was a pioneer of public school music education (and composer of “Mary Had a Little Lamb”). Mason and his partner George Webb established the Boston Academy of Music in 1833 to promote music education among the masses and raise the standards of church music. The academy offered vocal and instrumental instruction, developed choirs and instrumental groups, and presented public concerts, among them the first American performances of Beethoven symphonies (1841-1842).

However, according to *Grove Music Online*, “Mason's influence on American music is generally regarded as a mixed blessing. Although he established music as an integral part of public school education, he replaced the indigenous fusing tunes and anthems of 18th-century America with hymn tunes and anthems arranged from European music or imitations based on ‘scientific’ principles producing ‘correct’ harmonies.” In other words, American music education was founded upon the three following principles:

- a. The purpose of music is twofold – to enhance worship in religious contexts, and to entertain in social contexts (ideally, to elevate the sensibilities of the common man through access to the European masters).

¹ As an aside, salary has nothing to do with society’s needs. Familiarity tends to breed contempt in all fields. For example, the medical subcategory we need the most of (internal medicine/physicians – the doctors the vast majority of the population sees regularly) earns on average half of the salary of the specialists that deal with only a tiny fraction of the population.

- b. The purpose of music education is to improve the *performance* of music in these settings. Music literacy was emphasized; creativity was not.
- c. Music is ruled by scientific principles, and exists in “correct” (i.e. European) and “incorrect” (i.e. non-European) forms.

Even as Mason was winning the hearts and minds of the Boston School Board, normal schools – schools for teaching teachers – began popping up around the U.S. based on the European model (big surprise). The purpose of the normal school was to establish teaching standards, or “norms,” and initially they enrolled high school graduates to prepare them to teach primary school. Many of what are now our state colleges and universities began as normal schools, and when they achieved their new status the training of teachers morphed into undergraduate and graduate degree programs in education.

So music education and teacher education grew up side by side in the U.S. It was the Oberlin Conservatory, founded in 1865, that first offered the bachelor of music education degree. That first degree program was undoubtedly performance based and quite similar to Mason’s endeavors in Boston. As long as the three fundamental principles held (a-c above), all was well. Through the end of the 19th and into the 20th century, U.S. music education programs were essentially little European conservatories teaching teachers and performers to spread the civilizing influence of classical music to the uncouth American masses.

You can take Charles Ives’ experiences at Yale as the quintessential clash of American innovation and freedom with European tradition and snobbery. Ives was smart enough to realize that Europe’s pull on the arts was powerful and unyielding so he became an insurance executive and composed his weirdo music on the side.

And then there were two World Wars, and the center of global cultural gravity shifted. With the U.S. at the helm, the old world rules that were firmly rooted in class structure gradually gave way to individual creativity and economics. If you could make something and convince people to buy it, you gained status. In the arts, this was appalling to the old regime – and to many still. In this new world, Andy Warhol has as much cultural clout as Claude Monet. Elvis and the Beatles (and now Madonna and Lil Wayne) trump Igor Stravinsky. It is a world in which the works of Danielle Steele sit side by side with Mark Twain and Leo Tolstoy. In the immortal words of Cole Porter, anything goes.

Growing Pains

Music education has never reconciled itself with this cultural tectonic shift. Instead it has adopted a pack rat approach. Nothing is retired, we simply keep adding layer upon layer to the basic foundation set down by Lowell Mason. One would hope that over time the pressure on the base would create a diamond. Instead we have something more like a landfill – a collection of miscellaneous bits and pieces that might have value individually or in another context, thrown together in such a way that nobody wants to live next to it. No wonder the three R’s get worried about plummeting property values when music moves in to the curriculum.

As the spectrum of musical styles continues to expand, we would do well to look to the visual arts for a way to cope. Developments in the visual arts have preceded those in the sonic arts throughout history. A simple illustration is impressionism. The first painters were experimenting

in this mode in the 1870s. Debussy, the composer first associated with impressionism in music (although he hated the term), didn't turn this new corner until the 1890s. Conversely, musical styles tend to stick around longer than those in the visual arts. Even one of music's briefest events – the bleak jaunt into serialism in the mid-20th century – is epochal compared to movements in the visual arts such as Blaue Reiter or vorticism. One German, the other British, each lasted a mere three years.

If art education adopted music education's obsessive/compulsive need to keep everything in a vain attempt to please everybody, the result would be appalling. In a typical academic year, a teacher would have about five minutes per topic (sounds like a BME program!). The concept of basic skills wouldn't exist because what was essential to the artists of one era was actively shunned and derided by those of another. Thus, all techniques must receive equal billing. What it means to be an artist balloons to obscene proportions, leaving the poor layperson to flee to the friendly and unchallenging confines of TV. No wonder arts organizations expend so much effort on advocacy. Half of the time is spent explaining the Rube Goldberg-like design, the other half explaining why anybody would need such a complex mechanism.

We're told the arts are basic. The numerous organizations that chant this mantra have carefully chosen just one of the definitions of the word basic: essential, critical, important. However, basic has another meaning: simple, plain, without adornment, elementary. Without the latter definition, the former isn't true. Why would well-meaning advocates of the arts favor the former in spite of this fact? Fear.

Everybody wants to be important, and in academia the most important programs are determined either by enrollment, or grant funding. Musical training requires a great deal of one-on-one instruction. Across literally centuries of time we haven't figured out any other way. Thus in any university, the music department will have the lowest student to teacher ratio. Ironically, in any secondary school, music classes (i.e. ensembles) are likely to have the largest student to teacher ratio. What does this tell us?

Public school music programs justify their existence according to size. The larger the ensemble is, the harder it will be to cut when the budget gets tight. Curricular content takes a back seat to enrollment. To go to the cynical extreme, it doesn't really matter what you teach as long as there are plenty of students in the room. This works in music, as opposed to math, because nobody really knows how to measure musicianship. If Johnny can't add and subtract, a simple test will show it. If Johnny can't hear the difference between major and minor, no one will know because he's buried in the middle of fifteen other trombonists and boy, doesn't the band sound great?

Conversely, university music programs have to justify their low enrollments even as they prove their worth in other ways. This leads to grant writing. In any university, programs that generate prodigious amounts of grant money are lauded as cutting edge, vital to the health and well-being of the institution, and relevant to the needs of society. At the top of the food chain are medical studies (AIDS, cancer) and the "hard" sciences. Tell people you want to build a robot smaller than a grain of sand to repair mutated cells in the pancreas and you're golden – literally. But musicians aren't curing diseases or building spacecraft. So in order to get the attention of the most prestigious funding organizations, musicians learn to translate their creative aspirations into pseudo-scientific terms. In other words, they have to make their work seem complex.

Merely creating beauty isn't enough. But if you tell folks you're going to use brain scanning technology to measure the effects on lab rats of listening to Beethoven string quartets for hours on end, you're on the right track. Suggest it might cure cancer if only you were able to design tiny stereos to implant in the cerebral cortex and you're on the fast track to fame and fortune. Forget the fact that simply being able to perform one of Beethoven's string quartets takes a lifetime of study and practice. And as any music faculty member at a major research institution will tell you, that study and practice is on your own time – unless you can find a way to make it sound like research.

So music's pack-rat-ism is a defense mechanism. The more complex and impenetrable the subject (i.e. the more worthy of research), the more secure its place in the academy. But this accumulation at the university level has dire effects on its primary and secondary school counterparts.

Methodologies

Even a brief stroll through the metaphorical music landfill will call to attention the innumerable elements, concepts, theories, facts, figures, and artifacts that enable it to be fertile ground for academic research. Depending on which you choose you can create your own complete little world – like a gated community in a larger metropolitan area. This is true for the visual arts as well. Remember vorticism? I'm told it's an interesting place to visit but you wouldn't want to live there.

As is the case with any urban sprawl, the farther the suburbs extend the more likely downtown is to deteriorate. Public transportation systems dry up and the circulation of the population (i.e. ideas) diminishes greatly. In the music metroplex, we can't even find downtown any more. What was considered fundamental in Lowell Mason's time would be considered unconstitutional, elitist, and xenophobic today. Hence, each suburb has defined "downtown" according to its own values and ambitions. To some, the city center is music literacy. To others, audiation. To still more, creative expression. And the list goes on.

In our zeal to make something substantial of music as a discipline, something "basic" and therefore beyond reproach as an element of the core curriculum (to impress the citizens of Reading Town, Writingville, Mathburg – with its suburb New Mathburg – and Scienceopolis) we've built our very own Tower of Babel. The resulting tribes are legion: the Kodály Method, Orff Schulwerk, the Suzuki Method, Eurythmics, Music Learning Theory, Conversational Solfege, the Sensory-Motor Approach (Carabo-Cone Method), the Manhattanville Music Curriculum Project (MMCP), Applied Groovology and Path Bands (Keil)... And you thought vorticism was obscure.

Thankfully the good people of MENC (founded in 1907) recognized the need to reestablish some common ground if only to present a united front for the sake of advocacy. One early step was to adopt the *Child's Bill of Rights in Music* (1951). Sadly, like every other of MENC's initiatives, it is the result of a dedicated committee's best efforts – that is to say, a laundry list that provides a little of everything, and therefore not much of anything. Here are some excerpts:

As their right, all children must receive extensive opportunities to sing, play at least one instrument, compose, improvise, and listen to music.

As their right, all children must have the opportunity to study music of diverse periods, styles, forms, and cultures, including samples of the various musics of the world and music that reflects the multimusical nature of our pluralistic American culture.

As their right, all children must have the opportunity to develop their abilities to analyze music with discrimination, to understand the historical and cultural backgrounds of the music they encounter, to make relevant critical judgments about music and performances, and to deal with aesthetic issues relevant to music.

As their right, all children must have the opportunity to grow in music knowledge, skills, and appreciation so as to bring joy and satisfaction to their lives, challenge their minds, stimulate their imaginations, and exalt their spirits.

They might just as well have added a pony while they were at it. Don't get me wrong – ponies are great, as are all the items on the bill. But which among them are truly basic in the elemental sense? Like the pony, which can a budding musician live without at least until he's old enough to decide if he's cut out to be an equestrian?

Laundry

If MENC has a fatal flaw it's the inability to choose. The evidence lies in all that followed the adoption of the bill. In the late 1950s it was the Contemporary Music Project (CMP), the five goals of which were:

1. To increase the emphasis on the creative aspect of music in the public schools
2. To create a solid foundation or environment in the music education profession for the acceptance, through understanding, of the contemporary music idiom
3. To reduce the compartmentalization that existed between the profession of music composition and music education for the benefit of composers and music educators alike
4. To cultivate taste and discrimination on the part of music educators and students regarding the quality of contemporary music used in schools
5. To discover, when possible, creative talent among students

According to the *Music Educators Journal*, the Contemporary Music Project ended in 1973 with its purposes being fulfilled: "to provide a synthesis, a focus, for disparate activities in music, in order to give them a cohesion and relevance in our society, to its cultural and educational institutions and organizations." If its purpose was fulfilled, why did we need any of the myriad symposia that followed? Each had its own declarations to add to the list. The result was something even Santa Claus couldn't cope with.

To illustrate, let's visit the major events and see what they had to offer. The Yale Seminar of 1963 found that teaching materials were limited and watered down, with little attention to encouraging the growth of the child's musical knowledge. Also, while there were many fine performing groups in the schools, including band, chorus and orchestra, the panel felt there was a need to stimulate the individual musician.

The recommendations of the panel were to develop musicality in the music classroom. Thus we must:

1. Examine the way in which performance, movement, musical creativity, ear training and listening are taught.
2. Broaden the repertory.
3. Not underestimate a child's ability to perceive and understand music.
4. Make listening experiences sequential for elementary and junior high students.
5. Offer marching and stage bands at the high school level.
6. Offer keyboard instruction.
7. Offer advanced theory and literature courses.
8. Bring professional and highly competent amateur musicians into the schools to inspire the students.
9. Make advanced music study available to all students regardless of social standing.

In 1965, the Northwestern Symposium contributed these discoveries and recommendations:

1. The need to study music traditions outside of the 18th and 19th century. It was suggested that the grammar and syntax of the music from the present time be studied and then related back to its sources from former times.
2. Music literature masterpieces studied in history and musicianship were too disparate from the materials used for teaching/performing. There was strong sentiment that prospective teachers needed to find means for developing their own creative potential and apply this to creative techniques for teaching music to young children.
3. Training in the practice of composition is an essential element of training for comprehensive musicianship, and that it should be part of the required subject matter in college schools of music. The typical part-writing courses would not suffice, rather creative composition was needed. Pertaining to music teacher preparation in particular: composition should equip future school music teachers and conductors to understand the compositional principles underlying any work, to impart these principles to their students, and to apply them in teaching music theory, performance, or history, and above all in their own performance.
4. Aural skills lead to analytical insight which is crucial for aesthetic understanding and appreciation. This connection between aural skills and aesthetic understanding must be made. Repertoire for aural skills classes should be representative of all periods and styles (jazz, folk, electronic, student-composed) and analysis should occur in all courses. These courses should cover a wide range of repertoire (including non-Western and 20th-Century), however exploration of certain composers, styles, genres or periods should be in-depth with considerable focus on context. All music courses should be interrelated.

5. There is a great need for a philosophy of music education in the music education profession. Even though music educators have in recent years grown more receptive to philosophy, there exists no comprehensive philosophy of music education.

Not to be out-done, the Tanglewood Symposium of 1967 crafted a special declaration for added flair (the emphasis is their own):

We believe that education must have as major goals the art of living, the building of personal identity, and nurturing creativity. Since the study of music can contribute much to these ends, **WE NOW CALL FOR MUSIC TO BE PLACED IN THE CORE OF THE SCHOOL CURRICULUM.**

The arts afford a continuity with the aesthetic tradition in man's history. Music and other fine arts, largely nonverbal in nature, reach close to the social, psychological roots of man in his search for identity and self-realization.

Educators must accept the responsibility for developing opportunities which meet man's individual needs and the needs of a society plagued by the consequences of changing values, alienation, hostility between generations, racial and international tensions, and the challenges of a new leisure.

To the laundry list the intrepid Tanglewood-ians added:

1. Music serves best when its integrity as an art is maintained.
2. Music of all periods, styles, forms, and cultures belongs in the curriculum. The musical repertory should be expanded to involve music of our time in its rich variety, including currently popular teen-age music and avant-garde music, American folk music, and the music of other cultures.
3. Schools and colleges should provide adequate time for music in programs ranging from preschool through adult or continuing education.
4. Instruction in the arts should be a general and important part of education in the senior high school.
5. Developments in educational technology, educational television, programmed instruction, and computer-assisted instruction should be applied to music study and research.
6. Greater emphasis should be placed on helping the individual student to fulfill his needs, goals, or potentials.
7. The music education profession must contribute its skills, proficiencies, and insights toward assisting in the solution of urgent social problems as in the "inner city" or other areas with culturally deprived individuals.
8. Programs of teacher education must be expanded and improved to provide music teachers who are specially equipped to work with the very young, with adults, with the disadvantaged, and with the emotionally disturbed.

If you look closely, you'll start to notice that we tend to repeat ourselves. For example, we've been discovering the tragic state of the repertory for the better part of a century. It is still one of the chief complaints among music educators in spite of all the swell declarations.

But I digress. Here's what the Goals and Objectives (GO) Project of 1969 tossed on the pile. Bear in mind that MENC was founded in 1907. This makes you wonder what they had been doing for 62 years:

1. The goals of MENC shall be to conduct programs and activities to build a vital music culture, and an enlightened musical public.
2. The goals of the profession are:
 - Comprehensive music programs in all schools.
 - Involvement of people of all ages in learning music.
 - Quality preparation of teachers.
 - Use of the most effective techniques and resources in music instruction.

Plus the following objectives for MENC as an organization:

1. Lead in efforts to develop programs of music instruction challenging to all students, whatever their sociocultural condition, and directed toward the needs of citizens in a pluralist society.
2. Lead in the development of programs of study that correlate performing, creating, and listening to music and encompass a diversity of musical behaviors.
3. Assist teachers in the identification of musical behaviors relevant to the needs of their students.
4. Advance the teaching of music of all periods, styles, forms and cultures.
5. Promote the development of instructional programs in aesthetic education.
6. Advocate the expansion of music education to include preschool children.
7. Lead in efforts to ensure that every school system requires music from kindergarten through grade six and for a minimum of two years beyond that level.
8. Lead in efforts to ensure that every secondary school offers an array of music courses to meet the needs of all youth.
9. Promote challenging courses in music for the general college student.
10. Advocate the expansion of music education for adults both in and out of school.
11. Develop standards to ensure that all music instruction is provided by teachers well prepared in music.

12. Encourage the improvement and continuous updating of preservice and inservice education program for all persons who teach music programs and in the certification of music teachers.
13. Expand its programs to secure greater involvement and commitment of student members.
14. Assist graduate schools in developing curricula especially designed for the preparation of teachers.
15. Develop and recommend accreditation criteria for the use of recognized agencies in the approval of school and college music.
16. Support the expansion of teacher education programs to include specializations designed to meet current needs.
17. Assume leadership in the application of significant new developments in curriculum, teaching-learning techniques and technology, instructional and staffing patterns, evaluation, and related topics to every area and level of music teaching.
18. Assume leadership in the development of resources for music teaching and learning.
19. Cooperate in the development of exemplary models of desirable programs and practices in the teaching of music.
20. Encourage maximum use of community music resources to enhance educational programs.
21. Lead in efforts to ensure that every school system allocates sufficient staff, time, and funds to support a comprehensive and excellent music program.
22. Provide advisory assistance where music programs are threatened by legislative, administrative, or other action.
23. Conduct public relations programs to build community support for music education.
24. Promote the conduct of research and research-related activities in music education.
25. Disseminate news of research in order that research findings may be applied promptly and effectively.
26. Determine the most urgent needs for information in music education.
27. Gather and disseminate information about music and education.
28. Encourage other organizations, agencies, and communications media to gather and disseminate information about music and education.
29. Initiate efforts to establish information retrieval systems in music and education, and to develop databases for subsequent incorporation into such systems.

30. Pursue effective working relationships with organizations and groups having mutual interests.
31. Strengthen the relationships between the conference and its federated, associated, and auxiliary organizations.
32. Establish procedures for its organizational program planning and policy.
33. Seek to expand its membership to include all persons who, in any capacity, teach music.
34. Periodically evaluate the effectiveness of its policies and programs.
35. Ensure systematic interaction with its membership concerning the goals and objectives of the conference.

No wonder they can't actually achieve anything. It takes three days just to read the "to do" list. You'd think someone would say enough is enough. Nope. In 1978 we head to Ann Arbor for yet another symposium. This one actually had something new to say. It emphasized the impact of learning theory in music education in the areas of: auditory perception, motor learning, child development, cognitive skills, memory processing, affect, and motivation. Finally someone realized that to teach music effectively you have to know how to teach. Wow! And it only took 145 years.

Lest we dwell on this useful contribution too long, let's get back to the mainstream of innovations in music education. There was the 1984 Becoming Human Through Music Symposium which emphasized the importance of cultural context in music education and the cultural implications of rapidly changing demographics in the United States. That's vintage music edu-speak. Note the avoidance of how to teach in favor of a description of what to teach.

All this leads us to the 1994 National Standards. True to form, we now get nine content standards (what to teach). On the bright side, we also get accompanying achievement standards (how to measure learning). What's missing? How to teach. No doubt the rationale there is that there are numerous well established teaching methods (Kodaly, Orff – the whole list mentioned earlier). Just pick one and go.

But the teaching methods weren't designed with this content in mind. It's like having a great socket wrench set when you're faced with planting a tree. Before you pick your tools you need to know what the job is. And to improve the tools the job has to remain stable through repeated attempts. In music education, we've never agreed on what the job is. Need more proof?

Take the Housewright Declaration of 1999, a part of Vision 2020.

Whenever and wherever humans have existed music has existed also. Since music occurs only when people choose to create and share it, and since they always have done so and no doubt always will, music clearly must have important value for people.

Music makes a difference in people's lives. It exalts the human spirit; it enhances the quality of life. Indeed, meaningful music activity should be experienced throughout one's life toward the goal of continuing involvement.

Music is a basic way of knowing and doing because of its own nature and because of the relationship of that nature to the human condition, including mind, body, and feeling. It is worth studying because it represents a basic mode of thought and action, and because in itself, it is one of the primary ways human beings create and share meanings. It must be studied fully to access this richness.

Societal and technological changes will have an enormous impact for the future of music education. Changing demographics and increased technological advancements are inexorable and will have profound influences on the ways that music is experienced for both students and teachers.

Music educators must build on the strengths of current practice to take responsibility for charting the future of music education to insure that the best of the Western art tradition and other musical traditions are transmitted to future generations.

Holy cow! It makes Superman seem like a 98-pound weakling in comparison. *Music: All Things to All People. Bedrock of Culture – Essence of Humanity – Curer of Society's Ills. Able to leap tall buildings in a single bound...*you catch my drift.

With such a grand declaration, you can be sure the Housewright folks had something to add to the laundry list.

1. All persons, regardless of age, cultural heritage, ability, venue, or financial circumstance deserve to participate fully in the best music experiences possible.
2. The integrity of music study must be preserved. Music educators must lead the development of meaningful music instruction and experience.
3. Time must be allotted for formal music study at all levels of instruction such that a comprehensive, sequential and standards-based program of music instruction is made available.
4. All music has a place in the curriculum. Not only does the Western art tradition need to be preserved and disseminated, music educators also need to be aware of other music that people experience and be able to integrate it into classroom music instruction.
5. Music educators need to be proficient and knowledgeable concerning technological changes and advancements and be prepared to use all appropriate tools in advancing music study while recognizing the importance of people coming together to make and share music.
6. Music educators should involve the music industry, other agencies, individuals, and music institutions in improving the quality and quantity of music instruction. This should start within each local community by defining the appropriate role of these resources in teaching and learning.
7. The currently defined role of the music educator will expand as settings for music instruction proliferate. Professional music educators must provide a leadership role in

coordinating music activities beyond the school setting to insure formal and informal curricular integration.

8. Recruiting prospective music teachers is a responsibility of many, including music educators. Potential teachers need to be drawn from diverse backgrounds, identified early, led to develop both teaching and musical abilities, and sustained through ongoing professional development. Also, alternative licensing should be explored in order to expand the number and variety of teachers available to those seeking music instruction.

9. Continuing research addressing all aspects of music activity needs to be supported including intellectual, emotional, and physical responses to music. Ancillary social results of music study also need exploration as well as specific studies to increase meaningful music listening.

10. Music making is an essential way in which learners come to know and understand music and music traditions. Music making should be broadly interpreted to be performing, composing, improvising, listening, and interpreting music notation.

11. Music educators must join with others in providing opportunities for meaningful music instruction for all people beginning at the earliest possible age and continuing throughout life.

12. Music educators must identify the barriers that impede the full actualization of any of the above and work to overcome them.

And we're not done yet! 2007 saw Tanglewood II (*Son of Tanglewood*). They're still crafting the official declaration, but you can be sure it will be a doozy. Rumor has it there will be (has been?) Yale II, too. No doubt Northwestern II and Ann Arbor II will also be coming to a theatre near you.

Dressing for Success

We already have eighty-three things on the laundry list. Maybe instead of tossing more into the hamper we should figure out a way to do the wash. The first step is sorting. Quite a few of those eighty-three items overlap in whole or in part. The next step is setting aside worn out or outmoded items for the trash or Good Will. What's left will still be a substantial wardrobe, so we'll need to divide the underwear from the outerwear, the formalwear from the sportswear.

But the music education profession has proven itself incapable of sorting, let alone eliminating. As a result, nobody is dressed appropriately (metaphorically speaking). Teachers dressed for a day at the beach are finding themselves in settings where a biohazard suit is the standard uniform. Elementary music students are being given top hats in lieu of footie pajamas. College students are dressed in so many contrasting layers they look like refugees fleeing with all their possessions on their backs. In many cases they're just shown a trunk full of clothes and told to pick what they like. It calls to mind visions of Jonathan Winters, without the humor or insight.

Coincidentally, the *NASM Handbook* lists the results to be expected upon the completion of any specific professional undergraduate degree program. It tells us what every college-trained musician should be wearing, so to speak:

1. Students must demonstrate achievement of professional, entry-level competence in the major area, including significant technical mastery, capability to produce work and solve professional problems independently, and a coherent set of artistic/intellectual goals that are evident in their work.
2. Students are expected to have the ability to form and defend value judgments about music, and to communicate musical ideas, concepts, and requirements to professionals and laypersons related to the practice of the major field.

If the musical training of college students can be summarized in two items, how is it that we've ended up with eighty-three to describe music education through high school? Another great question is: why do colleges consistently fail to achieve their two goals? The bleak truth is if colleges can't do two things, the public schools surely can't do eighty-three.

Lifelines

Insane as all this seems, there are lucid voices crying in the wilderness. Two such are Maud Hickey and Fred Rees. Their "Designing a Blueprint for Curricular Reform in Music Teacher Education" can be found online.² In it, they cite two fundamental problems with the laundry list approach:

One common weakness with these curricular efforts was the lack of formal evaluation of student learning. There were few replicable outcomes published on the effectiveness of these programs' information that might have inspired practitioners to consider redesigning their curricula...

Another problem was the significant shift in priority that almost all of these projects took away from transmission of subject content and skill that had been the byword of most collegiate music programs, pointing instead toward process-based education. The non-course content/skill mastery model that was implied by process-based learning ensured almost no alliances between those few music educators who saw its value, and all other music education specialists and members of the higher education musical community, for whom there never was perceived to be a need to change business as usual. In the meantime, the music education community seems to have lost the connection with the college teachers in the other disciplines. Our collegiate instrumental music education majors are shaped to be band and orchestra directors, but not much more.

Aside from the subtle slam on band and orchestra directors, and based on where this whole flow began (way back on page 1), I would add that they are ill suited even for that. In fact, I suspect even Lowell Mason didn't achieve his goals. If he had, there would have been no need for reform that, according to Hickey and Rees, has been a part of music education since its inception.

So how would Hickey and Rees get us out of this mess? First, for public school music programs to function on equal footing with traditionally accepted subjects, they need to be inclusive of the student population.

² http://symposium.music.org/cgi-bin/m_symp_show.pl?id=762

While general music programs have, historically, addressed schools' entire student bodies, performance ensemble programs have not. In the upper grades, a distinct minority of students participates in or has access to music instruction. Much of this problem rests with the nature of the ensembles, the manageability of student numbers, and instructional time. Also, in order to maintain the quality of musical performance that is recognized not only by the ensemble director, but students, administrators, and parents, some means of selecting and excluding student participants is necessary.

This tradition undermines the position of music as a curricular subject in the public schools. Virtually all academic courses function from grades K-12 and are either mandatory for all students, meet graduation requirements, or satisfy admissions requirements of collegiate institutions. While Advanced Placement and upper level courses in science, mathematics, and foreign languages are selective, students do have the opportunity to qualify for enrollment through a series of prerequisite subjects. Moreover, completion of these courses can usually be tied to formal fields of collegiate study, whereas for all but a small minority of aspiring music majors, the high school performing ensemble usually serves as an enrichment activity. Even for the prospective collegiate music major, there is often little opportunity to take pre-college musicianship courses (usually in music theory and music history), either because the ensemble directors do not have the time to teach them or there are not enough student enrollments.

Performing ensembles have been the fundamental vehicle for music instruction in schools since the beginning. One could easily argue that the entire point of the existence of music is performance. You've got to hear it. But are ensembles the only way? Certainly not, but they are what is expected. Musicians perform, and allegedly "music is for everyone"; ergo, everyone performs. Music may be for everyone, but performance isn't – at least not good performance.

But performance is the only way to assess musical skill. Musicians perform. Assessing musical knowledge is another thing. Plenty of contestants on *Jeopardy* have won small fortunes answering questions about music even though they couldn't carry a tune in a bucket. It's the same with football. How many guys can quote chapter and verse from the NFL rulebook, yet can't throw a decent spiral? But football isn't for everyone; music is. Okay, how about math. How many people can explain the concept of addition, yet not arrive at a sum for $2+2$?

Here's the problem: in the rest of the core subjects knowledge and performance are linked. If you understand the principle of addition, you can add. In music, there is a great chasm between knowing about music (e.g. that the note on the second line of the treble staff is G, or the octatonic scale is built from the alternation of half steps and whole steps, or sonatas are an instrumental form while songs are vocal) and the ability to produce music (compose or perform). College faculties of music are divided neatly between the academics and the performers. Their research expectation divides along the same lines: academics write about music, performers make it. Knowing how an octatonic scale is built and performing one are not necessarily related. In fact, many musicians play octatonic sales regularly without knowing what they are. And anybody can write one without having the faintest idea how it sounds.

The Big Bang

What's more essential (more "basic"): knowing about music, or being able to produce it? Music educators avoid completely this most fundamental question. You need both – period – and here's a list of eighty-three items to prove it. But when you step out of the knee-jerk defensive posture adopted by MENC et al., the answer is clear. Before there was knowledge about sound, there was sound. You had to make a sound before you could think about it, name it, categorize it, and combine it with others. Virtually all of us have been producing sound since the day we were born. It might be important (dare I say "basic") to learn more about it.

But contemporary society demands complexity of its educational system. More and more expectations are heaped onto the public school system without any extension of instructional time or resources. It might colorfully be described as 10 pounds of manure in a 5 pound bag. But when the public wonders why it smells funny, their answer is to add more. What do Hickey and Rees have to say about this?

If music is to become a curricular subject that is to be perceived by policy makers, school boards, and parents as integral to a child's education, then it must be available for study through all of the school grades. It must also be able to address the needs and abilities of learners in a more comprehensive way than it currently does, if it is to be inclusive of this nation's student body. To accomplish this task, music education majors will need to know much more than common practice music theory, western European music, ensemble conducting, Orff-Schulwerk/Kodaly/Dalcroze, and how to perform skillfully on an acoustical instrument, (let alone generate lesson plans on non-western music or be able to print out a score in Finale). In fact, the vast amount of musical and pedagogical knowledge to which today's music educator needs to have access is overwhelming.

The kind of music program and teaching in Mason City, Iowa that is highly effective there would not work in East Los Angeles. Teaching in a school populated predominantly by students of African-American descent may require completely different instructional strategies and course content than in another school heavily populated by Hispanic and Asian students. Teaching students with Attention Deficit Hyperactivity Disorder (ADHD) can be quite different from working with students who come from single-parent families. A music educator who is required to instruct general music, beginning band, and choir in a small, rural school district will need a more diverse battery of teaching skills than a band director resident full-time in a well-financed suburban high school.

We're going to need more than eighty-three things – or will we? If we dwell on what is different in each of these settings, then yes. But what is different is not what is fundamental. What is fundamental in music is fundamental in all music, regardless of the culture it emanates from or the context in which it resides. I agree whole-heartedly that instructional strategies must differ, but not content. Examples may differ, but concepts must be common. A music student from Mason City dropped into a music classroom in East L.A. should feel completely at home both academically and artistically.

Waste Management

The last half-century has seen the piling on approach wreak havoc in the classroom. It's a pleasant, inert sort of confusion on a gentle incline of improvement, but the disorder is

undeniable. One hopes that the landfill has now gotten so large that we can no longer pretend to control it by sending barges to New Jersey. Voices such as Hinckley and Rees must be heeded:

This prospect challenges long-held beliefs about what the music educator needs to know and be able to do as musician and teacher, because there is no way to address the kinds of concerns raised here without eliminating or de-emphasizing some of the musical knowledge and skill cherished by our profession.

They may be off the mark in some areas, but that statement is spot-on. But before we clean out the toolbox, we need a clear sense of what the job is. The first step is to define what a person needs to know and be able to do at each stage of physical, intellectual, and musical development. I'm way out of my league in the pre-school and primary grades, and only slightly less ignorant in secondary. I've got a good grip on the college and professional ranks though. Thus, I'll work backwards.

“Foul!” some will cry. “Of all students that study music pre-K through high school, only a tiny fraction will continue into college, and only a tiny fraction of those will make it to the professional ranks. Besides, music education through the secondary level is not about college or professional preparation.” True enough. But if we work from the reasonable premise that these tiny fractions of the total cohort need to know more than the average student, we have at the beginning of a college program a marker that is farther than pre-K through secondary music education needs to go. In other words, we know the farthest point to which we'll need to travel.

This is the essential limiter that all attempts at curricular reform have lacked. When the sky's the limit and we're shooting for things like exalted spirits, and using music to cure the “urgent social problems” of the inner city, we'll miss every time. No gun we can build will bring down an elephant that big. “But music education through the secondary level is not about college or professional preparation. Music is for everyone and we must equip all for lifelong enrichment and learning.” If a high school graduate has what it takes to enter a degree program in music, one has to believe that he is standing on a platform that would support lifelong enrichment and learning should he, at the last moment, choose to become a doctor instead.

Every other academic discipline – that chic clique we're so desperate to join – sees high school as preparation for college, and elementary school as preparation for middle and high school. But ask any elementary music educator if his job is to prepare students for middle school music and the answer will be no. How can this be? Elementary music is devoted to general music; middle and high school music is devoted to ensemble performance. General music in the secondary grades is reserved for those students the elementary teacher would gladly have thrown out of class had they had the option. The secondary teachers do have the option, thanks to the selection process disparaged by Hickey and Rees, so general music becomes the artistic equivalent of Skid Row.

Ask any high school music teacher if his job is to prepare students to major in music at college and the answer will be no. How can this be? High school music programs are “enrichment activities” – to borrow Hickey and Rees' term – not curricular constructs. So students enter college firmly believing that music is a fun activity, and boy wouldn't it be neat to be a band director and help students have fun too? And then they fail theory, and struggle valiantly through countless re-takes in aural skills, and turn green with trepidation before applied juries, and

complain that the repertoire the college band plays isn't "real band music." In other words, when faced with the reality of what being a musician is, most find out too late that they aren't cut out for it and it's much more work than spiritual exaltation.

Physics is for everyone (or we'd have people flying off into space willy-nilly), but being a physicist isn't. Baseball is our national pastime, but very few Americans can honestly call themselves baseball players – and we're okay with that. Why are music educators hung up on the most grandiose aspects of music? Through physics, Einstein achieved spiritual exaltation as surely as Ernie Banks (Mr. Cub!) did through baseball, or Isaac Stern through music. Music is for everyone, but musicianship isn't – and that's okay. Better than okay, in fact. It's true, and truth is beauty.

The beauty is in the fact that all human beings have different desires, needs, talents, and tastes. Thank goodness we're not all musicians. It takes too long to master, and Leonardo would have had no time to paint, or Michelangelo to sculpt, or Shakespeare to write. We'd never have reached the moon, or cured polio, or invented the computer. Therefore the goal of music education in the public schools can't be to create musicians any more than the goal of mathematics can be to create mathematicians, or physical education to create athletes.

The goal is to build a pathway to a door, beyond which lies the possibility of musicianship. Next to that door are any number of others, all equally valid. The bricks in the pathway must be the same for everybody – basic, fundamental. If music is part of the core, everybody must travel the path – not just a chosen few, nor merely those who enjoy it. I didn't enjoy math, but boy did I have to travel that path, and obviously I didn't pick the door leading to mathematician (it was locked from the inside, and somebody had wedged a chair under the knob).

Dessert

At the moment, music education wants to have its cake and eat it too. It wants to be part of the core, yet ethereal, ephemeral, spiritual and sublime. It wants to be inclusive (for everyone!) yet exclusive (oh yeah, there's an audition). One of the most curious aspects of music education's bipolar nature has to do with retention. At the secondary level, music educators think nothing of adjusting content to please the students. Can you imagine an English teacher dropping Shakespeare because students are avoiding the class? Oh, that's right – English is a core subject, which means the students can't avoid the class. Enrollment isn't an issue because everyone has to take it.

If music is a core subject, it must act like a core subject. The content must be unremittingly worthy, and firmly upheld in spite of student opinion. Nobody asked me if I enjoyed algebra (I didn't – still don't, but it does come in handy every now and then). Student motivation is a real concern in any school, but music educators have put the world on its head.

The rest of the educational spectrum simply adjusts teaching style and employs different educational techniques to boost student interest in the subject. Music classes routinely default to sub-par repertoire (do you know that in 2007 there were no fewer than seven renditions of *Pirates of the Caribbean* published for concert band?), travel (Disneyworld is popular, also Chicago and Washington, D.C.), and extra-curricular competition. I'm not sure what I would have thought if Mr. Bryk had organized a trip for his Algebra II class to Disneyworld. My head

would surely have exploded if we had to compete against other classes around the state, and if he had based a semester of study on repeated viewings of *A Beautiful Mind*, I'd be even more hopeless than I am.

Music educators aren't dummies. They know that very few students will be intrinsically motivated to study and practice. Most students aren't intrinsically motivated to do anything but sleep, eat, and play *Guitar Hero*. But they've warped the concept of extrinsic motivation past all recognition. It is now so firmly ingrown it will have to be surgically removed.

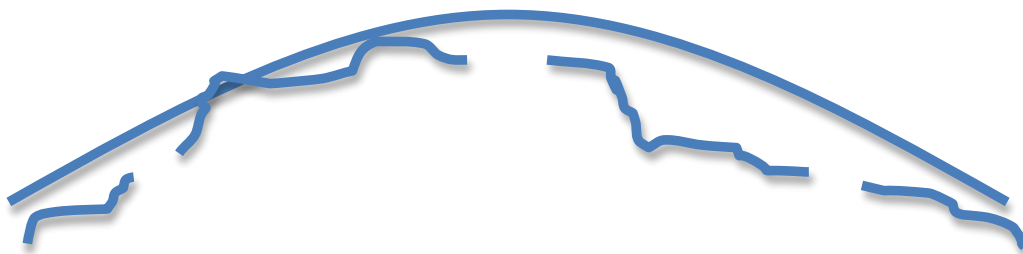
Music can't be a core subject unless it acts like a core subject. That would mean widespread change (gasp!) and the elimination of long-cherished but idiotic notions. Of course Johnny wants to go to Europe, but what does that have to do with matching pitch? And there's nothing wrong with competition, it's a useful assessment tool and great for outreach – if you win. The problem comes when the entire class is forced to compete. I'm sure the übergeeks in my high school chemistry class had opportunities to compete at the local, state, and even national level. The principal and superintendent of schools had great fodder to offer the Board of Education and the parents. But the rest of the class was allowed to wallow placidly in the shallow end of the periodic table of elements. We paddled up to the door marked "Chemist," but didn't have to go through it.

In music the rule has been all or none. You can't compete with half a marching band any more than you can make the state finals with half a football team. But football is voluntary – it's not a core subject. Imagine a team that was required to field every student in school (even the übergeeks). A .500 season would be a miracle. Even music teachers understand this is absurd, until they look into their own classroom. Then it's essential.

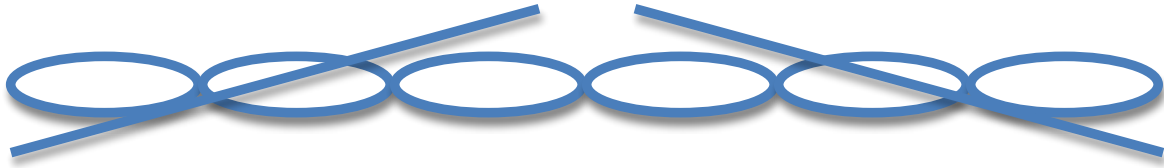
The band that earns a "1" at contest each year must be the result of some great teaching...unless it isn't. I have seen far too many "1"s earned by bands whose teachers I know to be sub-par, based on direct observation. I've also seen ensembles earn a well deserved "4" with a skillful educator at the helm. How can that be?

Performance doesn't necessarily measure musicianship. It is one important indicator, but the "1" is awarded to the ensemble. There can be a large percentage of students in that ensemble that are poor musicians, and poor performers, but they are tucked away on third trombone, or fourth clarinet, or triangle. Then there are those with whiz-bang instrumental technique who can't shape a phrase. *Come one, come all – see the Fiery Fingers of Fury! Hear the Atlas of the Altissimo! Pay no attention to those tone-deaf flutists behind the curtain.*

Perhaps I'm odd (okay, strike "perhaps"), but I would much rather hear



...than the ubiquitous



At least in the first there is correlation between the efforts of the musicians (one hopes the smooth line is the conductor, but that doesn't have to be the case). In the second, not only is there no correlation but no hint of artistry. Yet the second is far more likely to earn a "1" from the judges in part because it is familiar and expected, and also because it is what most of the judges would achieve were the tables reversed. Indeed, it is what most would strive for.

In shape #1, most old-school educators couldn't recognize the wiggly lines as the infant version of the smooth arc. By the same standard they wouldn't recognize a baby as a human being because it can't walk or speak. They'd also argue that the person making the smooth arc is either deluded or narcissistic. "He's just making pretty shapes in the air; it has nothing to do with the music." In truth, shape #2 has nothing to do with music; it's a picture of mechanical dysfunction. The player (bubbles) has serious airflow and articulation problems, and the conductor (lines) is rigid and airless. To anyone who has made it beyond this stage, it's an abomination. Why would we reward those who demonstrate this? Either because we don't know any better, or because we believe that better is the sole province of professionals.

Ironically, the younger we are the more likely we are to freely stumble upon artistry in our daily endeavors. Art professor Howard Ikemoto relates an anecdote in Bayless and Orland's *Art & Fear*:

When my daughter was about seven years old, she asked me one day what I did at work. I told her I worked at the college – that my job was to teach people how to draw. She stared back at me, incredulous, and said, 'You mean they forget?'

We don't forget, but as we age the shelves up front in our subconscious simply block the "miscellaneous" bin at the back. As our brains process more information, the law of gravity moves away to be associated with other scientific and logical items, and the Easter Bunny is packed away with the bronzed baby booties. Acquiring the freedom and intellectual flexibility to access the whole mental storehouse (even the Bunny/bootie box) is actually a reversion to a childlike state.

Soylent Green

The question at hand is: how do you get the music education populous to understand that Soylent Green is people? The status quo is not healthy, it is not musical, and it is not worthy of being a core subject in its current condition. That's why MENC has to spend most of its time and energy

on advocacy. When was the last time you saw an ad for bread? I haven't seen one in ages, yet I eat bread nearly every day – it's a staple. The National Bread Board (or whatever is the appropriate organization) knows that everybody is going to eat bread, so they don't have to spend too much effort drumming up support.

But MENC is selling a product that isn't a staple (in its current state), so they first have to convince everybody how nutritious it is and then convince them to buy it. They also have to train legions of music teachers to hit the streets like Fuller Brush salesmen hawking their wares. In academia, science = bread, music = bologna (or salami, or any other processed meat in the spirit of multiculturalism). It's time for music educators to stop trying to sell bologna and realize that what's important is protein. The human body can't live without it – it's more essential (i.e. basic) than bread. Show the world that music = protein and spend the advocacy money on teacher training. Prove that music = protein and watch the bread people scramble to link to it. Science classes will field experiments in acoustics, math classes will use the division of the octave as a vivid demonstration of fractions, English classes will focus more on rhythm in both poetry and prose.

How do you turn bologna into protein? Happily, we don't need Jesus for this one (the deli at Cana). It's a simple process of extraction. The protein is in there – it always has been. What we don't need are the water, corn syrup, modified food starch, salt, sodium lactate, sodium phosphates, sodium diacetate, sodium erythorbate, flavor, sodium nitrate, and extractives of paprika. Instead of finding more weird things to throw into the vat (e.g. sodium nitrate is used as an ingredient in fertilizers, explosives, and in solid rocket propellants, as well as in glass and pottery enamels – yum!), MENC and its ilk need to sit down and determine what is musical bedrock. None of this “music is the universal language” blather either. That's the kind of thinking that leads to *Soylent Green*. Sure, cannibalism is a great source of protein, but at what cost? The more we insist that music has meaning – and to be a language the critical factor is meaning – the more music can be handled by the non-musical core subjects. English and mathematics are all about meaning; who needs music?

While I'm sure there must be an episode of *Star Trek* in which Spock altered the sequence of amino acids in a protein to send a coded message to Kirk to save the Enterprise from certain destruction, no sane human being could argue that protein has meaning. Likewise, NASA used a synthesizer to “communicate” with the giant spacecraft in *Close Encounters of the Third Kind*, but I have yet to find anybody who can tell me what was said. Sound = amino acid. Sound can be used to communicate – we call that speech. Sound can also be accidental or environmental – we call that noise. But music is the result of human beings using sound to achieve abstract aesthetic ends. Music, like protein, is *sui generis*.

Music education must get to the heart of how humans use sound to create art. No other subject covers this territory. Furthermore, if music is a discrete intelligence (see Gardner), every person must come to grips with it if they are to understand themselves and reach their full potential as a human being.