

**Update on Research  
Terese Volk Tuohey**

**Part I: Abstracts from the 2010 MMC Poster Session**

**Andrew Justin Allen**, Central Michigan University.  
*The Development of the Saxophone Quartet*

The purpose of this literature review is to show that the successful development of the saxophone quartet occurred as a result of the efforts of individuals who felt a strong drive to commission and inspire new works for the ensemble.

The efforts of Adolphe Sax, Marcel Mule, Larry Teal, Sigurd Rascher, and others provided a large number of now-standard works for the saxophone quartet, helping to secure a future for the ensemble. In the past thirty years, their many followers have continued pushing for new literature yielding a three-fold increase in the number of available original works.

Those quartets that have performed mostly transcriptions of works for other instruments had little or no impact on the development of the ensemble. The saxophone quartets of Edward Lefebre, the American Saxophone Quartet of the Sousa band, and the saxophone quartets of the vaudeville era had large public audiences at the height of their popularity. They performed mostly transcriptions but neglected original works for the saxophone quartet, and had a low impact on the future of the saxophone quartet as a legitimate concert ensemble.

It can be inferred that any musical medium requires individuals who are willing to make a commitment, not only to the ensemble but also to new literature for the ensemble. Music Educators could realize the same effect in developing programs at the local level.

**Ashley Biermann**, Central Michigan University  
*Teaching Students to Sing Acoustically: A multisensory Approach*

There is a lack of methodology that provides acoustical ways to teach students to sing. When students cannot sing acoustically, it reflects their lack of understanding about pitches relate to the underlying harmonic structure (Eskelin, 2005). Traditionally, students learn to match pitch by singing pitches presented on the piano. The problem can be accredited to tempered tuning. Students are not learning to hear and produce pitches that relate to each other acoustically (Eskelin, 2005). Another

approach is for the teacher to sing and the students to repeat, and is not directly acoustics based. With the Kodaly method, students learn a hand sign for each pitch of a scale, but this is also not acoustics-based. Gumm proposed an acoustics-based method in combination with multisensory techniques would more successfully aid in matching pitch (Gumm, 2009).

The purpose of this study is to pilot an investigation on the effectiveness of a multisensory and acoustics-based method of matching pitch compared to traditional methods. Four methods of matching pitch for a pentatonic scale, note by note, were tested in a random order. Method A - Singing with Keyboard: Researcher plays notes individually on keyboard. Subject is to match the note using 'La'. Method B - Singing with Researcher (Female voice): Researcher sings notes individually using 'La'. Subject is to match pitch and syllable. Method C - Singing with Researcher (Female voice) using Solfa: Researcher begins on 'Do'. Subject is to match pitch and syllable of researcher. Pattern continues with pentatonic solfa. Method D - Singing with Multisensory Technique: While standing approximately 2 feet away from subject, the researcher sings 'Do' and tosses a ball to subject. Subject is to match pitch, syllable, and motion of researcher in return. Researcher moves back 1 foot approx., sings 'Re'. Subject is asked to repeat. Pattern continues with pentatonic solfa. Five fifth grade students from a general music classroom participated. The most successful method results were matching the researcher while using hand signs. The least successful method results were matching the keyboard.

**Sarah L. Bowman**, Fruitport Community Schools  
*A review of literature that examines why people do and do not sing*

Singing is often perceived as the most natural instrument with which human beings create music. This perception might fuel the presumption that singing is a common activity most people participate in. However, the current reality in our culture is that singing is something most people do not participate in. This lack of participation in singing is discouraging to music educators, especially those who teach and advocate for singing activity among students. By reviewing literature that examines why people do or do not sing, one can begin to understand the large disconnect between the most natural instrument available to human beings and their decision to not use it to create music.

Some researchers in the field of music education have focused their studies on determining why people sing (Durrant & Himonides, 1998; Richards & Durrant, 2003; Turton & Durrant, 2002). This

literature suggests that such factors include enjoyment, interest, perceived ability, and social or family influences. Fewer researchers have focused their studies on determining why people do not sing (Abril, 2007, Turton & Durrant, 2002). In some cases, individuals have had a negative music education experience that has discouraged them from singing, while others are primarily concerned with their perceived lack of ability (Richards & Durrant, 2003). Also, a historical study that discusses both colonial and 20<sup>th</sup>-Century forms of public singing offers a foundation for understanding this metamorphosis (Gates, 1989).

**Scott N. Edgar**, The University of Michigan  
*Principals' Expectations of Music Teachers: A Review of Relevant Literature*

The purpose of this paper is to review relevant literature regarding principals' expectations of teachers in general, art, and music education. Building principals play a crucial role in the development and retention of teachers. Studies show that teachers, both novice and expert, rely on curricular, professional, and motivational leadership from their administration to successfully execute their jobs in a school setting. The common expectations that principals have of new teachers in general education are: "a) a professional attitude; b) adequate knowledge of subject areas; c) good classroom management areas; d) excellent communication skills; e) a belief that every child can learn; and f) a desire to help students succeed" (Brock & Grady, 1998, p.114). It is essential that principals communicate these expectations with their teachers. Little research has been conducted on building principals' expectations of music teachers, especially in their entry-year. This knowledge could aid teachers' initial success and retention in the field of music education. The research will be reviewed in three categories, administrative expectations in a) general education, b) arts education, and c) music education.

**Phillip Hash**, Asst. Prof., Calvin College  
*The Universal Teacher by J. E. Maddy and T. P. Giddings(1923)*

This study examined the *Universal Teacher for Orchestra and Band Instruments (UT)*, a class method by Joseph E. Maddy and Thaddeus P. Giddings published by the Conn Musical Instrument

Company in 1923. Research questions focused on 1) details surrounding the writing and publishing of the *UT*, 2) philosophical, psychological, and pedagogical principles behind the method, 3) the influence of the *UT* on class teaching and subsequent books, and 4) implications of this research for modern practice.

Maddy and Giddings wrote the *UT* from 1920-1922 while teaching summer methods courses together at Chautauqua, New York, and the University of Southern California. The authors designed the book to appeal to children by applying the song method from elementary vocal music to instrumental instruction. This pedagogy differed from previous instrumental methods in that instructional material consisted entirely of melodies rather than scales and exercises. The *UT* also employed a detailed, systematic series of class procedures intended to maximize the use of class time, hold students accountable for their progress, and allow independent learning with as little teacher intervention as possible.

**Kelly K. Hay**, Central Michigan University

*A Good Reed: A comprehensive study of oboe reeds and reed making*

The purpose of this literature review is to help oboists and music educators choose and manage reeds for a more preferable sound. The writings on oboe reeds aim to provide advice on how to control the reed making process. The literature on this topic is separated into four sections. The first is centered on knowing the effects of different shapes, lengths and scrapes of oboe reeds on the subsequent sound. The second topic centers on the history of the oboe reed and sound. The third subject focuses on making reeds according to the different national and geographical styles. The final issue discusses the effects oboe reeds have on tuning pitches. Missing in the literature however, is a study of climatology and the effect of regional weather patterns on reeds. This idea may be a factor in improving the future of reed making.

Knowing this information will help oboists stabilize their oboe reeds and find a personal formula for reed making. These topics will also assist band and orchestra directors to improve the sound of their oboe section. This paper satisfies a need to analyze the reed-making process not only from a practical angle but also from a geographical and historical point of view.

**Bradford Howells**, Vanguard Charter Academy, Wyoming, MI

*The Effect of Primary Performing Instruments on Peer Evaluation*

The purpose of this study was to investigate the validity of peer evaluation of solo performances of high school band students. The findings may be useful to a band teacher to enhance students' musical

development, and ultimately their performance achievement. The problems of this study were: 1) to determine if high school students' peer evaluations of solo performances were valid when using a standard testing tool and 2) to determine if the student evaluator validity was different when the evaluator played the instrument being rated than when the evaluator did not play that instrument. The subjects in this study were high school band students (n=59) from a low-to-middle class, urban school district. Each student observed seven video-recordings of peer solo instrumental performances. Some of these performances were on the same instrument that the evaluating student played in band. Three expert musicians evaluated all the solo performances. There was a low to moderate correlation between student and expert evaluations and there was a significant difference found between same-instrument and not-same instrument classifications.

**Sheri E. Jaffurs**, Highmeadow Common Campus- Music Department  
*SIMPonic Island and Musical Identity*

The development of immersive computer mediated environments has opened many new and exciting possibilities for education. Students may now develop 3-D virtual environments and representations of themselves as they participate in educational gaming and social networking. The distance learning modules of the past, usually a single teacher created course, with little synchronous communication, has been replaced with real time chat room events, live webinars, instant messaging, and streaming of live audio. This ability to stream live audio offers a unique opportunity for musicians. In the fall of 2008, a public school in the Midwest purchased a virtual island from Linden Lab's Second Life. SIMPhonic Island hosts a pilot online music technology course for high school students. Students create avatars, virtual representatives of themselves, and develop their musicianship and the skills needed to become virtual musicians that create their own music and broadcast through the internet. Data from an earlier study (Jaffurs, 2006) was used to inform the current study into the development of musical identity in the Metaverse. In the earlier study, each venue supported the development of the members' social and musical identities.

The participants were students enrolled in the music technology course. The researcher/instructor, who is the avatar Lucy Joles, conducted interviews with student avatars while on SIMPhonic Island. Narrative accounts from the interviews and observations describing the music venues each participant created on the island were used to synthesize the data.

An examination of teens on a virtual island, creating their own spaces, their own music, and even their own embodied representative may reveal important information about teen identity. Gracyk's (2004) conception of identity as a fluid process that teens strive to stabilize suggests that identity development is a

process not as connected to the music students choose to create and perform but to the cognitive ordering of the many facets of music to a single object.

**Steven Kadow**, Central Michigan University  
*Quarter-Tone Pedagogy in Music Education*

The purpose of this paper is to help music educators and performers interpret and program quarter-tone music. There are three inconsistencies that hinder the teaching and performing of quarter-tonal music. The first inconsistency is notational method. Each quarter-tonal piece uses one of four different methods of notation, each with its own set of variations. In this paper, these four methods are explained and elaborated upon. The inconsistency in notation is complicated further by scores that do not include an explanation of which method is used. Students, therefore, should be exposed to a variety of notational methods to better understand what pitches the composer wants sounded. The second inconsistency is musical purpose of quarter-tonal music. Students respond differently depending on the musical purpose of quarter-tones in a piece. Musical purposes for quarter-tones include ornamentation, a derivation of folk tunes, and as links between chords in jazz improvisation. In this paper, further musical purposes are explored. The third inconsistency is the method of quarter-tone pitch accuracy and attainment. Instruments are not naturally constructed to generate quarter-tonal pitches with ease and facility. For these instruments exists more than one option for quarter-tone pitch production. This paper presents the methods of quarter-tone pitch production available for instrumentalists. If knowledge regarding all three of these inconsistencies were incorporated into performance pedagogy, musicians could perform quarter-tone music with competence and facility. They would understand the underlying purpose of quarter-tones in music and could relay the meaning of that music to their audiences.

**Loretta Lanning**, Central Michigan University  
*Instrumental Pedagogy in Russia, The United Kingdom and The United States: A Cultural Study*

The purpose of this paper is to show how American private instrumental teaching can improve student performance by designing their studio curricula to provide a more comprehensive general music education in their private lessons. A problem in American music education is the time and budget shortages that do not allow for broad general music education programs. Not mutually exclusive to this is another

problem: American pre-college musicians, even those who are not preparing for a professional music career, typically perform below comparable international standards. The root of these problems is deeper than simple budget shortages or teaching methods: the problem may lay in American culture itself. When comparing American music history and culture to that of the United Kingdom and Russia, it can be seen that these two cultures are conducive to excellent to general music education programs in public education. These comprehensive programs have a positive effect upon instrumental performance results. In response to this, American private studio teachers can create studio curricula to provide what is lacking in the public school curricula. Suggestions for creating internationally competitive curricula include: (1) designing repertoire study around the syllabus of the local ensemble or music program the student may also be involved with; (2) including a strong comprehensive musicianship component in private lessons, such as more aural training, broader exposure to musical content, and experimentation with composition and improvisation; (3) encouraging and participating in international standardized music exams such as the Associated Board exams; (4) encouraging more community involvement in private performance and general music education.

**Joy Morin**, Central Michigan University

*Improvisation in music education and piano pedagogy settings: a means for teaching students how to convey expression through music.*

The purpose of this paper is to demonstrate practical ways that non-jazz piano improvisation can be incorporated into modern music education, and specifically, into piano pedagogy. Although learning improvisation involves the development of a good tone and skills such as sense of tonality/meter, learning improvisation is ultimately learning to effectively communicate expression through music. Research reveals a decline in the use of improvisation in performance and pedagogy settings throughout history, accompanied by the trend that favors accurate, literal renditions of music scores. Research also reveals, however, a recent, renewed interest in improvisation, evidenced by an interest in the value of creativity and discovery methods of learning, as well as the emphasis upon improvisation in methodologies such as Kodaly, Orff, and Dalcroze. The 1994 National Standards of Music Education acknowledged this body of research by the inclusion of improvisation as one of the nine standards. In the teaching of creative processes such as improvisation, music educators may experience obstacles, such as lack of time, training, and resources. Based upon modern research, however, an effective, practical model

for improvisation pedagogy can be formed.

When conducting improvisational activities, music educators should create an environment where: (1) “wrong” notes do not exist; (2) individuality is encouraged; and (3) musical “authority” is shared equally between the teacher and student(s). Benefits of incorporating improvisation within the music education curriculum may include: (1) increased student motivation; (2) greater confidence during public performances; (3) stronger connections between “theory” and “practice;” and (4) increased ability to convey musical meaning.

**Charles Norris**, Grand Valley State University

*Elementary Children’s Tonal Awareness as Related to Perception of Tonal Dissonance*

The purpose of this study was to investigate elementary children’s aural awareness of tonality by measuring their abilities to detect dissonance in major tonality using the author-created Tonal Dissonance Detection Test (TDDT). The TDDT, comprised of 26 short tunes, requires subjects to determine presence or absence of dissonances, each created by placing a flatted (minor) third against an accompanying major I, IV or V chord. A between subjects one-way ANOVA of TDDT test scores of 1<sup>st</sup>- through 6<sup>th</sup>-grade children (N = 312) in a Midwestern suburban school revealed that 1<sup>st</sup>- and 2<sup>nd</sup>-graders’ abilities to detect dissonances were significantly weaker than those of third, fourth, fifth and sixth graders. These findings are consistent with related, but limited study of the perception of tonality and tonal expectancies in children and adults. Given the homogeneity of the sample, the longevity of the music instructor, the school’s sequential Kodály-based curriculum and conclusions of prior research, discussion considered the impact of musical instruction and musical development on the ability to perceive tonality. The author suggested that a distinction between the two aforementioned constructs might be ascertained in future research by comparing the same perceptual skills of children from Western cultures with children of non-Western cultures.

**Stephen A. Paparo**, Michigan State University

*The Effect of Instruction on High School Choral Singers’ Ability to Self-Rate Posture, Breathing, and Phrasing Performance*

The purpose of this study was to investigate the effects of rating scale instruction on self-evaluation accuracy of high school choral students. The specific problems were: 1) to identify how students

rate themselves on posture, breathing, and phrasing in relation to a panel of expert judges, and 2) to determine whether instruction in using the rating scales improves students' rating accuracy.

High school choral students (N=29) from a midwestern state individually performed and video-recorded an excerpt from a popular tune, then critically evaluated their own performance using a researcher-constructed rating scale. One week later, the treatment group received instruction during two class periods on how to use the rating scale, while the control group received no instruction. Subjects in both the treatment and control groups, subsequently, rated their performances for a second time. Three expert judges also independently rated the same performances. Inter-judge reliability, control and treatment group correlations, means, standard deviations, and standard errors of measurement were calculated using Pearson product-moment correlations.

Results indicated that rating scale instruction was effective in students' ability to rate their own performance in the dimension of breathing. The breathing ratings correlated more highly with the expert judges following instruction. Experience with the rating scales seems to play a more important role than instruction in the dimension of phrasing and perhaps in posture, although to a lesser extent. This may be because phrasing is an element of music, whereas posture is a technical aspect of performing. While the results of this study show that self-assessment is not a reliable method of providing knowledge of results to students in and of itself, it may suggest a need for educators to use rating scales and to teach students how to assess themselves.

**Lauren Peterson**, University of Michigan

*Chamber Music and the Development of Musical Independence: A Review of Research*

While private instruction is one method of individualizing music education, another option for music educators is the incorporation of a chamber music experience as a part of instrumental music education. Many music educators have made a case for chamber music, noting potential benefits such as problem-solving and critical thinking skills, confidence, motivation, social skills, and team-building skills, among others. The list of aforementioned qualities hint at chamber music being an access point for a larger goal: the development of musical independence.

The purpose of this paper is to explore existing literature relating chamber music

to the skills indicative of musical independence. Findings suggest that chamber music aids in the development of specific skills relating to chamber music such as intonation, communication, leadership, role development, and self-awareness. Although musical independence may be an important goal in music education, the term itself is not clearly defined through research. Clarifying the concept of musical independence may help music educators uncover more gaps in existing research that, once explored, could help create a stronger case for chamber music.

**Nicole Piunno**, Central Michigan University  
*Maintaining a Healthy Embouchure: How to Prevent Injuries in Brass Musicians*

The purpose of this literature review is to help brass musicians avoid injury. Specific research questions include: How can teachers prevent their brass students from injuring themselves? What knowledge is needed in order for students to maintain a healthy embouchure? How can this knowledge be applied in playing? Findings showed that injury to the lip muscle can lead to time away from the instrument and may even prevent the player from ever returning to the instrument. Every brass player needs at least a general understanding of how the muscles of the embouchure function in order to remain healthy. Once there is an understanding of the facial muscles, the player can learn how that relates to forming a proper embouchure.

Musicians should seek to avoid faulty embouchures such as using an extreme pucker or an extreme smile. Excessive mouthpiece pressure and playing longer than one is used to and with more physical effort is also dangerous. Brass players should seek an understanding of the embouchure and the risks involved with abusing it. By seeking understanding, brass players and teachers will know the audible and visible signs of an injury. Most importantly, these performers and teachers will know how to prevent a serious injury from ever occurring.

**Clint Randles and Gareth Dylan Smith**, Michigan State University and the University of London (England)  
*Encouraging creativity in the music curriculum: A cross-cultural perspective on the identities of pre-service music teachers in the UK and the USA.*

Kratz (2007) suggests that music education in US schools, which has been dominated by the traditional large ensemble model, is in danger of becoming irrelevant to students. A study was undertaken,

comparing the creative identities of pre-service music teachers in the USA with their counterparts in the UK. The aim of the project was to see whether differences exist between the two populations with regard to perceptions of their ability to create music and their plans to teach composition when they assume a teaching position. A 20-item researcher-devised survey tool was developed, based on the questionnaire developed by Isbell (2008) as a way to examine the specific research questions: 1. Do differences in perceived value of creative music making exist between pre-service music teachers of each country? 2. How can differences—if they exist—be explained? 3. What curricular implications can be drawn from this comparison? Results suggest that pre-service music education students in the US feel less confident about their abilities to compose music ( $p < .0002$ ), less comfortable teaching composition ( $p < .0001$ ), and are less likely to plan on “teaching students to compose/improvise their own original music when [they] get a job as a music teacher” ( $p < .01$ ) than their UK colleagues. Differences in primary and secondary socialization are proposed to account for the differences in survey responses between the two populations. The UK model, while not perfect, seems to be encouraging students to develop creative and appreciative faculties to a greater extent than the US system, resulting in UK pre-service teachers planning on including the teaching of composition to a greater extent.

**Karen Salvador**, Michigan State University

*Is there a ‘musical’ personality type? A study of the relationships among temperaments and participation in band, choir, or orchestra for seventh and eighth grade students.*

Educational research has posited that awareness of temperament might help classroom teachers individualize instruction to capitalize on the personality strengths of their students. The purpose of this study was to find (1) if certain personality styles were more likely to be represented among music students in band, choir, and/or orchestra (2) if any personality trait or composite personality style was more likely to be associated with vocal music as opposed to instrumental music among those tested. Nine classes of seventh and eighth-grade band, choir and orchestra students ( $N=198$ ) from two middle schools in a suburban Midwestern school district took the Student Styles Questionnaire (SSQ), a test designed to measure personality type. Data from the SSQ were entered into an Excel spreadsheet, which was then analyzed using the SPSS product PASW 17.0. No significant differences were found between the different ensemble types regarding the predominant traits or composite personality styles of the students. However, this data did indicate that middle school band, choir, and orchestra teachers served students with all

possible combinations of predominant trait and composite personality styles. The limitations of this study may have prevented more significant findings. Further study regarding traits and personality types and their influences on the learning styles of children could result in more information to help music teachers to differentiate instruction.

**Andrew E. Shankles**, Central Michigan University  
*Video Podcasts for the Middle School Band Director: An Audio-Visual Aid for Recall of Beginning Instrumental Techniques*

Novice band directors have a tremendous amount of various instrumental techniques they are expected to recall their first years on the job. And while it is true there is no substitute for experience, knowing where to find the answers to your teaching questions is helpful in those first years as a young teacher. Technology has made access to these answers even easier. But with the duty of a band director being so “hands on” and given the amount of information they are expected to learn concerning instrument technology, instrument technique, and the physical developmental areas of students themselves, it is easy for a first year teacher to become overwhelmed. In the event that there is no private teacher available to beginning band students, how is a band director supposed to accurately recall the experiences of his various instrumental techniques courses? Video podcast provide a way to see proper techniques for various instruments, and allow the band directors to review the process of beginning instruction on the instrument. A literature review details that audio and video instruction aids in the recall of once learned skills. To assist novice band directors, a set of succinct beginning techniques for trumpet and clarinet were gathered, and an original video podcast was produced and made available on various technological platforms such as computer, iPhone, and Blackberry.

**Ryan Shaw**, University of Michigan  
*Lesson Planning: A Review of Literature*

The purpose of this paper is to review the literature on lesson planning in music education. Reviewed studies include those that focus on (a) lesson planning differences between novice and expert teachers, (b) relationships between planning and rehearsal design, (c) and different perceptions of lesson planning. Analysis shows a large deficiency in this research area. Few studies exist, and the bulk of the literature only references teacher opinions of lesson planning as one part of a survey or deals with a small subset of teachers such as undergraduate preservice teachers. Relatively little is known about teachers’

feelings on the subject of lesson planning, especially those of experienced teachers. Recommendations are made for further research and practice. Research recommendations include studying experienced teachers and investigating alternative, non-linear lesson planning approaches. Practice recommendations encourage music teachers to experiment with these alternative, non-linear approaches.