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Editorial Note

I am pleased to present the Proceedings of the 2011 Desert Skies Symposium on Research in Music Education. This symposium has a long history and continues to be a forum for encountering new ideas in music education and revisiting former ones in innovative ways.

During the conference opening-night welcome, those in attendance learned a few historical facts regarding symposia. In ancient times, Greek symposiums were a time for “drinking together” as well as a time for debate. A symposium would be overseen by a "symposiarch" who would determine the wine’s strength for the evening depending on the seriousness of the discussions. Fortunately my role of symposium director did not require the judicious determining of wine strength! Rather, I was fortunate to merely provide the venue for the many lively discussions that ensued from the three keynote speakers and 38 authors.

The five full-length papers in the 2011 Proceedings represent various research foci. Terese Volk Tuohy and Lauren Kapalka Richerme present historical data regarding music therapy and the Federal Music Project of the Works Progress Administration and a comparison of Sputnik and “A Nation At Risk,” respectively. Gina Jisun Yi presents the classroom management strategies utilized by two early childhood music teachers. Michael A. Raiber and Christian Hauser both address the creative aspects of music making. Raiber examined the creative thinking of young children involved in an integrated music and math classroom. Hauser presents data on pre-service music teachers’ perceptions and preferences when engaging in compositional tasks.

On behalf of the Desert Skies National Advisory Board, we hope you enjoy reading these informative articles. We also hope to see you at the 2013 Desert Skies Symposium.

Shelly Cooper, 2011 Director
Desert Skies Symposium on Research in Music Education
Welcome

Welcome to the twelfth biennial Desert Skies Symposium on Research in Music Education. The purpose of this symposium is to showcase current research in music education and the Desert Skies National Advisory Board hopes the presentation of such material will inform research, pedagogy, and practice now and in the future. It is my hope that the 2011 Desert Skies Symposium will be a thought-provoking forum for you to exchange information with colleagues who share similar professional interests.

Symposium Director

National Advisory Board

Shelly Cooper, Symposium Director
University of Arizona

Robert A. Cutietta
The University of Southern California

Tami Draves
University of Arizona

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The Pennsylvania State University

Sandra Stauffer
Arizona State University

Linda Thompson
Lee University

David J. Teachout
University of North Carolina at Greensboro

A special thank you to the following people
for their help in organizing and supporting this years’ event.

Jory Hancock, Dean of the College of Fine Arts
Dr. Peter McAllister, Director of the School of Music
Ingvi Kallen, Public Relations and Outreach
The Desert Skies Symposium National Advisory Board
THURSDAY, FEBRUARY 17, 2011

5:30 - 6:00 pm  Check-in or Late Registration

6:00 pm  Opening Remarks

6:00 - 7:00 pm  Dr. Robert Bayless (Keynote Speaker), University of Arizona
                *M & M: Music and the Mind*

7:00 - 7:15 pm  Break

7:15 - 8:45 pm  SYMPOSIUM RESEARCH SESSION #1
                7:15 – 7:30  2-Minute Overviews from Presenters
                7:30 – 8:45  Rotation of 3 Breakout Sessions

Presenters:

Steve Oare, Wichita State University
*Aural Image in Practice: A Multicase Analysis of Instrumental Practice in Middle School Learners*

Kimberly VanWeelden, Florida State University
*Classical Music as Popular Music: Adolescents’ Recognition of Western Art Music*

Lauren Kapalka Richerme, Arizona State University
*Remain Or React: The Music Education Profession’s Responses To Sputnik and “A Nation At Risk”*

Tammy Kuntz, Case Western Reserve University
*An Exploration Of High School Band Students’ Participation In Music Activities Beyond The School Day*

Lisa Martin, University of Colorado
*The Musical Self-Efficacy Beliefs Of Middle School Band Students: An Investigation Of Sources, Meanings, And Relationships With Attributions For Success And Failure*

Samuel Tsugawa, Independent Researcher
*The Instructional Preference, Desired Traits Of Effective Teaching, And Self-Directed Musical Learning Among Members Of Two New Horizons Ensemble*

8:45 - 9:45 pm  Evening Reception
FRIDAY, FEBRUARY 18, 2011

9:00  Welcome  
   Dr. Peter McAllister, University of Arizona  
   School of Music Director  

9:00 - 10:00 am  
   Dr. T. Philip Malan (Keynote Speaker)  
   Professor of Anesthesiology and Pharmacology  
   University of Arizona College of Medicine  
   
   How We’re Educating Your Next Doctor  

10:00 - 10:30  Discussion/Reaction/Questions  

10:30 - 10:45 am  Break  

11:00 am - 12:30 pm  SYMPOSIUM RESEARCH SESSION #2  
   
   11:00 – 11:15  2-Minute Overviews from Presenters  
   11:15 – 12:30  Rotation of 3 Breakout Sessions  

Presenters:

Gina Yi, Michigan State University  
   Classroom Management in an Early Childhood Music Setting  

Crystal Guy Sieger, University of Arizona  
   Teacher Perspectives of Music Performance Anxiety in Middle  
   and High School Instrumental Music Students  

Ann Deisler, Florida State University  
   Music Teachers’ Perceptions of Students’ Musical Activities Outside of School  

Si Millican, The University of Texas at San Antonio  
   Describing Pedagogical Content Knowledge in Instrumental Music Instruction  

Michael A. Raiber, University of Oklahoma  
   Integrated Instruction in Music and Mathematics and its Relationship  
   to Creative Thinking Among Young Children  

Nancy Conley, Michigan State University  
   Michigan String Teachers’ Use of and Attitudes Regarding Improvisation  
   in the String Classroom  

Nathan Kruse, University of North Texas  
   Music Teaching and Learning Online: A Content Analysis of YouTube  
   Folk Music Instructional Videos  

12:30 - 2:15 pm  Lunch
2:15 – 3:45 pm  SYMPOSIUM RESEARCH SESSION #3

2:15 – 2:30  2-Minute Overviews from Presenters
2:30 – 3:45  Rotation of 3 Breakout Sessions

Presenters:

Christian Hauser, University of North Texas
   Pre-service Music Teachers as Composers

Daniel Johnson, University of North Carolina – Wilmington
   The Effect of Critical Thinking Instruction on Music Listening Responses:
   A Follow-Up Study

Dale Misenhelter and Joshua Russell, University of Arkansas
   Teacher Perceptions of Compulsory Elementary Music on Cultural and Social Outcomes

Jason Silveira, Florida State University
   Students’ Motivation to Participate in Honor Music Ensembles

Melissa Brunkan, University of Kansas
   The Effect of Training With Singer Gesture on Acoustical Measures of a Sung [u] Vowel

Joanne Rutkowski, Keith Thompson and Yi-Ting Huang, The Pennsylvania State University
   Cited Quantitative Research Articles in Music Education Research Journals, 1990-2005:
   A Content Analysis of Selected Studies

3:45 - 4:00 pm  Break
4:00 – 5:30 pm   SYMPOSIUM RESEARCH SESSION #4

4:00 – 4:15   2-Minute Overviews from Presenters
4:15 – 5:30   Rotation of 3 Breakout Sessions)

Presenters:

Elizabeth Bucura and JulieAnne Weissberg, Arizona State University

Children’s Musical Empowerment and Composition Task Design

Julie Kastner, Michigan State University

Elementary Music Teachers’ Perceptions of Teaching Pre-Kindergarten Students with Special Needs

Amy Spears, Arizona State University

A Survey of High School Band Directors’ Attitudes toward Team Teaching Effectiveness: A Pilot Study

Peter Miksza, University of Colorado

The Development of a Measure of Self-Regulated Practice Behavior for Intermediate Instrumental Music Students

Terese Volk Tuohey, Wayne State University, Michigan

Music Therapy and the Federal Music Project of the WPA: 1935-1943

Michael Hewitt, University of Maryland

An Exploration of Relationships among Gender, Grade Level, Instrument, and Music Performance Self-regulation of Secondary Band Students

Elizabeth Cassidy Parker, Columbus State University, Georgia

An Intrinsic Case Study of Two Homeschooled Undergraduates’ Decisions to Become and Remain Music Education Majors

The Evening Is Free
SATURDAY, FEBRUARY 19, 2011

9:00 - 10:00 am  Dr. Robert Cutietta (Keynote Speaker), University of Southern California, Dean of the Thornton School of Music

*If You Conduct An Experiment And Forget To Collect Data, Is It Still An Experiment?*

10:00 - 10:30 am  Discussion/Reaction/Questions

10:30 - 10:45 am  Break

10:45 am - 12:15 pm  SYMPOSIUM RESEARCH SESSION #5

10:45 – 11:00  2-Minute Overviews from Presenters

11:00 – 12:15  Rotation of 3 Breakout Sessions

*Presenters:*

**Erik Johnson**, University of Colorado

*A Case Study of the Development of Preservice Music Teacher Occupational Identity in a First-Semester Conducting Course*

**Lisa Huisman Koops**, Case Western Reserve University

*Music Play Zone II: Deepening Parental Empowerment as Music Guides for Their Young Children*

**Jeannine A. Sturm**, University of Arizona

*Performance Related Discomfort Among University Level String Players*

**Charles Ciorba and Amy Seibert**, University of Oklahoma

*Music Education in the State of Oklahoma: Perceptions from the K-12 Community*

**Beth Gibbs**, Grand Valley State University, Michigan

*A Comparison of Elementary Music Teachers’ Perceptions of Instructional Interactions*

**Dawn Famer**, Arizona State University

*Authorship and Methodology Patterns in Music Education Research, 1984-2007*

**Frank Diaz**, University of Oregon

*A Preliminary Investigation into the Effects of Mindfulness on Attention, Flow, and Aesthetic Response*

12:15 - 12:20 pm  Concluding Remarks

12:20  The Conference ends
Dr. Malan grew up in Long Beach, California. After receiving his BS in Biological Sciences and BA in Chemistry at the University of California, Irvine, he completed a PhD in Biochemistry and Molecular Biology at Harvard University. He then earned his MD from the University of Massachusetts Medical School, followed by residency training in Anesthesiology at Brigham and Women’s Hospital and Harvard Medical School. He joined the Department of Anesthesiology at the University of Arizona in 1989 and is now Professor of Anesthesiology and Pharmacology. He has an active clinical practice and is listed in Best Doctors in America. In addition, he is internationally recognized for his research in anesthetic pharmacology and pain biology, having published over 60 highly cited papers. He is best known for his contributions to the development of the general anesthetic sevoflurane and for his work showing that drugs acting selectively at one class of cannabinoid receptors (receptors responsible for the effects of Cannabis) cause pain relief without the side effects typical of Cannabis. Finally, he has an active interest in medical education. He recently completed 4 years of service as Vice Dean for Academic Affairs at the University of Arizona College of Medicine, where he was responsible for all aspects of medical education. He is well versed in current trends in medical education.
Symposium Program

Symposium Speaker

Dr. Robert A. Cutietta
University of Southern California
Thornton School of Music

Robert Cutietta, dean of the University of Southern California Thornton School of Music, enjoys an international reputation as a music educator. He is a noted author and popular speaker whose areas of expertise include the middle-school learner, choral education, learning theories, and the psychology of music.

Prior to coming to USC, Dr. Cutietta was professor and director of the School of Music and Dance at the University of Arizona. He joined the University of Arizona as a professor of music education in 1994, following appointments at Kent State and Montana State universities. Dr. Cutietta earned his Ed.D. in music education at Pennsylvania State University in 1982 and his master’s and bachelor’s degrees from Cleveland State University in 1978 and 1975, respectively.

Author of the highly readable book Raising Musical Kids: A Parent's Guide (Oxford University Press, 2001), Dr. Cutietta has published a wide range of articles on music education. These have appeared in such publications as The Music Educators Journal, Psychology Today, Journal of Research in Music Education and The American Music Teacher, among others. He is also co-author or editor of four books and has contributed chapters to several others.

Honors include the prestigious Putnam Award for Meritorious Teaching and the Maestro Award, based on the accomplishments of his students, from the University of Arizona. Dr. Cutietta was also named Distinguished Alumnus of the Year by Pennsylvania State University College of Arts and Architecture in 2000 and received the Distinguished Alumni Award from Cleveland State University College of Liberal Arts and Social Sciences in 2008.
Symposium Speaker

Dr. Robert R. Bayless
University of Arizona
School of Music

Dr. Robert R. Bayless received a Doctorate in Music Education from Kent State University, where he also received his master’s and bachelor’s degrees. In addition, he was awarded the dissertation fellowship from the music department and served as an ONTAP adviser for incoming graduate assistants at Kent State. His dissertation studied the leadership qualities of high school large group ensemble directors.

Dr. Bayless taught in public schools for over twenty years in Ohio and then in various college music programs for over twenty years. His college teaching experience includes appointments in Mount Union College, Malone College, Kent State University, Ithaca College, the University of Wisconsin Eau Claire, and currently at the University of Arizona in Tucson.

In 2008, Dr. Bayless collaborated with Dr. Shelly Cooper and published “An Examination of the Music Teachers National Association Papers and Proceedings 1906-1930: A Twenty-Five Year Perspective” in the Journal of Historical Research in Music Education. This paper was presented at Keokuk II: The MENC Historical Centennial Symposium (2007) and at The Music Educators National Conference (MENC) 61st National Biennial In-Service Conference (2008). Dr. Bayless presented his research paper, “The 25th President of the United States, William McKinley, and the Grand Army Band of Canton, Ohio” at the WASBE Biennial International Conference (2009). He has presented research papers on leadership styles, large ensemble contests, acoustics and hearing loss, and other topics relating to music education at various conferences in Arizona and Ohio.

Performing groups under Dr. Bayless’ direction were always rated superior at district and state orchestra, band and choir music competitions during his Ohio public school teaching career. Among the performance honors received by groups conducted by Dr. Bayless include: the Anglo-American Bicentennial Festival, Royal Albert Hall, London, England; UNESCO-ISME Conference, Hanover, Germany; International Society of Musicians, Montreux, Switzerland; Mid-West Band and Orchestra Clinic, Chicago; Washington National Cathedral Easter Services, Washington, D.C.; Mid-East Band Clinic, Pittsburgh; Blossom Music Center International Festival, Cleveland; American School Band Director’s Ohio State Meeting; Ohio Music Education Association Fiftieth Anniversary Concert, Fostoria, Ohio; and Ohio Music Education State Meetings. Among the guest conductors of his high school and college groups have included David Maslanka, Karel Husa, Arnold Gabriel, John Paynter, John Boyd, Robert Fleming, Fredrick Fennell, Mark Kelly, James Byo, Paul Whear, Patricia Grutzmacher and Stuart Ling. Dr. Bayless has continually worked as a conductor, teacher, adjudicator and clinician for high school and junior high school bands and orchestras throughout Ohio, New York, Wisconsin, and Arizona.

Currently Dr. Bayless is an Assistant Professor of Music Education at the University of Arizona. In addition to directing the Symphonic Band at the University, he teaches conducting and music education courses and is the coordinator of the Outreach Honor Band. He is the Associate Conductor of the Civic Orchestra of Tucson and has been the Editor of AMEA’s Arizona Music News.
Abstracts
(Listed Alphabetically by Author)

The Effect Of Training With Singer Gesture On Acoustical Measures Of A Sung /u/ Vowel

Melissa Brunkan, University of Kansas

The purpose of this three-phase investigation was to assess by selected acoustic (fundamental frequency, formant frequency profile) and psychoacoustic (singer perception, expert panel perception) measurements the effects of three conducting conditions, singer gestural training, and singer gestural movement on individual singers’ (N = 58) performances of a sung /u/ vowel in the context of a familiar song. Among primary findings: (a) statistically significant main effects for type of gesture by group in posttests; (b) significant differences in deviation in cents from target frequency among phase three participants when mimicking the conductor’s gestures in the posttest; (c) singer perceptions most frequently described low gesture as a feeling of deeper breath, high gesture as lighter, tense sound, and standard gesture as affording a sense of familiarity; and (d) expert ratings of intonation aligned with acoustical measures of singer Fo in the posttest. Results were discussed in terms of singing pedagogy, limitations of the study, and suggestions for further research.

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Children’s Musical Empowerment and Composition Task Design

Elizabeth Bucura and JulieAnne Weissberg, Arizona State University

Composition is becoming more prevalent in elementary school general music curricula. The purpose of this study was to investigate students’ creating processes under two different task designs: freedom and constraints. Two fourth-grade classes took part in this research, which occurred over nine classes. Students created two compositions with acoustic classroom instruments and computer software, one of each with specified constraints and with complete freedom. Four large themes that emerged from the data were: students’ sense of ownership in various compositional activities, facilitation roles required of teachers, student motivation and creativity as related to freedom and constraint in compositional tasks, and the impact of social support and group size on the compositional process for students. Implications include student empowerment when given composing autonomy, the ways in which students respond differently to freedom and constraint in task design, students’ feelings about group size, and the facilitation roles required of teachers.

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Music Education in the State of Oklahoma: Perceptions from the K-12 Community

Charles Ciorba and Amy Seibert, University of Oklahoma

The primary purpose of this study was to determine how the K-12 educational community in the state of Oklahoma perceived the subject of music education. Results indicated that music educators’ overall perceptions towards music education were significantly higher than the perceptions reported by administrators, teachers of other subject areas, and support staff. The secondary purpose of this study was to ask members of the K-12 educational community how they would improve music in the schools. While administrators, music teachers, and support staff reported increased funding for music education to be the number one response to this question, teachers of other subject areas were more inclined to suggest improvements to the areas of curriculum and scheduling.

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Michigan String Teachers’ Use of and Attitudes Regarding Improvisation in the String Classroom

Nancy Conley, Michigan State University

The purpose of this study was to determine the extent to which improvisation was incorporated in the middle and high school string classrooms in the state of Michigan. The problems of this study were to determine (1) if middle and high school teachers include improvisational activities in their string classes, (2) the frequency of these activities, (3) what sort of improvisational activities are included, (4) how the teachers rate the importance of improvisation in the string classroom, and (5) possible impediments to including improvisation in the string classroom. All middle and high school string teachers in Michigan were asked to complete an online survey. Results from the survey indicate that string teachers in Michigan overall are willing to incorporate improvisation but feel impeded by a lack of time and materials.

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Music Teachers’ Perceptions of Students’ Musical Activities Outside of School

Ann Deisler, Florida State University

The purpose of this study was to investigate music teachers’ perceptions of students’ musical activities outside of school. Specifically, the researcher sought to answer the following questions: (a) What musical activities do music teachers think their students are involved in outside of school? (b) How might teaching experience in terms of years and grade level taught influence perception? (c) What musical activities are teachers implementing in classrooms that emulate the musical activities students participate in outside of school? (d) In teachers’ perceptions, how might school music transfer to the students’ musical lives outside of school? Survey results indicated teachers’ (N=90) perceptions varied slightly between high school and middle school teachers and not at all with years of experience. Results of the free response question indicated that many respondents were unclear as to how the music they taught in school transferred to their students’ musical lives outside of school. Implications for music teachers and students were discussed.

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A Preliminary Investigation into the Effects of Mindfulness on Attention, Flow, and Aesthetic Response

Frank Diaz, University of Oregon

This study investigated the effects of a brief mindfulness meditation induction on attention, aesthetic response, and flow during music listening as measured by Continuous Response Digital Interface (CRDI) and questionnaire. Participants were music students at a comprehensive university in the southeastern United States (N=132), randomly assigned to one of four groups: mindfulness induction paired with aesthetic response (n=34), mindfulness induction paired with flow response (n=35), aesthetic response (n=32), or flow response (n=31). Although no significant differences were found among participants based on self-reported attention during music listening, the majority of mindfulness participants attributed enhanced levels of focus to engaging in the induction. CRDI graphs suggest unique response patterns between groups based on both the mindfulness task as well as construct used for focus of attention, and verbal reports suggest phenomenological differences between flow and aesthetic responses, with each accounting for a unique type of heightened and positively valenced affective experience.

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The purpose of this study was to evaluate gender-related authorship and research methodology patterns in music education research. Articles were examined in order to determine if the frequency of women authors in the sample matched the frequency of women receiving doctoral degrees in music education. Furthermore, methodologies of the articles were tallied to determine what types of research were being published and in what frequencies. Analysis of seven top-tier music education journals published from 1984 to 2007 suggested that women published below the expected frequency and that quantitative research comprised 78.93% of published articles. Data indicated that women were less frequent authors than men, but published a greater percentage of qualitative research. The number of women authors increased from the Early Period (1984-1991) to Late Period (1992-2007), as did the number of authors writing qualitative research.

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A Comparison of Elementary Music Teachers’ Perceptions of Instructional Interactions
Beth Gibbs, Grand Valley State University, Michigan

Elementary music teachers in Pennsylvania (N = 102) were surveyed to investigate their perceptions of effective classroom interactions. Teachers responding to the questionnaire indicated a preference for verbal directions and feedback when interacting with students. A comparison of responses from teachers with 10 or more years of experience and those with fewer than 10 years of experience revealed little difference in the reported perceptions of the frequency and effectiveness of actions taken to facilitate classroom interactions.

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The purpose of this study was to expose pre-service music educators (n=12) to three composition tasks of various structure—rhythm, poem and unstructured—and to examine their preferences and perceptions of composing. The study inquired if a “learn by doing” approach might influence their perceived ability to teach composition. Participants composed using xylophones and were given 10 minutes to complete each task. Data were gathered through surveys and interviews. The results showed that composing was a novel experience. Participants seemed to enjoy the composition tasks, regardless of assigned compositional method. Though the poem task was rated higher than the other conditions, the difference was not significant. A majority of the participants indicated that this experience positively changed their opinion on incorporating compositional activities in the classroom. Many remarked that this experience was fun and engaging; since they enjoyed the creative endeavor, they surmised their future students would also enjoy it.

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The purpose of the study was to investigate the relationships among gender, grade level, instrument, and music performance self-regulation of middle and high school band students. Participants (N=340) indicated their self-efficacy for performing a selected band or solo work, performed the work, and then immediately evaluated their performances. Findings suggest that musicians with high self-efficacy are likely to perform better and, though they may be somewhat over-confident in their predictions, are more likely to better predict their performance than those with low efficacy. Performance scores exhibited strong correlations with self-evaluation bias indicating that higher performers tended to evaluate themselves lower than their actual performance while low performers rated themselves higher than experts. Gender had a low impact on the dependent variables though males did tend to overestimate their performance more than females. High school students felt more capable of performing than middle school students and were more accurate in their predictions.

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The Effect of Critical Thinking Instruction on Music Listening Responses: A Follow-Up Study

Daniel Johnson, University of North Carolina – Wilmington

The purpose of this study was to compare effects of two contrasting approaches to music listening - critical thinking instruction (CTI) and activity-based instruction (ABI). Using a quasi-experimental, pretest-midtest-posttest design, the researcher analyzed fifth-grade participants’ written responses for significant differences by treatment. This design limited effects of open-ended, higher-order questions and improvisation to the CTI treatment. One music teacher presented both treatments consecutively in a series of eight, weekly 45-minute lessons. Participants were twenty-five randomly chosen students from one intact class. Using a one-way multivariate analysis of variance (MANOVA), the researcher analyzed responses on a researcher-designed measure by category: musical terms, affective responses, associative responses, and total responses. As a result of the CTI treatment, participants demonstrated significantly higher associative response scores ($p = 0.04$) and increased response scores in every category. Implications are to include open-ended questions and improvisation with vocabulary and response activities in music listening instruction.

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A Case Study of the Development of Preservice Music Teacher Occupational Identity in a First-Semester Conducting Course

Erik Johnson, University of Colorado

Research on preservice music teacher occupational identity often highlights two competing identities: performer and teacher. Of the many factors that contribute to the occupational identity of the preservice music teacher, conducting has the potential to integrate performer and teacher identities. Previous research suggests that high school and college ensemble conductors influence the occupational identity of the preservice music teacher, yet little is known about how socialization to the norms of a conducting community influences the development of preservice music teacher occupational identity. Using the theoretical frameworks of community of practice (Wenger, 1998) and symbolic interactionism (Blumer, 1969), this case study describes the status of preservice music teacher occupational identity at one collegiate institution during a beginning conducting course. Data analysis suggests four primary themes: (a) conducting as teaching; (b) conducting as performing; (c) participants learn by watching others conduct; (d) participants seek to assume the role of the expert.

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Elementary Music Teachers’ Perceptions of Teaching Pre-Kindergarten Students with Special Needs

Julie Kastner, Michigan State University

This study describes the perceptions and role-identities of two elementary general music teachers who taught pre-kindergarten music classes to students with special needs in order to explore whether the participants viewed their roles and skills as different from their elementary music teaching. Data collection included observations, fieldnotes, anecdotal evidence from informal conversations, and individual interviews, which were later transcribed. The data were coded and analyzed for emerging themes, which were (a) teacher roles, (b) teaching influences, (c) flexibility, and (d) communication and collaboration. The music teachers viewed aspects of their pre-kindergarten teaching as distinct from their elementary teaching. They created musical and non-musical roles, used flexibility as a teaching strategy, and communicated with other adults as they met the needs of their pre-kindergarten students. Discussion and suggestions for future research are also described.

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Music Play Zone II: Deepening Parental Empowerment as Music Guides for Their Young Children

Lisa Huisman Koops, Case Western Reserve University

With the intent of facilitating musical development of children enrolled in early childhood music courses, the purpose of this research was to describe the ongoing use of an online social networking site by parents of preschool children. Seven families attended a 45-minute early childhood music class each week for 10 weeks and responded to an assignment during the week via a private online social network similar to Facebook. Research questions examined perceived benefits and effects of participation in the online social network. Data consisted of online posts by the participants, transcripts of exit interviews, and pictures drawn by the children of their favorite part of music class. Results of qualitative data analysis suggested that the online social network seemed to foster deeper connections among most participants and provided a strong communication tool between parent and teacher. Parents indicated lack of time as a barrier to full participation in the site.

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Music Teaching and Learning Online: A Content Analysis of YouTube Folk Music Instructional Videos

Nathan Kruse, University of North Texas

The purpose of this study was to describe the overall characteristics of YouTube folk music instructional videos and to determine which characteristics were displayed the most. YouTube videos (N = 40) from five websites were analyzed for pedagogical and musical content. Video selection and categorization included banjo (n = 10), fiddle (n = 10), guitar (n = 10), and mandolin (n = 10) lessons. Content analysis factors included video characteristics, instructor characteristics, musical content, and teaching methods. Results indicated that the majority of these selected videos were geared toward beginners and that instructors tended to be white, middle-aged males. Videos also included many forms of aural reinforcement, modeling, technique-based instruction, and physiological prompts. However, opportunities for improvisations were infrequent. When combined with other aspects of Internet-based instruction, these initial results may lead to a more comprehensive picture of online music learning in our modern world.

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An Exploration Of High School Band Students’ Participation In Music Activities Beyond The School Day

Tammy Kuntz, Case Western Reserve University

The purpose of this qualitative study was to investigate the music activities high school band students are involved in and how these activities might lead to lifelong music participation. Specific research questions were: (a) In what activities are high school band students involved? (b) How do they describe their plans for musical involvement in the future? (c) What are high school band directors doing to encourage lifelong participation in music? Three focus group discussions at one rural school (n = 5), one suburban school (n = 5), and one urban school (n = 4) were conducted to discover ways students participated in music activities beyond the school day. These opportunities ranged from cultural groups, to community youth events, to time with friends listening to music. Influences of family members and the desire to maintain connections seem to be beneficial in creating musicians with a desire for music participation as adults.

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This study investigated musical self-efficacy of middle school band students. A sample of 45 students from 14 suburban schools completed a 60-item questionnaire measuring students' self-efficacy beliefs and their attributions for success and failure in music. Measures included the Schmidt Self-Efficacy scale (2007), a researcher-adaptation of Hendricks' Self-Efficacy scale (2009), and the Asmus Motivating Factors (AMF) scale. Students reported generally high musical self-efficacy levels. Many significant relationships were detected among the self-efficacy measures and the AMF subscales (p<.01). A maximum variation sub-sample was selected for interviews investigating experiences contributing to feelings of self-efficacy. Interview questions reflected Bandura's (1994) four primary sources of influence upon self-efficacy: (a) mastery/failure experiences, (b) social models, (c) social persuasion, and (d) somatic experience. Responses were transcribed and coded. Students with low musical self-efficacy cited mastery and failure experiences nearly one and a half times more than students with high musical self-efficacy.

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The Development of a Measure of Self-Regulated Practice Behavior For Intermediate Instrumental Music Students

The purpose of this study was to develop a self-report measure of self-regulated practicing for intermediate instrumentalists. A questionnaire was designed to assess the motive, method, behavior, time management, and social influences dimensions of the theoretical model of self-regulation proposed by McPherson and Zimmerman (2002). Construct validity was tested using confirmatory factor analysis. Reliability in regards to internal consistency and consistency over time was assessed as well. A preliminary assessment of predictive validity was estimated via correlations with self-reported practice habits. The sample consisted of MS band students, grades 6 to 8 (N=302). Confirmatory factor analyses indicated a model including factors representing the dimensions self-efficacy, method/behavior combined, time management, and social influences was the best fit to the data. Reliability results indicated good to excellent consistency across all sub-scales (coefficients from .76 to .90). Correlations (p<.001) between the self-regulation sub-scales and practice habits provided preliminary evidence of predictive validity.

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Describing Pedagogical Content Knowledge in Instrumental Music Instruction

Si Millican, The University of Texas at San Antonio

Pedagogical content knowledge (PCK), the particular ways that teachers understand their subjects in order to instruct others, has been described and explored in the math and science education fields in some depth, yet little research exists illustrating this concept in music instruction. I used a phenomenological approach to explore expert beginning-band teachers’ thinking as they viewed videotaped performances from sixth-grade instrumental music students. Each teacher in the study demonstrated a clear mental image of what they wanted to see and hear in student performances, and each used modeling, comparison, and questioning techniques to develop awareness skills in their students. The findings have implications in teacher education and teacher development in music.

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Teacher Perceptions of Compulsory Elementary Music on Cultural and Social Outcomes

Dale Misenhelter, University of Arkansas and Joshua Russell, The Hartt School, University of Hartford

The purpose of this study was to explore the degree to which elementary teachers (N=64) indicated perceived importance, intentional use, and unintended observation of fundamental cultural and social roles of music in compulsory music classes. A purposive sample of music teachers was gathered from two geographic regions as determined by the American Orff-Schulwerk Association. Most participants had completed individualized training in Orff-Schulwerk teaching processes, either by attending workshops or through certification programs. The primary research questions were in regard to 1) how important teachers believe different functions of music are, 2) how often teachers intentionally consider these functions while planning lessons, and 3) how often teachers recognize unintentionally encountering these social functions of music in their classrooms.

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**Aural Image in Practice: A Multicase Analysis of Instrumental Practice in Middle School Learners**

Steven Oare, Wichita State University

The purpose of this study is to examine one theme that emerged from a multiple case study involving adolescent students engaged in self-directed practice. The original study focused on decisions novice adolescent band students make while practicing. The use of aural imagery during practice emerged as a theme that seemed to be embedded within all aspects of their practice. Six band students in seventh and eighth grade were videotaped during self-directed practice. Students provided verbal reports during their practice and retrospectively while reviewing their video immediately after practice. Students were asked to discuss the goals they had while practicing, their choice of practice strategies, their self-assessment process, and their motivation. Findings suggest that students tended to accomplish more in their practice when they used aural imagery. Student use (and non-use) of aural imagery seemed to effect practice in multiple ways relating to motivation, goal setting, strategy use, and self-assessment.

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**An Intrinsic Case Study of Two Homeschooled Undergraduates’ Decisions to Become and Remain Music Education Majors**

Elizabeth Cassidy Parker, Columbus State University, Georgia

The purpose of this intrinsic case study was to understand two homeschooled undergraduates’ decisions to become and remain music education majors. Two senior music education participants’ data were used holistically to capture their experiences over a six-month period. Individual interviews, weekly journals, and field notes comprised the data sources while verification procedures included triangulation, member checking and peer review. Participant profiles are included in the results as well as three themes, including: (1) remembered moments and the desire to facilitate those experiences for others; (2) parents, teachers and other important role models within musical and teacher development; and (3) personal qualities and “getting over it.” Results reflect several past studies and highlight the need for homeschooled individuals to participate continually in field experiences at the undergraduate level.

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Integrated Instruction in Music and Mathematics and its Relationship to Creative Thinking Among Young Children

Michael A. Raiber, University of Oklahoma

This collective case study investigated how integrated math and music instruction may be related to the development of creative thinking skills among young children. Over the course of a year, researchers observed integrated lessons as they were being presented to two classes of pre-K students enrolled in an after school enrichment program. Field notes were kept from each of these observations. Additional data include parent interviews, classroom teacher interviews, and creativity assessments of each child enrolled. Data analysis revealed that young students combine learning concepts during integrated instruction in multiple ways. Analysis also revealed that integrated instruction that combines concepts in mathematics and music can stimulate divergent thinking among young children and that continued practice in divergent thinking may influence a child’s creative abilities.

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Remain Or React: The Music Education Profession’s Responses To Sputnik and “A Nation At Risk”

Lauren Kapalka Richerme, Arizona State University

The 1957 launch of Sputnik and the 1983 publication of “A Nation at Risk” shifted national education policy. Music educators promoted an “intrinsic value” of music philosophy following Sputnik and advocacy through politics and public performances following “A Nation at Risk.” Examining the history of the “intrinsic value” philosophy and advocacy reveals that music educators responded by continuing their existing language and practices rather than reacting to and transforming after either event. The political, social, and cultural contexts of these events may explain why music educators’ responses differed over time.

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Cited Quantitative Research Articles in Music Education Research Journals, 1990-2005: 
A Content Analysis of Selected Studies

Joanne Rutkowski, Keith Thompson and Yi-Ting Huang, 
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The purpose of this study was to replicate Cited Quantitative Research Articles in Music Education Research Journals, 1975-1990: A Content Analysis of Selected Studies (Schmidt & Zdzinski, 1993). Five articles were among the most frequently cited in both studies. The total number of times the listed studies were cited represented many more citations than reported by Schmidt and Zdzinski. The predominant journal cited was still The Journal of Research in Music Education, however more variety of journals was represented in our replication. A dominant stream in our replication was the music teacher. Streams related to the music learner were less dominant. In general, it seems little has changed over this 30-year time span although increases in the number of articles published in the target journals, the variety of journals in which the identified articles were cited, and the diversity of quantitative research designs were noted.

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**Teacher Perspectives of Music Performance Anxiety in Middle and High School Instrumental Music Students**

Crystal Guy Sieger, University of Arizona

Music Performance Anxiety (MPA) is a sometimes debilitating condition affecting young musicians of all ages. Sufferers often consult their teachers for help in overcoming their anxiety. The purpose of this multiple case study was to investigate the strategies and methods currently being used by middle and high school instrumental music teachers to address MPA in their students. Participants were a purposive sample of instrumental music teachers from public schools in a southwestern state and were chosen to cover a broad spectrum of teaching experience, gender, and area of expertise (band, orchestra). Data were collected through interviews and e-mail prompts reporting teacher-observed classroom experiences. The researcher found several trends in how music teachers currently address MPA with their students, including observed physical and mental signs of performance anxiety, a mutual lack of and need for training available to teachers, and the need to create a safe environment for discussing performance anxiety with students.

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**Students’ Motivation to Participate in Honor Music Ensembles**

Jason Silveira, Florida State University

The purpose of this study was to examine the perceptions of students participating in honor music ensembles. More specifically, this study examined the following research questions: (1) What were students’ stated reasons for participating in honor music ensembles? (2) What differences existed between instrumentalists and vocalists? (3) What were students’ most favorite and least favorite reasons for participation? Participants (N = 233) included middle school and high school instrumentalists (n = 117) and vocalists (n = 116) from three geographical areas who had previous experience in participating in honor music ensembles. Results of a motivation to participate survey indicated that the top three rated influences included: a desire to improve musical skills, recreation, and prestige. Additionally, students ranked “Playing/singing challenging music,” “Working with talented musicians,” and “Being with/meeting friends” among their favorite aspects of the honor music ensemble experience. Suggestions for future research, and implications for music educators are included.

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A Survey of High School Band Directors’ Attitudes toward Team Teaching Effectiveness: A Pilot Study

Amy Spears, Arizona State University

This study examined band directors’ attitudes of team teaching effectiveness based on collaboration, communication, job stress, and student performance. Surveys (N = 420) were sent to Alabama band directors with n = 84 responding. The most statistically significant finding is that assistant directors benefit when head directors offer support and guidance. Other important findings are that head directors indicated that they are happier with their current workloads than did assistants. Head directors do not split non-teaching responsibilities equally, and assistants may not be as happy with the way that they are split. Assistants feel that communication could be improved more than heads. Assistants also felt that the team teaching relationship can contribute to job stress and that job stress affects their teaching. Results indicate that band team teachers value team teaching, but the problems listed merit consideration. Suggestions for further research and more effective team teaching practice are discussed.

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Performance Related Discomfort Among University Level String Players

Jeannine A. Sturm, University of Arizona

Intense musical performance and practice schedules can take its toll on the body. If incorrect performance habits are present, this can lead to discomfort. Multiple studies have suggested that as young musicians enter the collegiate level of performance, the playing becomes more intense and demanding, and reports of overuse injuries and repetitive stress injuries increase greatly. The purpose of this study was to determine if there was a commonality among reported discomfort in string players. A survey was conducted using the site www.surveymonkey.com, interviewing string players from two orchestras at a large university in the southwestern United States. The survey yielded 42 responses from undergraduate and graduate students. Approximately 97 percent of the subjects had experienced discomfort after practicing or after a performance. Results were further evaluated and categorized to compare upper string (n = 30) vs. lower string (n = 12) discomfort.

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The Instructional Preference, Desired Traits Of Effective Teaching, And Self-Directed Musical Learning Among Members of Two New Horizons Ensemble

Samuel Tsugawa, Independent Researcher

The purpose of this study was to investigate music teaching and learning among members of two senior adult music ensembles. This study employed a multiple case study design, in which members of a New Horizons band and orchestra located in two different cities were observed and interviewed over a period of several months. Verbatim transcripts, videotaped recordings of imbedded observations, and artifacts served as primary data sources. Findings emerging from the data illustrated a social and musical culture defined by the following themes: (a) members’ preferred attributes of conductor-teacher effectiveness; (b) the impact of the sonic qualities of a large ensemble on members; (c) individual members’ personal encounters with music making and the phenomena affecting those experiences. The findings of this study suggest recommendations for practice and research that deal with: (a) lifelong music learning; (b) understanding how to teach senior adult musicians; (c) establishing a theoretical foundation for further research.

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Music Therapy and the Federal Music Project of the WPA: 1935-1943

Terese Volk Tuohey, Wayne State University, Michigan

During the Great Depression of the 1930s in the United States, the federal government tried several avenues to ease the heavy unemployment within the country. One of these, the Works Project Administration (WPA) ran from 1935-1943, and was designed primarily to hire workers for large construction projects. Artists and musicians were particularly hard hit during this period, and, in an unprecedented effort not to lose the talents of the country’s artists to heavy labor, President Franklin D. Roosevelt established a section of the WPA called Federal Project One. Federal Project One was divided into four sections: Art, Theater, Writing, and Music. This research targets the Federal Music Project (FMP), specifically the work units relating to music therapy. Music therapy under the FMP has not been documented, although it holds a place in the history of the profession. The impact of these government-run “make work” projects for music therapy continues to have implications today.

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Classical Music as Popular Music: Adolescents’ Recognition of Western Art Music

Kimberly VanWeelden, Florida State University

The purpose of this study was to determine which “popular” classical repertoire is familiar and predictable to adolescents. Specifically, the study sought to examine: (1) if students had heard the music before, (2) where they had heard the music, and (3) if they could “name that tune”. Participants (N=668) for this study were middle school (n=220) and high school (n=448) students who listened to 30 classical music excerpts and answered the research questions for each piece. Results found 80% of the students had heard many of the pieces chosen for this study (middle school – 18 of the 30; high school – 27 of the 30). Results also revealed students had heard these pieces in a number of contemporary media, school music classroom, and live performance situations. However, only three pieces were correctly titled by 50% of the students, Flight of the Bumblebee, Hallelujah Chorus, and Pomp and Circumstance. Further results are discussed in the paper.

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Classroom Management in an Early Childhood Music Setting

Gina Yi, Michigan State University

The purpose of this case study was to explore the classroom management experiences of 2 early childhood music teachers. The researcher observed and collected fieldnotes in 2 early childhood music classes for children aged birth to 3 years, for 3 weeks of a 10-week program. The researcher also interviewed and conducted think-aloud interviews with the teachers. Analysis of data revealed 3 themes encompassing the classroom management behaviors of early childhood music teachers: proactive behavior, intentional tolerance behavior and reactive behavior. Both teachers viewed natural behavior: inattentiveness, fussiness, crying, making natural noise and social behavior of children as developmentally appropriate (Bredekamp, 1987), and they intentionally tolerated these behaviors of children. Disruptive behaviors of children had varying degrees of seriousness and required different interventions. Certain manipulatives, flexibility in activities, verbal cues, modeling and caregiver’s participation were helpful in classroom management in an early childhood music setting.

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Abstract

The purpose of this case study was to explore the classroom management experiences of two early childhood music teachers. The researcher observed and collected fieldnotes in two early childhood music classes for children aged birth to three years, for three weeks of a 10-week program. The researcher also interviewed and conducted think-aloud interviews with the teachers. Analysis of data revealed three themes encompassing the classroom management behaviors of early childhood music teachers: proactive behavior, intentional tolerance behavior and reactive behavior. Both teachers viewed natural behavior: inattentiveness, fussiness, crying, making natural noise and social behavior of children as developmentally appropriate (Copple & Bredekamp, 2009), and they intentionally tolerated these behaviors of children. Disruptive behaviors of children had varying degrees of seriousness and required different interventions. Certain manipulatives, flexibility in activities, verbal cues, modeling and caregiver’s participation were helpful in classroom management in an early childhood music setting.

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Maggie, full of curiosity, explores the room with great excitement. She looks around and finds things with which to play. She is a “wonderer.” A mom with two children, a toddler and an infant, enters the room. Maggie shouts “baby!” and goes near the baby who is crawling on the floor and she begins crawling like the baby and giggling.

Peter enters the classroom late. Maggie suddenly decides that Peter is her new friend. Peter, who is very near to his mother, does not leave his mom. When Maggie approaches him, he hides behind his mother but still peeks out to see what Maggie is doing. Maggie keeps “hanging around” Peter, trying to engage him in her trip of wonder. As Peter engages more with the music activity and clings less to his mother, Maggie finds her chance to be near him and hugs him. Shocked, Peter runs back to his mother. Discombobulated by his reaction, Maggie stands there for a few seconds before carrying on with her personal trip of wonder.

Maggie’s mom keeps her eyes on her daughter, as she wanders around the room. Miss Stephanie decides that it’s time to move. “Let’s go for a train-ride, all aboard!” Maggie is still not participating in the group activity. She vacillates between being in the group and out of the group. “I hear it coming, I hear the train, chug-a-la choo-choo chug-a-la choo!” The chant in an unusual meter seems to be difficult for the parents’ walking but less so for the children. Miss Stephanie makes a train sound “Choo Choo.” Maggie responds in the circle by saying, “Choo Choo!”

When everyone sits down after the train activity, Maggie sits next to “her friend,” Peter. Peter feels more comfortable in engaging with Maggie after several activities. As Miss Stephanie takes out the scarves and teases the children by holding the scarves over their heads and not dumping them out so they can play with them, children giggle and make natural sounds of excitement, anticipation, and disappointment. Finally, after a few teasing gestures, Miss Stephanie dumps the scarves in the middle of the circle. The children laugh, slide into the scarves, and roll on the floor. Miss Stephanie gets up and they all dance with music. The class gets more excited. Some children just watch others, dance or jump up and down. Mothers carry their infants who cannot stand up. Maggie jumps up and down too, and slowly approaches Peter and tries to hug him again; this is still too much for Peter, who pulls away from Maggie. Miss Stephanie quickly, but not in a manner that disrupts the group, scoops Maggie up and resumes her dancing while carrying Maggie to her mother. All three dance together. A moment of uncertainty changes into one of enjoyment, and everything is okay.

Introduction

Music education researchers recognize the importance of early childhood music education in the lives of young children (Nardo, Custodero, Persellin & Fox, 2006), and growing interest in early childhood music education has resulted in qualitative studies where researchers explored musical responses, musical development, and musical behaviors of children at an early age (Berger & Cooper, 2003; Hornbach, 2005; Hsee, 2007; Reynolds, 2006). In addition, a few researchers have studied early childhood music teachers and their behaviors in the early childhood music class (Valerio & Freeman, 2009; Hornbach, 2005; Hsee 2007). However, most studies pertaining to early childhood music focus more on the children than the teachers.
Studies pertaining to classroom management abound in general education (Brophy, 1983; Doyle 1985; Emmer & Evertson, 1981; Sanford, Emmer, & Clements, 1983). There are also a number of studies regarding classroom management in early childhood education (Carter & Doyle, 2006; Victor, 2001). Classroom management has been studied frequently in a variety of educational settings, but none in early childhood music. Therefore, the purpose of this case study was to examine the classroom management experiences of two early childhood music teachers.

Review of Literature

Although no studies could be found pertaining to classroom management in early childhood music classes, many studies have explored this topic in the elementary classroom. Doyle (1985) defined classroom management as “the actions teachers take to solve the problem of order in classroom” (p.13). He also states that classroom management is fundamentally an intellectual skill based on knowledge about action-situation relationships in classrooms, and that successful management depends on a teacher’s skill in recognizing and interpreting events within a complex classroom scene. As proposed by Doyle (1985) and discussed in other studies, classroom management seems to be heavily dependent on the abilities of teachers to maintain “order” in classrooms (Tauber, 2007).

A notable classroom management study by Kounin (1977) revealed that certain teacher behaviors led to managerial success. He analyzed videotapes of 49 elementary school classrooms and found that teachers’ managerial success was associated with witness—teachers’ awareness of what was happening in classrooms—and overlapping—teachers’ ability to handle two or more simultaneous events, maintain the activity movement smoothly, and sustain a group focus. Additional studies indicated that organizing an appropriate physical setting, establishing rules and procedures, keeping students on task, and establishing a routine help teachers to manage classrooms (Carter & Doyle, 2006; Doyle, 1985). Although results of these studies may be applied to general classrooms, it is more difficult to apply them in early childhood music classrooms because of classroom setting differences and the children’s ages.

The notion of classroom management in early childhood music is difficult to conceptualize without an understanding of some of the characteristics of music learning for young children. From birth to age three, young children are unstable in nature, are not self-regulatory, and struggle with self-control, especially when they become mobile (Howes & Ritchie, 2002). Also, early childhood music classes differ in many ways from learning environments for older children. Young (1998) recommends that early stages of child-initiated music making should be valued and music classes should consist of activities that children initiate and in which they voluntarily choose to participate (Marsh & Young, 2006). Music learning occurs best for young children when they are provided with an expressive music and movement model (Reynolds, 1995) to absorb and to which to respond. In addition, infants and toddlers engage in musical babble that is produced in response to music (Gordon 2003; Trawick-Smith, 1994). These characteristics of an early childhood music classroom produce a noisy learning environment that does not fit the traditional definition of a well-managed classroom. The limited linguistic developmental levels of very young children result in less verbal communication in early childhood music classes; thus language instruction to regulate the classroom is not applicable. Therefore, it is the researcher’s perception that early childhood music classes taught from the Music Learning Theory perspective (Gordon, 2003) do not parallel traditional school-
aged music classroom teaching. Thus, investigating a different approach to classroom management is warranted.

Research Questions

This study explored the classroom management of teachers in two early childhood music classes at a community music school affiliated with a large Midwestern university. The guiding questions were as follows:
1. How do teachers manage, respond to, or try to change the behaviors of inattentive children?
2. How do teachers manage, respond to, or try to change the behaviors of children who are distracting other children in the class?
3. How do teachers manage, respond to or try to change a child’s behavior when that child cries or gets fussy?
4. How do teachers manage, respond to, or try to change the behaviors of a child when that behavior becomes disruptive?

Method

Participants

This investigation is a case study bounded in an early childhood music setting, specifically in two classes for children from birth to age three. The primary participants in this study were two early childhood music teachers. At the time of the study, Miss Meghan (all participant names are pseudonyms) was in her first semester as a lead teacher in early childhood music classes. However, she had substantial experience teaching K-4 general music and directing choirs of all age groups in a variety of settings. As part of her training to teach early childhood music at the community music school, she audited a three-credit class—at the affiliated university—and worked as an assistant teacher for two previous semesters. She attended an early childhood music class as a parent participant with her two-year-old daughter since her child was 9 months old.

The other participant, Miss Stephanie, had taught K-6 general music and music for a Head Start preschool program in a public school for four years. She had been teaching early childhood music class at the community music school in which this study was conducted for two years. She holds certifications in early childhood music instruction, and took the three-credit course in early childhood music at the affiliated university and also taught an early childhood methods course.

Design and Procedures

Miss Meghan and Miss Stephanie each had 10 children enrolled in their classes, ranging in age from birth to three years. A caregiver attended class with each child. The researcher observed each class for 45 minutes, one time per week for three weeks. The observations began on the fifth session of a 10-class session. Class activities included singing and chanting, moving to music, playing assorted percussion instruments, exploring manipulatives, and tonal and rhythm pattern instruction. The goal of the curriculum was to increase children’s music aptitude through engaging, entertaining music activities. The participant teachers tried to respond to any of the children’s musical or movement responses, providing rich musical settings. Little verbal direction or verbal communication occurred during the activities.
Data were collected in several ways. The researcher took extensive fieldnotes, during observations of the classes. All classes were videotaped, allowing the researcher to review them at a later time and to allow for “think-alouds” with each teacher. The researcher engaged the participants in brief informal discussions after each class, which were immediately transcribed. Both participants were interviewed after the third observation. The teacher and the researcher engaged in one-on-one think-aloud protocols, during which each teacher and the researcher watched a recorded class together. The think-alouds and interviews were audio-recorded using a Samsung Yepp. Fieldnotes, videotapes, and audio-recordings were transcribed within 24 hours for analysis. The transcripts of the fieldnotes, teacher interviews, and think-alouds were coded and analyzed for emerging themes using the lens of the research questions to guide analysis. Data triangulation, peer-reviews of the analysis, and member checks were employed to establish trustworthiness (Creswell, 2007).

**Themes**

Analysis of data revealed three themes encompassing the teachers’ classroom management behaviors: proactive behavior, intentional tolerance behavior, and reactive behavior. Proactive behavior refers to a teacher behavior taken to avoid management difficulties before they arise. Intentional tolerance behavior refers to a teacher intentionally tolerating child-behavior in the moment. Reactive behavior refers to a teacher behavior that occurs in response to a child—behavior or to an undesirable or unexpected situation. The behaviors identified in these three themes were consistently observed over three weeks and supported by both teachers.

**Proactive Behavior**

The two teachers engaged in many proactive behaviors with the intent of engaging children in the learning environment. Proactive behaviors consisted of verbal cues, modeling, using a “hands-on” strategy, or adjusting the lesson plan to match the children’s moods. Teachers’ proactive behaviors were especially noticeable when they sensed a classroom management issue was imminent.

Although manipulatives are helpful to engage children in an activity and elicit musical responses (Hornbach, 2005), their use could create problems unless the teacher took a proactive stance. Miss Meghan provided a verbal cue and modeling to avoid “flying balls” when she rolled the balls to children. As she rolled the balls to children, she sang, “Balls are for (singing on dominant) rolling (on tonic).” This particular behavior indicates that she anticipated possible problems with the manipulative and therefore modeled clear and appropriate behavior expectations. With a similar activity, Miss Stephanie also prevented “flying balls” by giving a verbal cue and modeling. She noticed a boy with his arm swung back preparing to throw a ball and said, “Don’t throw the ball, roll the ball,” and she showed him how to roll. Verbal cues and modeling continued between Miss Stephanie and the child for a brief time. Later, during the think-aloud, Miss Stephanie said, “He wanted to hit the ball, that’s why he kept saying hit it, hit it, so I tapped my ball to his ball and he was happy” (Think-aloud, Stephanie, April 1, 2010). In this case, she acted proactively based upon her observation. She found a way to resolve the problem before it actually occurred by taking an action proactively and interacting with the child.
Teachers’ physical interventions occurred when danger was imminent and immediate action was essential.

*Maggie tries to hug Peter during the dancing activity. Peter pulls away from Maggie and he is distressed. Maggie approaches him again. This time, Miss Stephanie quickly scoops Maggie up and dances with her.*

(Fieldnote, Stephanie, March 13, 2010)

In the situation described above, Miss Stephanie’s “hands-on” strategy avoided a potentially difficult situation, such as an outburst from Peter or his hitting or pushing Maggie and hurting her. Maggie was not angry about being scooped up, as Miss Stephanie immediately engaged her in dancing and musical activity.

Miss Meghan and Miss Stephanie both agreed that improvising on lesson plans is necessary when they anticipate the need for classroom management. Although neither teacher had strict lesson plans, each had a list of songs, chants, and activities. Miss Meghan thought of her lesson plan as a “list of a lot of activities,” and Miss Stephanie referred to it as a “class menu.” She believed that children “ordered off “the class menu with their behaviors so that each activity met their needs and desires as each class evolved.

“I hardly ever do the same activity the same exact way twice, at least I hope not, because I am always adjusting and trying get kids to interact and play or you know if I have to change for discipline reason . . . so, yeah I am always . . . (a little excitedly and talks a little bit faster) That’s one of my favorite things. I love improvising as a musician and I love improvising as a teacher too.”

(Interview, Stephanie, April 1, 2010)

“I change the order of my activities, so if people are getting kind of wild, I might get something out like the scrunchy [a big wrinkled band that can stretch and shrink] that requires them to . . . well, many of them will choose to sit down and grab on to and that seems to bring them back. I think also scarves can help a lot of times in bringing group back together.”

(Interview, Meghan, March 31, 2010)

When the teachers perceived they were losing the attention of children in the activity—and foresaw a problem that might occur—they either ended the activity, changed the activity, or introduced new manipulatives.

**Intentional Tolerance Behavior**

Teachers’ intentional tolerance behaviors occurred when a child was inattentive to the class activity. Teachers did not view a child’s “inattentive behavior” as something that needed to be fixed. Rather, they both felt that, although children might seem to be inattentive, they also might be absorbing the songs, chants, or movements. As a result of their viewpoints, they both showed intentional tolerance behavior—behavior chosen to observe the child in the moment while continuing the group activity. The teachers’ behaviors were related to developmentally appropriate practices (Copple & Bredekamp, 2009) for this age group. The teachers recognized that these young children are not yet socialized for school, nor at this age should they be expected to remain focused and participate in all activities.

*A boy with green overalls leaves the circle and plays with his milk bottle on the periphery. Miss Meghan notices him. While she continues her activity with other children, she observes*
him by turning her head to him seven times. He seems inattentive to the activity, but Miss Meghan doesn’t seem to mind. (Fieldnote, Meghan, March 17, 2010)

A boy and a girl stand in front of the door and play with the doorknob. While Miss Stephanie continues her activity, she winks at them and wiggles her fingers at them as if saying “hello”. At this point, their parents bring them back to the group. (Fieldnote, Stephanie, March 9, 2010)

When children were out of the circle, rather than trying to bring them back to the group or engage them in the activity, the teachers observed first and then gently tried to engage them at an appropriate time. However, depending on the degree of the child’s inattentive behavior, teachers decided to take certain action either proactively or reactively when classroom management was needed.

**Reactive Behavior**

Reactive behaviors occurred when responding to or managing the behaviors of a child or an undesirable or unexpected situation in the classroom setting.

Jack is struggling with the doorknob; he seems to want to get out (He begins to get fussy and starts to groan). Jack’s mom approaches her son and she leaves the class with him. Miss Meghan lets her assistant take over and follows them immediately. (Fieldnote, Meghan, March 10, 2010)

Miss Meghan’s reactive behavior to this unexpected situation was decisive and quick. She was not hesitant to leave the class at that moment. After class, she explained the situation, “I went out to ask why they were leaving and the mother said . . . she didn’t bring the safety blanket in class to see how long he can stay without it, and he had enough” (Brief conversation, Meghan, March 10, 2010). During the think-aloud, Miss Meghan recalled the situation and commented that she did not want them to leave with bad feelings. She had to respond in action immediately or she would have lost her opportunity to deal with the situation. The fact that she had confident assistant who could take over the activity successfully allowed her to make a quick exit and converse with the mother.

Sometimes teachers’ reactive behaviors occurred when a child was away from the group and started his/her own activity. In this situation, teachers engaged the child by incorporating the child’s behavior into the on-going activity of the class.

Everyone is sweeping the floor with a streamer. Tony leaves the circle and goes by the wall and does something that’s not related to the class activity (He held the streamer horizontally against the wall as if he was measuring the wall) Miss Stephanie picked up his behavior and altered the activity by going over to the wall and incorporating with singing. (Fieldnote, Stephanie, March 16, 2010)

This reactive behavior was not a result of the teacher intervening as the child was not being disruptive. Rather, the teacher reacted to the child’s behavior so the child might engage more fully in the class activity. Sometimes Miss Stephanie even incorporated a child’s fussiness or crying into the activity.

A boy is being clinging and fussy. He starts to make noise. He continues to make noise for certain amount of time. Miss Stephanie makes up a new song that sounds like his noise “ya-ya-ya.” He looks at her with interest and stops making his noise. (Fieldnote, Stephanie, March 23, 2010)
Sometimes teachers’ reactive behavior was followed by intentional tolerance behavior. When Miss Meghan placed the empty basket behind her after rolling all the balls to children and parents, Jacob went behind her and played with the basket. Although Miss Meghan noticed Jacob, she tolerated his behavior with attentive quick glances from time to time. When Miss Meghan noticed him putting the basket over his head, she approached him and sang, “Can I have my basket please (singing on dominant)?” and took the basket away. Her response was quick, and musical. There was no resistance when she took the basket from him. Miss Meghan reflected while watching the video:

When he went behind me and played with basket, that didn’t bother me, and now you can see he put the basket over his head and when he pulled back, I thought he was going to throw it and that’s part of the reason I did choose to intervene in this situation. I didn’t want . . . you see how Christina is trying to take it from him? Normally, with prop situations, they tend to work themselves up because there is a ton of balls, but with one basket, I could see that, that was causing a problem. (Think-aloud, Meghan, March 31, 2010)

Teachers were able to react immediately to undesirable child-behaviors, or unexpected situations because of their constant awareness of the classroom and children. Also, teachers’ reactive behaviors kept the instructional flow moving forward by incorporating the child-behavior as a part of musical activity.

Additional Themes

Several themes not related to research questions emerged during data analysis. Teacher’s personality seemed to play a role in classroom management. Through observations and interviews, the researcher found that Miss Meghan and Miss Stephanie shared similar views on teaching early childhood music. However, the teachers managed, responded, and behaved differently as a result of personality differences.

Researcher: Do you ever panic when you see a situation that is difficult to manage?
Meghan: No, I . . . (smiles, then laughs) I have a tendency to be like “Woooww, that didn’t work, let’s do something different.” I don’t feel panic about a difficult situation. It’s not hard for me to say, “Ok, we’re not gonna do this anymore, this is not working.” (Interview, Meghan, March 31, 2010)

Miss Meghan was easy-going. She liked to bring humor into the class by interjecting certain musical behaviors of children in the classroom activities. Her interactions with parents were friend-like, creating a warm and friendly atmosphere. Perhaps being the mother of a two-year-old and her experiences in attending the early childhood music classes with her own child might have given her the ability to see the class and teacher from a mother’s perspective.

Miss Stephanie was someone who liked to be in control in her guiding, yet at the same time flexible, required her to be constantly aware of the children and the parents. She made sure everyone was engaged, closely watched those of which she needed to be aware, and kept her awareness in what she called “hyper-sensitive mode” to adjust her teaching in order to meet the children’s and parents’ needs.

All my senses are in hyper-sensitivity mode, my listening, my observing, my movement, touching, all of that is hyper aware of everything that’s going on all the kids, all the parents so
that I can at a moment’s notice, adjust my teaching, adjust my interactions, change activities, change my pacing and do whatever it takes. So I feel like I am constantly aware. (Interview, Stephanie, April 1, 2010)

The use of manipulatives emerged as an important factor in classroom management. Teachers identified certain manipulatives as tools to regain children’s attention. Both teachers identified scarves as a manipulative they used in this way. Also, Miss Meghan said she uses the scrunchy band to bring children back in to the circle. Usually in the activities that used manipulatives, everybody in the class was able to take one manipulative (e.g., egg shakers, beanbags, sticks or scarf) which worked fine. However, when there was only one manipulative presented, such as “stuffed bear,” it created management difficulties. Miss Stephanie introduced the bear in her activity to accompany the song “Love Somebody,” and a few children either walked or ran toward the bear as the teacher went from child to child with the bear. Some of the children got fussy waiting for their turn with the bear. Manipulatives played a vital role in encouraging active participation, because they engage the children in the activities. Teachers were aware that certain manipulatives helped to manage the class and took full advantage of using these manipulatives.

Discussion

Through observations, interviews, and think-alouds, the researcher found that teachers managed, responded to, or tried to change certain behaviors of children and parents/caregivers in the classroom. These behaviors could be classified as natural child behavior, disruptive child behavior, social child behavior, and parent/caregiver behavior.

Managing Natural Behaviors of Children

The researcher recognized inattentiveness, fussiness or crying as natural behaviors of children, behavior that could not be self-regulated or self-controlled due to the children’s ages or physical and psychological conditions (Howes & Ritchie, 2002). Neither teacher was bothered by inattentiveness or non-participatory behavior, as they viewed this as an appropriate expression of what Gordon (2003) labels the acculturation stage of preparatory audiation. During this time, it is natural for children to watch, absorbing the music and activities without necessarily engaging in them (Gordon, 2003). Children sometimes stood by the window and looked outside, engaged in their own game, or just sat and watched the musical activities. However, sometimes children initiated their own activities when the class activities were no longer interesting to them. In this case, teachers normally observed and engaged them when appropriate by including the child-created activity into the activity of the class. When needed, inattentiveness and fussiness were managed by introducing new manipulatives and/or changing activities. Sometimes brief silence or beginning a quiet activity helped to draw the children’s attention to the teacher or group.

When children were being inattentive or made noise, parents often seemed to feel it their responsibility to intervene. However, teachers viewed many noises young children made as pre-musical and inattentive behaviors as developmentally appropriate. The teachers often wished parents would intervene less.

Managing Disruptive Behaviors of Children

Disruptive behavior was managed by diverting a child’s attention first unless the child’s behavior was dangerous. Some of the disruptive behaviors of children were
running, distracting other children, tantrums, or throwing manipulatives. Teachers’ proactive behaviors occurred when children showed disruptive behaviors, especially when they foresee probable danger. Also, children’s disruptive behaviors had different degrees of seriousness and, as a result, required different interventions. When teachers noticed a child running around in the class, they intentionally tolerated child’s behavior, and continued the class activity to see how the child’s behavior would unfold. Usually parents were more distressed about their child’s behavior than the teachers, and they tried to stop their child. When a child was running, the teacher often tried to divert them from running by changing the activity or introducing new manipulatives.

As aforementioned, teachers viewed children making noises during class as natural behavior. This was especially true for infants, as they just sat and did not bother others and their parents usually were quick to soothe them. However, upset screaming was considered as disruptive because it prevented other children from hearing the group singing or chanting. When children were screaming, teachers were grateful when parents took the children outside to calm them down. However, if parents were not being “hands-on” with their screaming child, the teacher would be “hands-on” and ask the parent to take the child outside for a moment and join the group again when the child had been calmed.

“In one class, it has almost gotten to the point where I was going to ask him to leave because he has been screaming for several activities and I was going to ask her to take him out, and speak to him, calm him down and bring him back in. But then, I didn’t have to because he stopped.” (Think-aloud, Stephanie, April 1, 2010).

Depending on the degree of disruptiveness, teachers behaved differently. If they considered the disruptiveness minimal, teachers observed and tried to divert children’s attention. If the degree of disruptiveness was high, teachers were “hands-on,” either by giving direct verbal-cue to the parents or addressing the classroom management problem. Throwing manipulatives was considered dangerous; thus, when teachers foresaw children about to throw manipulatives, they immediately behaved proactively and tried to prevent it.

When the disruptiveness was beginning to affect the class, teachers allowed time for the parent or the caregiver to react, but, if the parent did not address the child, the teacher intervened by giving a verbal cue, such as “Can I have my basket please?” in a manner so fluid it as part of the activity rather than a managing intervention

Managing Social Behaviors of Children

During the observation, sometimes children formed a small group and initiated their own play. It usually started between two children but sometimes extended to include three or four children. Teachers did not mind these interactions, viewing them as developmentally appropriate (Copple & Bredekamp, 2009). However, when the interactions led to social gathering such as running as a group, or a high degree of physical contact likely to cause a problem, teachers engaged them to come back to the group through various strategies rather than forcefully.

“Well, when it first happens, I don’t mind it at all, because I think the social gathering is good and important for them to engage each other and play with each other . . . With the social gatherings, if it turns into something where one of the children feels uncomfortable or unhappy about the interaction, then I will try to divert to change the behavior.” (Interview, Stephanie, April 1, 2010)
“When kids start gathering socially and starting to kind of play their own game, I usually change activities and change props to sort of bring them back to the group.” (Interview, Meghan, March 31, 2010)

Again, the teachers’ first step to managing social behaviors—depending on the degree of disruption caused by the behavior—was diverting children’s attention from such behaviors.

**Managing Parent/Caregiver Behaviors**

Both teachers were aware of the important role of the parent or caregiver in early childhood music classes. Miss Meghan and Miss Stephanie emphasized the importance of parenting skills, parent modeling, and parent-participation in an early childhood music classroom. Teachers interacted with parents/caregivers by giving verbal-cues or modeling during the class, and by having conversations before and after class. Miss Meghan casually engaged parents during class.

“I know we are encouraged to talk very little because the kids don’t respond real well to a lot of verbal stuff, but I like to have brief interjections. I think it brings some humor into the classroom and I also try to point out to parents when I am seeing a musical behavior from the kids, because sometimes I think they don’t know what we are looking at or looking for . . . I will say “so and so was having a ‘Ba-Ba’ conversation with me” [This statement] lets them see that they don’t have to echo me exactly . . . It is definitely intentional [that] before the class starts and after it ends I talk with the parents and the kids.” (Interview, Meghan, April 1, 2010)

Miss Stephanie gave verbal cues to the parents when she wants them to be “hands-on” with their child.

*Miss Stephanie forms a line to continue the “Train” activity. Two children are still engaged in their own game in the circle. She looks at them and says to class as she is moving in a line, “Maybe we can get them on the train.” Parents grab them and join the group.* (Fieldnote Stephanie, March 23, 2010)

Teachers did not approach parents/caregivers in an instructive way when they managed parent/caregiver behavior that might come across as bossy or scolding toward the parents or the caregivers. Rather, they guided parents/caregivers to know how they should behave in a certain situation, interact with the child, or engage in an activity for their own musical joy. Teachers interacted with parents/caregivers as much as possible within the given setting; the more they interacted, the more the parents/caregivers made the class flow. Collaboration between parents/caregivers and teachers combined with parental participation in activities is important to successful classroom management in this early childhood music setting.

**Conclusion**

The early childhood music teachers in this study made decisions and behaved based on the concept of “developmentally appropriate practice” in early childhood education. Their behavior was child-directed and child-concerned (Copple & Bredekamp 2009; Bryant, Clifford, & Peismer, 1991; National Research Council, 2001). Both teachers’ main class management goal was not necessarily to “bring order in the classroom,” (Doyle, 1985), but to prevent and resolve difficulties that interfered with music learning. Clearly, a classroom management behavior avoided by these teachers was the “teacher speaks and...
children listen” model. Birth to three is the most critical period in child’s development (Evans, 1973), and what a teacher does in a classroom attributes to child’s development immensely. As teaching has to be “developmentally appropriate,” so does the “classroom management.” In this study, teachers’ classroom management consisted in the context of teaching and guiding. For these two teachers, classroom management was a natural part of teaching.

Although distinctive classroom management behaviors — proactive behavior, intentional tolerance behavior, and reactive behavior — were identified, these behaviors interconnected and facilitated one another. Intentional tolerance behavior served as a momentary transitional behavior for teachers to observe whether a classroom management was needed and to take either proactive behavior or reactive behavior.

Kounin (1977) discussed the necessary classroom management behaviors for elementary teachers. Similarly, Kounin’s analysis of teacher behavior seems to apply for the early childhood music teachers. Early childhood music teachers need to do the following for successful classroom management: (a) be aware of class situations, (b) handle two or more simultaneous events such as singing to the group and interacting with individuals who are being fussy by giving warm glance, (c) maintain an activity smoothly by providing smooth transition between songs and chants, and (d) sustain a group focus by being responsive to the changes and need of the class. Further, early childhood music classroom teachers need the ability to synthesize music, movement, and response as one activity and making them a powerful force within the classroom.

Further research exploring the relationship of the parents/caregivers and the teacher in early childhood music class is recommended, because understanding the experience of parents/caregivers in class may contribute to teachers’ abilities to enhance their classroom management. As this is a case study, no generalization should be made to other early childhood music teachers or early childhood music settings. However, the findings may be applied to similar teachers and settings.

As a profession, educators need to understand the complexity of the early childhood music classroom due to the children’s physical and psychological conditions. In terms of class management, early childhood music teachers should desire “flexibility” rather than “order.” Also, to facilitate every activity with flow, teachers need to synthesize music, natural noise, responses, movements, and behaviors of children and parents/caregivers as one musical experience. The essence of music learning experience in an early childhood music classroom is being immersed in music, and the teacher taking a facilitative role of such music learning for these young children and parents/caregivers.
References


Music Therapy and the Federal Music Project of the WPA: 1935-1943

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Abstract

During the Great Depression of the 1930s in the United States, the federal government tried several avenues to ease the heavy unemployment within the country. One of these, the Works Project Administration (WPA) ran from 1935-1943, and was designed primarily to hire workers for large construction projects. Artists and musicians were particularly hard hit during this period, and, in an unprecedented effort not to lose the talents of the country’s artists to heavy labor, President Franklin D. Roosevelt established a section of the WPA called Federal Project One. Federal Project One was divided into four sections: Art, Theater, Writing, and Music. This research targets the Federal Music Project (FMP), specifically the work units relating to music therapy. Music therapy under the FMP has not been documented, although it holds a place in the history of the profession. The impact of these government-run “make work” projects for music therapy continues to have implications today.

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In some respects the work done...by these projects... [is] less well known to the
general public than are the more obvious projects of the construction projects.
However, these projects in many cases render direct services to special groups....
To these persons benefited, the projects are more real, and the appreciation expressed
is often greater than in the case of the projects which have a more material product.¹

-Edward Jones, State Administrator, Pennsylvania WPA

Introduction and Review of Literature

There is a great deal of primary source information from the Works Progress
Administration/Federal Music Project (WPA/FMP),² but there are no reports
focused on the topic of music therapy exclusively or exhaustively. In fact, the 1943
Record of Program Operation and Accomplishment, submitted by George Foster to the
US Congress upon final closure of the WPA/FMP, remains the only primary source
containing a complete review of the entire project. However, it is a final report for
the nation and does not contain specific examples for every state or for every section
of the FMP.

Although there are several dissertations and books about the FMP,³ each piece of
research presents only a small portion of the music therapy picture under the FMP,
often with only a sentence or two mentioning that music therapy experiments were a
FMP component. Other sources include articles documenting the FMP⁴, but again
offer little with regard to details. Standard histories of music therapy provided little
or nothing about this period.


⁴ Popular magazines carried articles to enlighten the average musical public about the workings of the Music Project. For example, see *The Etude, Literary Digest, Current History, Musical America* and the *Musical Quarterly* throughout 1936-1938. None of the articles investigated contained information about the music therapy programs.
Most of the information regarding WPA/FMP music therapy projects is found in the WPA/FMP Reports and Exhibits (R/E) files at the Library of Congress (LOC) and in Record Group #69 (RG 69) at the National Archives and Records Administration (NARA) in Washington, DC. Therefore, this research is designed to collate the existing information about the music therapy projects that existed under the FMP, and seeks to answer the following questions:

1) What was the WPA/FMP and how did it come about?
2) What were the music therapy projects and how were they conducted under the WPA/FMP?
3) What can be learned from the WPA/FMP music therapy projects that have influenced current music educators and therapists?

Since the Federal Music Project was run similarly in many states, emphasis will be on the projects in the state of Michigan, which had an “exceptionally fine” WPA/FMP Music Program.

**Historical Context**

By the time of the Wall Street crash in 1929, musicians in the United States were already in the throes of unemployment. There were unemployed bandsmen from the World War I armed forces. The increased popularity of the phonograph made live performances less desirable, and the newly introduced radio cut positions for live music in restaurants and hotel dining rooms. With the introduction of talking films in 1928, pit orchestras from the erstwhile silent movies became redundant. The Depression of the 1930s completed this list of employment woes for musicians as the economic strain curtailed concert ticket sales for the symphony and opera, and people saved money by dropping private lessons and support for local community performing groups. Economic conditions forced school systems to make deep cuts in their budgets, often reducing or cutting music education funding. In short, by 1934 the American Federation of Musicians union estimated that 70% of its national membership was unemployed.

The situation for persons with exceptionalities in the 1930s was one mostly of musical neglect, although scientifically, institutions and hospitals were advancing in their care of both the physically and mentally ill. The deaf were not offered music classes; the blind had little opportunity to learn to read music through Braille; children with what were, at the time, incurable illnesses – such as polio – were not offered instrumental music classes, though at least singing was part of their occupational therapy. The mentally ill had very little music offered them, even though it was a known fact that for hundreds of years music had been of help in treating these patients.

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5 The WPA Library of Congress Reports and Exhibits will be identified as LOC: R/E in all following notes and throughout the body of this research. The National Archives and Records Administration Record Group 69 will be identified as NARA: RG69. Narrative Reports in each collection will be identified as NR. For all abbreviations used in this research, see Appendix A.


7 G.V. Wilson, Music Educators Journal 22 (September 1935), 19.

8 McDonald, Federal Relief Administration and the Arts, 368-69.
The WPA/FMP

In 1935 President Franklin D. Roosevelt established the Works Progress Administration (WPA), and appointed Harry Hopkins as its National Administrator with orders that the WPA would report directly to the presidential office (See Appendix B). With the President’s approval, Hopkins designed Federal Project One to create a cultural program of art, theater, music and literature (called the Writers Project) to assist the citizenry through the Depression. The theater project was dissolved in 1939, however the music, art and writers projects continued until 1943 when the entire WPA ceased to exist (See Appendix C).

The Federal Music Project was designed for:

[the] employment of instrumentalists, singers, other concert performers, those participating in music education and recreation. The purpose is to rehabilitate musicians, to retrain them for new forms of work in music and allied fields, to establish high standards of musicianship and to educate the public in an appreciation of musical opportunities.9

Hopkins appointed Nikolai Sokoloff, well-known as a conductor, performer and composer, to be the WPA/Federal Music Project director. Sokoloff believed “music is a public right and obligation”10 and endeavoring to employ as many musicians as possible, he outlined five major groups or units within the FMP: instrumental ensembles; vocal ensembles; music teaching; composition; and service jobs.

The FMP funded orchestras, concert and dance bands, ethnic folk ensembles, operas and choruses across the nation. It provided music for these organizations by hiring music copyists and librarians rather than simply purchasing the scores. The music education section involved teaching music lessons and music appreciation classes in the public schools and the community, and was primarily designed to build audiences for the performing groups. Service personnel included piano tuners and music binders.11 Then, in 1939, two major events occurred. First, Sokoloff resigned and Earl P. Moore, music director from The University of Michigan, was appointed head of the Federal Music Project, resulting in a focus toward music education. Second, the entire WPA/FMP was turned over to the states. Now called the Work Projects Administration, it was still identified as the WPA. However, overall management for the WPA remained at the federal level.

During the years of the WPA/FMP’s existence (1935-43), one smaller portion of the music education section was devoted to music therapy projects. The rules governing the WPA stated that new work positions could not be in conflict with those already in existence, and those positions that were created had to be designed for the public good. Music therapy proved an ideal WPA project. The WPA

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11 Nikolai Sokoloff, “America’s vast new musical awakening,” The Etude 55, no. 4 (April 1937), 221-222.
musicians in music therapy worked where few musicians had ever worked before. They provided musical opportunities for the physically and mentally ill, as well as persons with physical challenges, and took part in a new approach to group therapy.

**Music Therapy under the WPA**

**Overview**

Many states offered music projects for the physically or mentally ill, and also for the physically challenged. Often these programs were merely band or orchestra concerts presented to patients as part of a combined music appreciation/music therapy program. In this way, WPA musicians performed in a variety of hospitals and children’s homes. For example, there were regular concert performances in the Children’s Convalescent Home, Toledo (OH), and the Miramar School for Crippled Children in Miami (FL) hosted WPA concerts, as did the Philadelphia Home for Incurables.12

Beyond concerts, other projects ranged from rhythm bands at children’s homes, to music appreciation courses for the deaf, and music transcribed into Braille for the blind. By 1936, music was a part of the recovery for patients in eight hospitals in New York City. The music program there was designed for participation—singing and playing rhythm instruments.13 Louisiana sponsored a WPA music-teaching project at the Chinchuba Institute for the Deaf in Hope Haven, and another at a Home for Incurables.14 Michigan had two extensive projects, one for assisting blind students, and another providing music appreciation classes for the deaf.15 Minneapolis (MN) offered a unique instrumental music program for the physically challenged students at the Michael Dowling School.16

Other projects were designed to provide musical experiences for mental patients. WPA choruses, dance bands, orchestras, and small ensembles were the usual performing groups, and “therapeutic concerts” became a regular mainstay at many institutions for the mentally ill. Considered “experiments” at some of these hospitals, records were kept of the mental patients reactions to the music—during and following the concert. Concert program repertoire was designed to provide the most improvement for the patients. The “musical diets” developed at Eloise Hospital in Michigan eventually were adopted by other hospitals for mental patients.17

**Music for the Ill and Physically Challenged**

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14 Photographs of these classes can be found at http://nutrias.org/photos/wpa/wpa30.htm, entry #30.13, 30.14, 30.15, all dated 1.10.1940. The Hope Haven, LA Entry #30.25 photographs are dated 5/5/1941.

15 LOC: WPA/FMP, R/E Box 6, Folder 1.

16 Briefs and Notes Compiled for the Sirovich Committee Hearings, Feb. 1938. LOC - WPA/FMP Reports/Exhibits, Box 1/folder 2/File: Nikolai Sokoloff

17 LOC: R/E, Box 1/Folder 3, File “Report on Activities of the WPA Music Program, Jan. 1941

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By far, concerts in hospitals were the most frequently employed WPA music project. These concerts usually took place right in the wards. For example, hospital ward performances were projects of the Massachusetts WPA/FMP, and were not uncommon elsewhere. In West Virginia, the Wheeling and Huntington FMP Orchestras regularly performed at the North Wheeling Hospital and the Ohio Valley General Hospital, and State Hospital, respectively. In addition, the Wheeling Orchestra also played at the Ohio County Sanitarium. The Ohio WPA musicians regularly scheduled concerts at homes for the blind and deaf in that state. The rhythm bands were the most common form of participatory music making in the hospitals. These concerts were often considered important community service and as such were part of the mission of the WPA/FMP.

**Music Projects for the Blind**

Performing groups of blind musicians were not uncommon under the WPA/FMP. Blind musicians comprised an entire orchestra under the WPA in Mississippi. Minnesota sponsored a chorus of blind persons, and the Mississippi School for Blind (Jackson, MS) had a rhythm band for their students. The Miami (FL) WPA offered a music class for blind adults. In addition, WPA teachers in the music education sections shared their techniques for teaching blind students.

Braille copying was a primary unit of work to benefit the blind during the WPA. In many states books and maps were Brailled for use by the blind (AL, FL, GA, IN, KS, LA, MA, MI, MN, MS, NJ, RI, VA, WI). However, in Michigan and Indiana, music was Brailled as well. In Michigan some work was done in Kalamazoo and Calhoun Counties, as well as the Lansing School for the Blind. In Indiana, this project was affiliated with the Indiana State Library project.

At the Lansing (MI) School for the Blind, Marie Williams supervised a Braille Transcribing Unit with 9 transcribers and 14 music copyists. As with other Braille Projects, the music was transcribed in teams; a sighted person dictated the music and his/her blind partner wrote it in Braille. Several compositions were completed each month, including a Braille violin instruction book. There was a proposal to

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18 Photographs, “Concert at St/ John’s Hospital, Lowell, by Lowell WPA Orchestra,” NARA File 200(S), W.H.4-1, taken 1/12/37, and “Everett Orchestra at Cambridge Hospital,” NARA W.H. 4-2.
20 NARA: GR69, NR Ohio, February 1941.
22 LOC: WPA/FMP, R/E, Box 1/folder 2, File: Nikolai Sokoloff, and Box 2/Folder 5.
23 For example, a report from the Nashville (TN) WPA and the Southern California WPA on “How I Teach the Blind” was sent to Michigan. These “Letters of Transmittal” contained copies of methods and materials that had been developed as part of the music education projects, and were circulated to the various states with WPA projects. NARA: Michigan, Box 1587/Folder 651.311 June-December 1941.
26 “Braille Transcriptions,” NARA: RG69 WPA/Division of Information, Information Service – Primary File 1936-1942Box 71/File 831-A.
27 “Michigan Music Project Narrative Report,” April 1940, p. 3. NARA: WPS/FMP, Central Files: States 1935-1944, Michigan, Box 1587, Folder MICH 651.311m January-September 1939. Recording artist Stevie Wonder is perhaps the most famous graduate of the Michigan School for the Blind.
introduce instrumental instruction by grades in Braille music notation, along with
requests for more Braille piano and organ transcriptions.28

Another segment of the FMP was the music-copying project. For the most part,
this project supplied music for the performing groups of the FMP. However, in
Minnesota, there was at least one section of this project devoted to making large
print copies for persons with limited sight.29

Music Projects for the Deaf

Several projects of the WPA/FMP were devoted to work with deaf children.
Projects for the deaf and hard of hearing existed in 13 states plus New York City
and Washington, D. C. The states involved were Arizona, Alabama, California,
Connecticut, Illinois, Louisiana, New York, Ohio, Oregon, Minnesota, Michigan,
Oklahoma and Wisconsin.30 While there is reference to projects in all these states,
descriptions do not exist for all. The most inclusive information follows.

A school for deaf and dumb children in Manitowoc, Wisconsin, hosted several
WPA orchestra concerts. After these experiences, the children were able to identify
the orchestral instruments without seeing the performers, simply by recognizing the
vibrations.31

Louise Harris, an Oklahoma City WPA music teacher, taught several deaf
students piano lessons. These students learned rhythm and timing through clapping
hands and taps on their shoulders. They felt the pitches’ vibrations through their
fingers at the keyboard. They could also identify compositions “while standing
several feet from the piano with faces averted.”32 In Tulsa, Oklahoma, a second
project for the deaf also involved piano lessons. Sixteen students were enrolled in
the WPA piano class, under the direction of Correne B. Mooney. These students,
ages seven to seventeen, stood behind the piano with knees touching the
soundboard and arms over the top of the instrument to better feel the vibrations.
They learned to read music well and had “excellent hand positions.” Informal
reports indicated their speaking voices also improved as a result of taking music
lessons.33

Both Louisiana and Michigan had extensive work with the deaf and music. These
experiments were centered in Hope Haven, Louisiana and Jackson and Lansing,
Michigan. Both these state projects for the deaf were particularly well documented.

28 NARA: Central Files: Michigan, January-September 1939.
29 Photograph Collection, Minnesota Historical Collection, Circa 1940. Location no.
HV1.453 r17
http://collections.mnhs.org/visualresources/results.cfm?Page=9&Keywords=WPA%20music&Se
archType=Basic Accessed August 8, 2010.
30 “Specialized Aid for the Deaf.” NARA: RG69, WPA/Division of Information-Information Service
– Primary File 1936-1942, Box 71/File 836-A.
31 “Letter from Mr. W.V. Arvold to Mr. W.C. Mayforth, Deputy Director of the Federal Music
Project.” NARA: WPA/FMP RG 69, File: Miscellaneous correspondence/Folder Wisconsin. Cited in
32 Works Projects Administration for Oklahoma, September 26, 1941. NARA:WPA/FMP, RG 69,
Box 71/ File 836-A, Folder: Oklahoma.
33 “Music for Deaf Children in Oklahoma Free WPA Music Classes.” NARA: WPA/FMP, RG 69,
Reports concerning the Operation of the FMP in Various States, 1935-1940 – Oklahoma. Box 15/File
1935-1940, Oklahoma Miscellaneous Reports,
In 1941, George S. Peterson, a WPA music teacher, worked cooperatively with the regular classroom teachers to conduct music classes at the Chinchuba Institute for the Deaf at Hope Haven, Louisiana. At this school, students learned to play in a rhythm band. A bass drum was added to the usual assortment of triangles, cymbals, rattles, sticks, and shakers. Students learned to “hear” their instruments by the vibrations they felt each instrument make, as well as the bass drum’s vibrations. These students also gathered around the piano, touching it to feel its vibrations. They learned to follow their teacher by reading her lips to count the rhythm and watching her hands on the keyboard as she accompanied them. In addition, these students learned to play tonettes (a recorder-type whistle) using a combination of regular and color-coded music notation. With red for pitches and black for rests, they performed using a combination of staff notation, letter names, and fingering patterns. The students also learned to sing by matching the vibrations of their voice with the piano’s vibrations.34

Michigan’s well-reported music classes for the deaf focused on music appreciation. At the School for the Deaf in Jackson, the use of WPA music education units proved very successful. Reports indicated plans to “extend the program to other Michigan cities, including Detroit.” Using earphones for assistance, students could hear the music, or at least feel the vibrations produced by the WPA orchestra.

The experiment was so successful that . . . the orchestra will play for the class at least once a week hereafter. The present arrangement is an outgrowth of a previous experiment, which demonstrated that the children, by placing their hands on the various instruments, could detect the rhythm of the music.35

Two other experiments were conducted with deaf students in Michigan: one focused on rhythm and one on pitch. Using earphones to augment whatever sounds the students could hear, a WPA orchestra, hidden behind a screen so the students would have no visual clues, performed heavily accented music for the students. Given a baton, it did not take long for these students to learn to beat time to a march, and later to match beat patterns regardless of how many times the meter changed from duple to triple. The pitch experiment involved the use of an oboe as a vibrating source. The sound of the oboe was amplified into the students’ earphones. Then, beginning on middle C where most of the students centered their speaking voices, the students gradually learned to discriminate pitches up and down a fifth, and then finally to match those pitches and others within that octave with their voices. These experiments concluded that deaf children can be taught music, and that learning to sing can assist them with their speaking voices.36

Music Projects for the “Incurable” and “Crippled”

By far the most common form of music appreciation that physically challenged children received was through WPA band or orchestra performances. In Toledo, Ohio, WPA orchestras were booked to play at charitable institutions, including St.

35 Narrative Report May 1936. NARA: RG69, Box 79/File 930A Federal Music Project Alabama Thru Missouri - MI
36 “Music for Totally Deaf Children.” LOC: WPA/FMP, R/E: Box 6, Folder 1.
Anthony’s Orphanage and Crippled Children’s Home.\textsuperscript{37} The Huntington, West Virginia FMP Orchestra performed at the Orthopedic Hospital for Crippled Children twice a month from 1937-39. One example cited in the West Virginia narrative report for May 1938, told of a young boy, paralyzed from the hips down, who was allowed to conduct the orchestra. Over a period of several months of therapy, he gradually regained the use of his legs, and finally walked unaided to the front of the orchestra to conduct them. Although there is no indication in the report, it is likely the incentive to conduct aided this boy’s recovery.\textsuperscript{38}

The FMP/Music Education project was particularly active in Louisiana. Along with the aforementioned work with the deaf, teachers brought music lessons to the disabled and “incurable” children who lived in group-homes. Harmonica classes proved popular at the Home of Incurables as students learned to play these portable, personal instruments.\textsuperscript{39}

During 1940, the Florida Music Project operated music classes for “spastic” patients. These classes included a rhythm band, singing, humming, conducting, and marching. Improvements were noted in a number of children as they gained more control over their arms, legs and diaphragm.\textsuperscript{40} The improvements noted in this report may have been drawn from observations of a rhythm band at the Crippled Children’s Home, Hope Haven, Louisiana.\textsuperscript{41} There were also classes for handicapped children in Grand Rapids, Michigan. The Florida, Louisiana, and Michigan projects all produced “encouraging results.”\textsuperscript{42}

Most physically challenged children living in group-homes during the 1930s were relegated to learning to sing in a chorus. However, in Minnesota, Elmer Klingman was a one-person music therapy unit working with children at the Michael Dowling School in Minneapolis. Many of these children had heart disease, infantile paralysis, or deformed or amputated limbs. By adjusting the instruments, providing attachments, or even creating special instruments, Klingman proved that students with physical difficulties could learn to play musical instruments.\textsuperscript{43}

Sokoloff reported on Klingman’s work in 1938, stating:

Hitherto children classified as cripples, victims of infantile paralysis or heart disease, or those with incompletely formed arms and hands, have had to be satisfied with singing. This concept has now been changed.

Elmer Klingman, who constituted the whole project, has demonstrated that crippled boys and girls can be taught to play most musical instruments, and his

\textsuperscript{37} Letter From Charles Roth to Theodore Hahn Re: FMP activities in Toledo, OH. June 10, 1938. LOC: WPA/FMP R/E: Box 1/Folder 2.


\textsuperscript{39} See http://nutrias.org/photos/wpa/wpa30.htm for photographs, items #30.13-30.15, photographs taken 1/10/1940.

\textsuperscript{40} Florida Report made Dec. 3, 1940. LOC: WPA/FMP R/E: Box 6/Folder 1.

\textsuperscript{41} LOC: WPA/FMP R/E: Box 2, folder 5.

\textsuperscript{42} William F. McDonald, Federal Relief Administration and the Arts, (Ohio State University Press, 1969): 642.

Music Therapy and Federal Music Project

Volk Tuohy

Proceedings of the 2011 Desert Skies Symposium on Research in Music Education

experiments have attracted national attention. He has an orchestra of 29 musicians and a waiting list of 50 student-musicians.44

Music for the Mentally Ill

Some aspects of the social music program stress “social” in its larger sense. For example, the work in the hospitals, particularly in the psychiatric wards, has been remarkably effective. Songs for the sick are selected for their therapeutic value as determined by mental condition improved as a direct result.45

–Nikolai Sokoloff, 1938

Overview

Hospitals for the mentally ill across the nation reported good results when WPA musicians performed in their institutions. Arkansas, Northern California, Connecticut, the District of Columbia, Indiana, Iowa, Massachusetts, Michigan, New Mexico, New York State—specifically New York City—and Virginia all sponsored at least concerts, and in some cases, requested WPA music teachers to work with their patients to develop a choir or instrumental group (Washington, D.C.). Sometimes music was listed as “occupational therapy” as at the State Hospital in Buffalo, New York. In some hospitals, such as the Evansville State Hospital for the Insane in Indiana, the concert programs were a part of “a combined program of medical, physical, occupational and recreation therapy.” In nearly all cases, the reports indicated the music was well received by the patients, and that afterwards the patients were “more manageable.”46

Harold F. Norton, superintendent of the Boston State Hospital, wrote, “It was felt that music with its ability to alter emotional states in normal individuals could be utilized equally well to alter the abnormal emotional states of mentally-ill persons and in so doing to make their recovery easier and more rapid. . . . If music can do this it should become one of the most aesthetic therapeutic agents in the treatment of mentally-ill persons.”47 A two-week WPA project with three orchestras performing at the Boston State Hospital proved very positive for the patients. One of them made this very clear with the comment, “Something about music seems to help my mind.” In fact, overall there were such good results that Mr. Norton requested that orchestras be assigned to the hospital for “as long as possible.”48

Behavioral Research with Music

An experiment with manic-depressive patients at the Worcester State Hospital (MA) was designed to determine if “certain types of music affect certain types of patients.” The experiment employed both live musicians and recordings and

45 “Briefs and Notes Compiled for the Sirovich Committee Hearings.”
46 “REPORT ON ACTIVITIES OF THE WPA MUSIC PROGRAM, JAN. 1941.” LOC: WPA/FMP, R/E, Box 1/FOLDER 3.
involved ten female patients who were exhibiting either depressed or excited states. The music performed was designed to match these states, and the patients were observed before, during, and after the performance. The small number of patients, and the contrived situation of live versus recorded music, as well as the types of music selected, led the researchers to inconclusive results. Although there was a definite change in behaviors during the musical performances, it is possible the novelty of the situation could have elicited this response. In addition, the question of the impact of intensity or dynamics on the patients remained to be investigated.49

Some of the first work with hospitals for the mentally ill began in 1935 at Bellevue Hospital in New York City. Following that, other New York City hospitals conducted several experiments with music and the mentally ill. In 1936, hospitals were trying to classify song material under the headings of “stimulants, tonics, sedatives, and narcotics” to see if music could be specifically prescribed to help cure some illnesses.50 A report from 1937 indicated that music therapy through the WPA projects had “proven definitely beneficial in the treatment of retarded as well as over-active children, of those suffering from disturbances in social and emotional adjustment, and even sufferers from brain diseases. Particularly significant were the results achieved with “neurotic children” at Bellevue Hospital.51 At Brooklyn State Hospital, rhythm bands proved helpful for patients who were catatonic or had paranoid conditions.52 One set of experiments determined the effect of certain songs on specific ages and conditions of patients. For example, “Alexander’s Ragtime Band” produced high stimulation for girls and adolescent boys at Bellevue Hospital, while it caused a “very bad drop” for the patients with dementia praecox at Rockland State Hospital for the mentally ill.53

The WPA/FMP in Miami, Florida hosted concerts “to soothe patients” at the Dade County Tuberculosis Hospital and the Jackson Memorial Hospital, with some remarkable effects.

After a series of Monday afternoon recitals at Jackson Hospital, the group of seven to ten musicians decided not to play any more classical music. The patients preferred light, popular music. One afternoon an elderly patient beat time with his foot to a “show tune”; he became so enthusiastic that he jumped up, danced around, and laughingly called for a partner!54

Eloise Hospital, Westland, Michigan

Eloise Hospital was one of the largest hospitals for the mentally ill in Michigan. Situated in Westland, Wayne County, just outside Detroit, Eloise was an entire self-sufficient complex on 902 acres, with its own laundry, dairy farm, gardens, employee dormitories, and its own fire department. At its height in the 1920s, it housed 10,000 patients. During the 1930s and 40s, there were still well over 3600 mental patients. Dr. Ira M. Altshuler was a psychiatrist at Eloise Hospital. His work with music and

49 “Musical Experiment with the Manic-Depressive Psychotics.” LOC: WPA/FMP, E/R, Box 6, Folder 1.
52 “Music Therapy In Hospitals,” May 1941 report. LOC: WPA/FMP, R/E Box 6, Folder 1.
53 LOC: WPA/FMP, R/E Box 6 Folder 1/File: New York City.
54 Stoee, 7.
the patients at Eloise has been well documented. What is not so well known is his connection to the WPA.

In 1937, Karl Wecker, State Director of the FMP for Michigan was “approached by Ira M. Altshuler, M.D. psychiatrist at Eloise Hospital...who requested the assistance of one or a group of our workers in some special experiments he was conducting with his patients in order to determine the pathological effect of music upon certain classes of insane inmates.”

Though the files only contained an incomplete preliminary report from Eloise Hospital, the careful work and detailed patient monitoring of this experiment is apparent. For the first trial, the patients were all women diagnosed with severe schizophrenia. The report says “the immediate and after effect upon the patient to the music is carefully recorded” as well as “the attitude of the patient to the music.” It was too early to draw any conclusions at the time, but it was apparent this experiment proved successful enough to warrant continuation.

Dr. Altshuler found the interaction with live musicians produced better results than recordings. He found that trios worked better than large groups, and the preferred groups were those comprised of a violin, cello and piano, or flute, piano, and violin as these timbres had “the best penetrating effect” given the wards’ acoustics. He also found the simple use of the piano and voice was effective, but that brass instruments upset the patients. These musicians were all paid through the WPA/FMP. By March of 1940, there were “22 musicians at work daily, claiming to send more patients home cured from mental “blackouts” than any other mental hospital in the country,” and by October, the number of musicians had grown to twenty-six. The Narrative Report for 1940 stated that Dr. Altshuler, the psychiatrist in charge, was “very certain the music has great therapeutic value” and described this project as “one of our most useful efforts.”

Dr. Altshuler described this music program at Eloise Hospital in several national articles and in presentations made before the meeting of the American Psychiatric Association (1938), the Music Teachers National Conference (1939), and the Michigan Association of Occupational Therapy (1940). He called his group therapy treatments a “musical diet” and prescribed specific music for his patients as part of their daily routine toward recovery. According to Altshuler, the music the patients experienced had to first match their mood, their state of agitation, and the volume of sound in relation to the amount of noise on the ward. These were his “isomoodic,” “isotempic” and “isovolumic” music selection principles, all of which were designed specifically to help make “contact” with the patients in their various states and to try to bring them closer to reality.

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56 NARA: Central Files, Michigan September 1937, p.3.
57 Interview with Dr. Altchuler, circa 1940, p.3. Papers of Ira Altshuler, Records of the American Music Therapy Association, Colorado State University, Archives and Special Collections.
59 NARA: NR, Michigan, March 1940, p. 2.
60 NARA: NR, Michigan, October 1940, p. 1.
61 Ira Altschuler and Bessey Shebesta, “Music – An Aid in Management of the Psychotic Patient, Journal of Nervous and Mental Disease 94 (August 1941); Ira Altschuler, “Four Years’ Experience with Music as Therapeutic Agent at Elise Hospital, American Journal of Psychiatry 100 (May 1944); and “The Past, Present and Future of Musical Therapy,” Educational Music Magazine 24, no. 16 (1945).
The typical daily pattern followed the same sequence. First, a gathering song was sung, always the same, but different for each ward—a “theme song” to let the patients know the music session was beginning. Group participation in the song was encouraged but not mandatory. Since the program was held in the wards, often more patients would join in singing than were identified for the “musical diet.”

Following the opening song, the musicians would perform several selections. First a piece with marked rhythm, then one more melodic. These were followed by “mood-modifying” music intended to relieve tension. Pictorial music then allowed for patient interaction and discussion. Each composition was approximately three-minutes in length. A dance often followed these selections to allow for each patient’s personal expression through movement.

Since the patients in each ward were identified by gender, illness, length of time in the facility, and ethnicity, the pieces would be carefully chosen for the musical characteristics that would most benefit each group of patients. In particular, Altshuler found that familiar folk songs and dances from countries matching the patients’ ethnic backgrounds proved very effective. Other pieces worked best to help patients calm down, or help them become energized.62 A typical “prescription” follows:

- Rhythm (Anglo-Saxon) - Al Fresco – Herbert
- Melody (French) – Simple Avbenu – Thome
- Harmony (Slav) – Slavonic Dance – Dvorak
- Mood –Modifying (Teutonic) – Vienna Life – Strauss
- Pictorial Effect (Scandinavian) – Bridal Procession – Grieg
- Group singing of a familiar tune
- Dancing
- Story telling, usually with a moral
- Questions for discussion with the patients
- A slogan for the day.63

The musicians selected to work at Eloise were the best that could be obtained under the WPA. Some could play by ear; most read notation. In the beginning of this project, Dr. Altshuler personally provided the transportation for the musicians. When their numbers grew, they made their own transportation arrangements, carpooling and sharing the cost. To offset the cost of their transportation, the musicians were given a free lunch at the hospital.

In 1937, Dr. van de Wall—a noted psychiatrist and author—warned that “if music were to have any value as a therapeutic instrument, it would be necessary for the musician to cooperate closely with the technical expert in treatment,” the case physician.64 Dr. Altshuler concurred. Therefore, to enable the musicians at Eloise to be more productive, they received lectures on how to get along with the patients and

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63 Letter to Wayne, from Bernard Crandell; A report on the work at Eloise Hospital, December 9, 1940. Papers of Ira Altschuler, Records of the American Music Therapy Association, Colorado State University, Archives and Special Collections.
what they might expect when working on the wards. A special terminology was
developed to “make it easier for the musicians to understand” the patients in
relation to their own musical work at the hospital. Altshuler acknowledged that it
was the talent, skill, and personality of the musicians that enabled him/her to “read”
the patients, and to adjust quickly to “the patient’s tempo and mood.” Altshuler said
the musicians were “happy to know that their music is . . . helping to restore lost
minds to sanity.” Eventually, the musicians began to take ownership of “their”
ward and patients. Some began offering suggestions regarding the music they
would play. They showed an eagerness to work at Eloise and were “quite proud to
participate in a project of this kind,” work in which they felt they were useful.

The Eloise music program proved so successful that the State Hospital in Pontiac,
Michigan also requested and received three WPA music teachers to work full time.
They taught music classes and eventually formed an orchestra with the patients.
The Longview State Hospital in Cincinnati (OH) also adopted the group therapy
music work from Eloise.

Under Dr. Altshuler at Eloise, more interest developed in working with mental
patients through music. Even though the WPA ceased functioning in 1943, some
musicians who had been working at Eloise continued to do so. Many college
student musicians came to be interested in the work, resulting in music therapy
courses sprouting up across the country. The first music therapy intern to work with
Dr. Altshuler was Esther Goetz Gilliland, followed by other students from the
Detroit/Lansing (MI) metropolitan areas. A music degree with a major in Music
Therapy at Michigan State University was established in 1944 – a direct result of Dr.
Altshuler’s work with WPA musicians.

Summary/Conclusions

The work of the WPA in music therapy included music education for the
chronically ill, physically disabled, and the blind and deaf. It also acted as a curative
agent for the mentally ill, and impacted the development of the music therapy
degree at Michigan State University. The musicians who participated in these
projects were unemployed, and basically working for government subsistence
wages. However, they were artists and teachers first, and their training enabled
them to produce musical results with heretofore ignored populations. Their efforts
have born fruit over the years and have impacted music education and music
therapy more than they ever could know.

65 Letter from Donald S. Campbell, Secretary, Wayne County Board of County Institutions to Dr.
Altshuler from, November 10, 1939, with attachment reviewing the Eloise WPA Project. Papers of Ira
Altshuler, Records of the American Music Therapy Association, Colorado State University, Archives
and Special Collections.
66 Interview with Dr. Altshuler, circa 1940, p. 3-4.
67 Letter: Campbell to Altshuler, with attachment reviewing the Eloise WPA Project.
68 “Michigan WPA Music Project 9393 Phase D,” p. 3. Michigan State Archives, Record Group 81-
49, Box 1.
Eloise was written into an article titled “Music and the Road Back” by Meinheert De Jong and
submitted to the WPA/FMP for publication. NARA: Michigan Box 1587/Folder 651.311 January-May
1941. Unfortunately, it was not printed. The author could find no copy of that article in the WPA files,
though it may be in another folder.
70 It is unfortunate that this degree program at Michigan State University closed in 2009.
Concerts in hospitals were not commonplace until the WPA projects brought music into the wards. Likewise, providing music classes beyond singing to students with physical disabilities was something new for the times. Adapting musical instruments to enable children with physical limitations to perform on them was also a breakthrough. Finding that listening to music and performing on musical instruments could assist patients with their healing advanced the development of music therapy in the late 1930s and early 1940s.

Working with deaf and blind children today employs nearly all the techniques used during the WPA by the music projects. It should be remembered, however, that in the 1930s, Braille music was not as accessible as today, and the blind were mostly trained to tune and repair pianos and other instruments. Earphones for the deaf were only beginning to be employed. Many people still considered the deaf as “dumb” mutes, even though the only reason they didn’t talk was because they couldn’t hear what was said in order to learn to copy speech. The WPA/FMP projects proved that music could enhance the speaking ability of the deaf, and that the deaf could enjoy music through feeling its vibrations. Both concepts were new at the time.

Adapting musical instruments to enable students with physical limitations to perform on them was also rare in the 1930s. The pioneering work of Elmer Klingman in Minneapolis (MN) in teaching these students on modified instruments is something taken for granted today. In many ways, the WPA led the way toward normalcy for challenged students.

A chart designed to show distribution of employment by job classifications in the arts programs from 1935-1941 listed “workers engaged in music therapy” under the heading of “public presentation and production.” Indeed the primary role of the WPA musicians working in music therapy was performance. However, what actually happened is that these musicians began to take an interest in the patients for whom they played. Gradually, they started to build their program music around their audience’s needs, and to comment about improvements they witnessed in the patients because of their musical interventions.

At the conclusion of the WPA in 1943, some of these musicians found a way to continue the work they had started by becoming music therapists. Their caring and creativity still provide insights for music educators faced with increasingly diverse classrooms today.

71 LOC: WPA/FMP, R/E Box 3/Folder 8/File: Foster.
72 The American Music Therapy Association was founded in 1950.
Appendix

Abbreviations:

WPA/FMP (1935-1939)- Works Progress Administration/Federal Music Project
WPA (1939-1943) – Work Projects Administration (state music projects)
LOC – Library of Congress
R/E – Reports and Exhibits
NARA – National Archives and Records Administration
RG 69 – Record Group 69 (all files re: WPA/FMP are contained in this Record Group)
NR – Narrative Report (these are state specific)
Integrated Instruction in Music and Mathematics and its Relationship to Creative Thinking Among Young Children

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Abstract

This collective case study investigated how integrated math and music instruction may be related to the development of creative thinking skills among young children. Over the course of one year, researchers observed integrated lessons as they were being presented to two classes of pre-K students enrolled in an after school enrichment program. Field notes were kept from each observation. Additional data include parent interviews, classroom teacher interviews, and creativity assessments of each child enrolled. Data analysis revealed that young students combine learning concepts during integrated instruction in multiple ways. Analysis also revealed that integrated instruction that combines concepts in mathematics and music can stimulate divergent thinking among young children and that continued practice in divergent thinking may influence a child’s creative abilities.

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Three O'clock on Monday afternoon at Mellon Berry Preschool is an exciting time. As Miss Jones finishes the preparations for the entering class, there is a masking tape line on the floor, a white board with empty spaces marked side by side called the “smiley face chart,” and a poster-sized train map showing all the places the students journey to through the music and math world of All Aboard. Four students enter the classroom. Miss Jones says, “Find my line” and all move to sit “criss-cross-applesauce” on the line facing the smiley face chart. It is Jay’s turn to pick the pattern today for the chart. Being a sports fanatic, he chooses “Gators, Longhorns and OU.” Miss Jones works to draw an acceptable “Gator” in the first space. “How many spaces are left?” asks Miss Jones. Larry quickly counted four remaining spaces and informed the class of his discovery.

Miss Jones stands in front of the children holding a bag of multi-colored scarves. She allows the students to pick a color, before asking them to get up and “move with me to the music.” Miss Jones starts the CD player and the song All Aboard: The Music and Math Connection begins to sound through the room. Miss Jones begins to move saying, “Find the beat and show me with your scarves.” Jerry waves his scarf in a circle while the others show a more vertical motion like that of Miss Jones. “Larry, can you show us the beat?” asks Miss Jones. As soon as called upon, Larry begins to wave his scarf much faster. Miss Jones corrects with, “Just show us the big beat, Larry. Can you feel the big beat?” Larry watches Miss Jones and corrects his timing to more closely match the pulse of the music. “Great! Can everyone follow Larry?” asks Miss Jones. Jerry immediately changes his motion from circular to more vertical and they all began to move around the room waving their scarves in time to the music.

Reffering to the smiley face chart, Miss Jones asks “Hmmm...What’s next in our pattern?” Jay reminds her that it is a “Longhorn.” Miss Jones smiles and draws the Longhorn as requested. Once again she asks, “How many spaces are left?” This time Jerry speaks up quickly as he counts out loud, “One, two, three. Three spaces are left.” “Great,” says Miss Jones and pointing to the train map states, “now let’s review where we have been and the characters we have met so far.” Miss Jones brings out pictures of characters. They include Conner the Conductor, Moe Math, Maddie Music, Buster Bee and Ally Dog.

Miss Jones tells a story about Maddie Music and her new friend Betty Beat, who likes finding the beat by tapping her foot. “What is a beat?” asks Miss Jones. None of the students speak up. “Well,” says Miss Jones, “steady beat is like the heartbeat of every song.” With this she asks the children to put their hands on their chests and see if they could feel their heart beat. Since all the students did so well with this, Miss Jones added another item to their pattern on the smiley face chart. “What goes next?” Jay excitedly shouts, “OU.” “Oh, yes, that’s right,” states Miss Jones. “How many spaces have we filled?” she asks. Larry counts three spaces out loud. “So, how many do we have left?” Jay responds immediately with “Two.” “Excellent” says Miss Jones.

“So, does music have a steady beat?” asks Miss Jones. “No,” respond the students. With this, Miss Jones brings out some pictures. The first was a train. Miss Jones makes the Chugga-chugga sound of a train and states that the train has a steady beat when it is moving like that. The next picture is of a basketball. Miss Jones shows the students that the ball has a steady beat when it is being dribbled. Larry immediately gets up and pretends to be dribbling a basketball. Miss Jones sees this as a “teachable moment” and asks all the students to pretend to dribble in rhythm to the song Hickety, Tickety, Bumble Bee. She turns on the CD and students start to dribble around the room. When the song ends, Miss Jones says, “Wow, that was very good, now what is next on our chart?” Jay looks at the charts
and says, “Gator, Longhorn, OU then Gator again.” Miss Jones smiles and draws another Gator. “How many spaces are left?” The class answers in unison, “one!”

Miss Jones shows the class a picture of a heart and asks if it has a steady beat. They all respond with “Yes!” Deciding to cross the line between concepts, Miss Jones asks again, “Does music have a steady beat?” Jay and Larry agree it does, but Jerry does not respond, so Miss Jones starts the CD player again and begins tapping her nose to the steady beat in Hickety, Tickety, Bumblebee. The students follow her motions. She then begins to march to the steady beat and all the students follow her motions. At the end of the song she asks, “Does music have a steady beat?” and the students all respond with “Yes!”

Miss Jones goes to the smiley face chart and says “Gator, Longhorn, OU, Gator. What comes next in our pattern?” This time Larry jumps in first with “Longhorn” and the symbol is added. “You all did an excellent job today” Miss Jones hands the children a picture of Betty Beat and asks them to take it home and color it. They hurry out the door to go home.

**Background for the Study**

As we enter the second decade of the new century, concern grows about what learning will be necessary for people to become productive members of society. Historically, the primary aim of public education was to prepare children to achieve such a goal. Those who consider future needs of the global workforce, note that today’s students must develop more knowledge and skills than at any time in history. The American Management Association (AMA) (2010) released the results of their recent survey on this matter. They state:

> Executives say they need a workforce fully equipped with skills beyond the basics of reading, writing and arithmetic (the three R’s) in order to grow their businesses. Skills such as critical thinking, communication, collaboration, and creativity (the four C’s) will become even more important to organizations in the future. (p. 1)

If this is the case, one might want to know if the current educational system is equipped to address these issues and if so, how?

Current thinking is that many parts of the American education system do not meet the future needs of society (AMA, 2010; Robinson, 2001). The common thought on educational improvement is to raise standards (Isaacson, 2009). Those supporting this position believe that if all children are measured according to the same outcome markers and meet stated goals, they will be better equipped to address the demands of future society. Robinson (2001) contends, however, that educational improvement must go beyond raising standards. He states:

> All national systems of education are based on two underlying models. There is always an economic model and an intellectual model and there is assumed to be a relationship between the two…the economic model is industrialism; and the intellectual model that supports it is academicism. The problem we now face is that this economic model is outmoded and the intellectual model is completely inadequate. All attempts to improve education by expanding it or by raising standards will fail if these two sets of assumptions are not completely reconstructed. (p. 23)

Should education be focused on the development of academics for an industrialized society,
it will fail to meet the needs of a 21\textsuperscript{st} century work force. The impact of such a shortcoming could be devastating to national economies worldwide. In short, education would fail to meet its most prominent goal of preparing children to be productive members of society.

Should officials desire to reconstruct the assumptions on which educational decisions are made, one means is to address what the AMA terms the “Four C’s” – critical thinking, communication, collaboration and creativity. Eckoff and Urbach (2008) subsume the four C’s in their definitions of imaginative thought and creativity. They note the importance of imagination and creativity inclusion in early childhood education by stating:

> It is essential to integrate conceptions of imagination into existing knowledge of child development and cognition…[such experience] allows for a focus on a prospective (educating for the future and problems not yet known) rather than a retrospective view of education (focus on mastering solutions to problems already known). (p. 179)

In their view, if one desires to educate for the future, he/she must apply creative elements to educational endeavors. Should this be the case, creativity-based curricula currently being implemented should be examined closely.

Definitions of creativity are wide and varied, but most share a similar position to Tegano, Moran and Godwin (1986) who define it as, “the development of products that are unusual, of high quality, and genuinely significant” (p. 388). Creativity is also often related to divergent thinking. Runco (1999) defines divergent thinking as, “cognition that leads in various directions.” Different from convergent thinking—that focuses on one right answer—divergent thinking allows the thinker to “do much searching around” (Gilford, 1968, p.8). Activities that support divergent thinking often require learners to uncover a number of solutions to a single problem.

The relationship of divergent thinking to creativity is debated. However, Kaufman, Plucker and Baer (2008) state that:

> Articles on divergent thinking [DT] frequently appear in the major creativity journals, most books on creativity include lengthy discussions of divergent thinking (some focus on it nearly exclusively), school districts frequently use DT tests to identify creative potential and DT test are used extensively around the world to assess creativity. (p.15)

Kaufman, Plucker and Baer (2008) go on to state that divergent thinking is comprised of the following four aspects:

\textit{Fluency} – the number of responses to a given stimuli  
\textit{Originality} – the uniqueness of responses to a given stimuli  
\textit{Flexibility} – The number and/or uniqueness of categories of responses to a given stimuli  
\textit{Elaboration} – the extension of idea within a specific category of responses to a given stimuli. (p. 18)

Should one wish to measure the levels of divergent thinking taking place among learners engaged in educational activities, these markers could help define the thinking processes being stimulated.

The relationship of early divergent thinking activities on children’s creative abilities...
later in life is another debated issue. Harrington, Block and Block (1983) found that scores from DT tests administered to 4- and 5-year old students could be significantly correlated with teacher-predicted creativity in those same children during preadolescence. While there are a number of other environmental factors that may influence these correlations, the relationship warrants consideration. That early facilitation of divergent thinking processes in young children impacts their creative abilities at later stages in life is a foundation for engaging young children in such activities during both formal and informal education.

One means of introducing divergent thinking strategies in a classroom setting is through the use of integrated arts instruction (Jutras, 1994). Practice in arts integration varies widely. Therefore, for clarity in this report, arts integration is defined as the inclusion of subject matter knowledge and skills from both an arts discipline and a non-arts discipline simultaneously during instruction with the expressed goal of using understanding in one to inform understanding in the other (Raiber, 2010). The thought processes stimulated in this type of instruction require learners to engage divergently, as there are many ways to consider the subject matters being explored. Geist and Horn (2009) state that, “this method of learning teaches the child a new and different mode of thinking, and they can incorporate their own emotions and creativity in their work” (p.144).

The subjects of music and mathematics are commonly paired during arts integrated instruction. This combination of subjects was thrust to the forefront with the publication of *Music and spatial task performance* (Rauscher, Shaw, & Ky, 1993) that resulted in the popular notion of the *Mozart Effect* (Campbell, 1997). Although findings from this study have been called into serious question (Waterhouse, 2006), a heightened interest of music’s effects on learning in mathematics was spawned among a variety of education stakeholders. The integration of music and mathematics and the effects of such on divergent thinking among young learners is the focus of this study.

**Purpose and Method**

The purpose of this study is to determine how integrated math and music instruction may be related to the development of creative thinking skills among young children. Specific questions include:

1) How do young children combine learning concepts during integrated math and music instruction?
2) How might integrated instruction in math and music stimulate divergent thinking among young children?
3) How might practice in divergent thinking influence a child’s creative abilities?

To address these questions, this study was designed as a collective case study. The participants, or cases, in this study were six children enrolled in a private daycare who participated in an after-school program titled *All Aboard: The Math and Music Connection* (Faulconer & Hines, 2005). This instructional program was selected because of its stated goal to integrate learning in math and music in an effort to develop higher-order thinking among children age three to five.

A number of different data were collected for this study. The researcher and/or his research assistant observed pre-K classes once a week for twenty-one weeks and wrote field notes during each visit. Additional data included parent interviews, regular classroom teacher interviews, an interview with the *All Aboard* instructor, and participant scores from a standardized creativity assessment instrument titled *Thinking Creatively in Action and Movement* (TCAM) (Torrance, 1981). The TCAM measures a child’s responses to a series of...
movement activities in terms of fluency, originality and imagination, which are all identified as aspects of divergent thinking (Kaufman, Plucker and Baer, 2008). The test has normed scores for children ages 3 through 8 that were derived by the author from the performances of 1,896 children. In an independent study, Tegano, Moran and Godwin (1986) found this test to be a valid, reliable instrument for assessing ideational fluency through different response modes. Their definition of ideational fluency as “the generation of ideas” (p. 387) is very similar to definitions of divergent thinking. Therefore, ideational fluency and divergent thinking are equated with each other in this study.

After all data were collected, complete sets of data existed for three cases. Others were missing important corroborating data from parents or teachers who could not be reached for interviews after repeated attempts. The three cases for which data sets are complete are the focus of this study.

The researcher, using HyperResarch software, coded all field notes and interview transcripts. This process included open coding where emergent themes were derived from the data and axial coding, where the emergent codes were combined to address certain research questions followed this process. Multiple data sources were used to establish reliability during analysis. These data were used to develop three within-case analyses that will be presented prior to a cross-case analysis addressing the research questions. Final assertions and interpretations of the analyses complete this study.

Jay – Case 1

Jay is a six-year old boy who lives with his mother, father and younger sibling. Both parents work outside the home. His father is an attorney and his mother works for an engineering firm. He attends Mellon Berry preschool five days a week and has been at the school for two years. Mellon Berry is the only school Jay has attended. Jay’s mother, Olivia, has a musical background, having studied piano until age 18. There is a piano in Jay’s home and he is allowed to play when he wants, but he has not received any formal instruction to date. Jay’s dad, Jason, does not have a musical background, but has good math skills and enjoys all kinds of mathematical endeavors. Olivia enjoys algebra, but claims she is not “great at any other kind of math other than taking care of the checkbook” (Parent Interview, April 13, 2010). Jay’s parents note that he enjoys math a great deal and that he has good skills for his age.

In class, Jay is a very active, social child. He is well liked by his peers but can be competitive with other boys his own age. Jay and one of his teachers, Miss Alexis, are “buddies” (Teacher Interview, March 25, 2010). Every morning Jay walks into class and exclaims as loud as he can, “Hi teacher, Alexis!” They both laugh and get the day started with a smile. His other teacher, Miss Kenzie, appears to have a more formal relationship with Jay. She notes that Jay can “get very fidgety” and “runs around a lot. I’ll say that he’s never still” (Teacher Interview, April 27, 2010). Both classroom teachers describe Jay as a visual and kinesthetic learner. They claim that when engaging in new activities, “He needs to practice. He does it much better every time he tries. The more times he does something, the better it gets” (Teacher Interview, April 27, 2010). They also believe that Jay learns better when the instruction is designed as a step-by-step process. He likes to know the whole picture concerning the plan for the day, so Miss Alexis makes a point to tell him what they are doing in class and in what order these activities will occur. Both his teachers note that Jay “has to be the center of attention. He is a leader in the class” (Teacher Interviews, March 25 and April 27, 2010). Additionally, Jay likes to probe deeper for more information when he is learning. According to Miss Alexis, he will ask many pertinent questions about the subject they are studying and at times will have additional information that he is very willing to
share with the class. She states, “like the time we were starting a unit on butterflies and he said, ‘Did you know they can fly all the way across the United States?’” (Teacher Interview, March 25, 2010).

Both of Jay’s teachers characterize his work in class as somewhat messy. He must work hard when writing and may repeat steps to make sure it is done correctly, but he is not worried about being neat and orderly. Jay does not always follow directions immediately in class. When it is something he wants to do, he will engage fairly quickly, but if it is something that does not immediately catch his attention, he will need to be reminded often before he will join the rest of the class in the activity.

Miss Jones, the All Aboard teacher, describes Jay as very creative and a student who often demonstrates divergent thinking while engaging in class activities. She states, “This is his second year in All Aboard. Once he gets something, he gets it and if he is interested in it, then he will apply it to other things” (Teacher Interview, May 4, 2010). Miss Jones also notes that Jay is often socially creative and enjoys collaborating with other students. She uses an example of when the students were drawing in class and Jay would let another student do the actual drawing while he would sit back and make suggestions like “we could do it this way instead” (Teacher Interview, May 4, 2010). Jay likes to figure out patterns and will often share his findings quietly with other students so they can tell the class or Miss Jones.

Jay appears to enjoy the active nature of the All Aboard instruction that requires him to interact with objects and move around the classroom. He is particularly attentive when activities make use of unifix cubes. Unifix cubes are colorful, interlocking cubes that help children learn by making concepts more concrete. The cubes can represent “units” of any kind and link in one direction. During a lesson where the character Mikey Middle is reintroduced, Miss Jones tells a story about when Mikey and Moe Math took a trip on the train and Mikey wanted to find the middle seat on the train because he liked to find the middle of things. Miss Jones demonstrates this concept with unifix cubes representing the seats on the train. Jay is quickly able to point out which cube in the group is in the middle. Then without instruction or question, he points out the middle of the pattern of colors on the border of the character cards that Miss Jones had placed in the front of the room. Miss Jones quickly reinforces his ability to transfer the concept of middle from the unifix cubes to the pattern border.

Moving on in the lesson, Miss Jones asks all the students to point out the middle of various body parts (i.e. knee, leg, hand) and Jay can easily identify the middle of these parts. When Miss Jones turns on the CD for the Mikey Middle song, Jay begins to emphatically point to the middle of various body parts as the song asks him to do so.

Jay is also highly engaged when taking part in graphing activities. The All Aboard curriculum makes use of a floor graph. The background of the graph is white. A blue line runs across the top of the graph, a yellow line is in the middle and a red line at the bottom. All three lines are perpendicular to each other. Four black lines run vertically on the floor graph dividing the other lines into equal parts (See Figure 1). Jay knows that the blue line is on top of the graph because Miss Jones reminds him it is “blue like the sky” and the red line is on the bottom because it is “red like the Oklahoma dirt” (field notes, October 26, 2009). After the Mikey Middle song, Miss Jones puts the floor graph out and asks the students to find the middle line. Jay quickly stands on the yellow line as Miss Jones introduces another character. His name is Grayson Graphing and the children are told that he loves to graph things. The story Miss Jones is telling in class now shifts to Grayson Graphing, Holly High and Larry Low. She explains that Holly likes high sounds. Holly is also dressed in blue that coordinates with the top line of the graph. The story also tells Jay that Larry likes low
sounds and he is dressed in red coordinating with the bottom line on the graph. As Miss Jones prepares to play the Hi-Low song on the CD, she asks the children to move to the blue line when they hear high sounds and to the bottom when they hear low sounds. As the song plays, Jay runs quickly between the blue and red lines as he hears the high and low sounds. He is energetic and genuinely engaged. He starts to move to the yellow line during the instrumental interludes and he tells Miss Jones that these are “middle sounds” (field notes, October 26, 2009) so he will stand on the middle line.

Figure 1 – All Aboard Floor Graph

Four weeks after introducing the floor graph, Miss Jones tells the students in Jay’s class, “today, we’re going to figure out what those black lines are for on the graph” (field notes, November 23, 2010). She brings out a character card with the familiar picture of Catlin Counting and asks the class what Catlin likes to do and they all answer in unison, “to count things!” Miss Jones turns on the CD player and the children sing along with the Catlin Counting Song. As the CD plays, Miss Jones places cards numbering from 1 to 4 at the bottom of each black line on the graph. After the first playing of the song, Miss Jones asks the students to walk from line to line as Catlin counts. At this instruction Jay stops spinning around in place and runs to the first line. As Catlin counts, he runs from line to line; his movements are quick—not matching the music’s beat—as he moves from line to line. As the song continues, Catlin begins to count higher numbers and Miss Jones places eight number cards on the graph, placing the odd numbers in the spaces and the even numbers on the lines. Miss Jones instructs the class to move from space to line across the chart as they count in time with Catlin. Jay understands the concept, but has difficulty moving to the beat. Miss Jones attempts to help Jay, but knows that coordinated movements to a steady beat are developmental and it will likely take Jay some time to move at consistent steady pulse. She also knows that this activity, and others like it, would be repeated in the weeks to come.

After this activity, Miss Jones asks the students to sit on the graph’s middle yellow line. She adds a zero card to the graph and points out the numbers zero through eight. She then asks, “Where is the middle?” Jay answers that five is the middle. Another student corrects him and claims four is the middle. Jay gets upset that he did not correctly find the
middle and is confused why five is not the correct answer. The other student notes that if you count the cards on either side of four, there is the same number of cards on both sides. Jay concedes this point, but was obviously struggling with the concept of zero as a number. Miss Jones makes note of this for future lessons.

Two weeks later, Jay’s class has journeyed around the All Aboard poster to the train stop at the Statue of Liberty (field notes, December 14, 2009). During the Statue of Liberty song, the students pretend to ascend the stairs in the statue to the top. They “climb” five levels in time with the music. Jay still struggles, but Miss Jones notes improvement in his ability to move to a steady beat. After the song, Miss Jones pulls out the unifix cubes and asks Jay to pick a color. He chooses white. Miss Jones then asks Jay to tell her what the biggest number is on each level. He responds with “eight.” Miss Jones and Jay pull one cube off for every group of eight, placing the cubes along the floor graph number line in sequence with the song. Miss Jones asks Jay, “How many total groups of eight do we have?” Jay answers, “five!” Miss Jones has Jay pick several more colors of cubes and count out eight in each stack. They stack these cubes in groups of eight by their markers—the white cubes—in the number line created on the floor graph. Miss Jones asks, “What if we stack them all together?” Jay stacked all the cubes on top of each other and noted five different colors in the stack.

Jay is particularly engaged when playing musical instruments in class. Later in the year, Miss Jones has the class play glockenspiels to further explore the concepts of high, low, and middle, as well as the concept of order. She gives Jay his instrument and asks him to remove all bars except “High C, Low C and G.” Using the character Polly Pitch and the Glockenspiel Song, Miss Jones explains that when Polly says “Low note” it means to play the low C, when she says “high note” they are to play high C. The middle note is G. Miss Jones starts the CD and Jay plays along as instructed. Miss Jones then asks the class how they could do this differently and still match what Polly wants. The students decide that “they could each be a note” and only play when their note is mentioned. At the conclusion of this playing, Miss Jones tells the students to, “Take off all your bars and set the base off to the side. Now, arrange your bars from smallest to largest” (field notes, March 23, 2010). At first Jay is confused because many of the bars are almost the same size. Holding up two bars, he says, “[Miss Jones], these [bars] are the same.” Miss Jones responds with, “Are they exactly the same or are they slightly different?” Jay looks at them more closely and then says, “They are a little different.” At this point, Jay and his classmates begin to work collaboratively. There is confusion among the students because it is difficult to distinguish between bars of similar size. A very lively exchange takes place among the students. Soon, some students begin to play the bars from the largest to the smallest. One student notices that his scale “turns around” in the middle and he changes the order of his bars to fix this problem. Jay immediately realizes this strategy and starts to tap on his bars to hear their pitches. During the next few minutes, the students tap on the bars and arrange them from “lowest to highest.” When they believe their bars in the right order, they play a scale up and down. Miss Jones compliments them on their problem solving and teamwork.

As the year of instruction comes to a close, Jay begins to be more easily engaged in all classroom activities. He often demonstrates divergent thinking when responding to the demands of class activities (field notes, April 19, 2010). One of the final train stops on the poster is in space, where the class explores the idea of order and relationships. Miss Jones introduces the students to the planets and the order in which they come from the sun. During this final lesson, Miss Jones asks Jay and one other class member to pick their favorite two planets of the first five. Miss Jones pulls out the floor graph and reminds the students of Holly High and Larry Low. Jay speaks up immediately, “I know what you’re going to do. You’re going to measure how hot the planets are.” This is not Miss Jones’
intent for the lesson, but she wants to know what Jay has in mind. “How can we do that, [Jay]?” she asks. Jay informs Miss Jones the planets get colder the further they are from the sun. Miss Jones decides to use the floor graph and places the sun on the red line and places each planet in order rising vertically from the sun. Miss Jones then plays the Planets Song from the CD and has the students jump from picture to picture as each planet is mentioned in the song. Miss Jones notes this incident as a watershed moment showing how Jay’s ability to think creatively has grown during the two years involved with the All Aboard program (teacher interview, May 4, 2010).

Miss Jones administered the Thinking Creatively in Action and Movement (TCAM) assessment battery to Jay during the last month of instruction. He came to Miss Jones’ teaching space outside of class time and participated in a series of activities. The first, How many ways? required Jay to demonstrate how many different ways he could move between to two marks on the floor. The second activity, Can you move like? asked Jay to move as if he were certain objects or animals. The next activity, What other ways? asked him to show the various ways he could hold a cup in a wastebasket. The final activity asked Jay to show how many different things he could do with juice cups. Jay participated in all the activities, but did not appear genuinely engaged at any time. He was easily distracted and would quickly want to move to another activity. Video recording the assessment allowed for scoring after the administration. The TCAM analysis produces scores in fluency, originality and imagination. Jay’s scores were as follows: fluency – 15th percentile, originality – 34th percentile, and imagination – 76th percentile. These low percentile rankings do not appear to represent Jay’s demonstrated creative and critical thinking skills in the All Aboard classroom. One possible explanation for this disparity could be Jay’s demonstrated social learning preference. In fact, at one point during testing, Jay remarked he wished a classmate was with him because he thought he would “think” better with a friend (video transcript, April 15, 2010).

Larry – Case 2

Larry is a five-year old boy who lives with his mother, father and older brother. Larry’s mother does not work outside the home and his father is a university professor. Larry has attended Mellon Berry for two years and is there five days a week. This is the only school that Larry has attended. Neither of Larry’s parents have a musical background. Larry’s mother, Jane, was an accountant at one time and believes her love of numbers has affected Larry’s love of math. She notes that Larry could add when he was three and he can play Yahtzee without assistance. Jane states that Larry really enjoys All Aboard, but she has no specific reasons why she and her husband decided to enroll Larry in this elective program. She did mention, “I heard good things about it, and [Larry] really enjoys music. We are not a musical family, so we are trying to encourage it” (parent interview, April 20, 2010).

Larry’s classroom teacher, Ruth, states he is very outgoing and likes trying new things. He interacts well with others and likes to participate in activities. She also notes he is very social and likes to play in groups. Ruth sees Larry as an affectionate child who listens well, is respectful, and has good manners. She considers Larry to be a logical learner who prefers to have things in order. She states, “He is very sharp. He catches on pretty quickly” (teacher interview, April 29, 2010.) Larry likes to be the center of attention in class, and Ruth notes he is very physical. “He likes to be the best ball-thrower or something along those lines.” She does not view Larry as an inquisitive child. “He is very short-answer. ‘This is what it is.’ He is kind of the black or white kind of answer kid.” Ruth states that Larry’s classwork is very orderly. When asked about her thoughts regarding her curriculum and
connections with what Larry is learning in *All Aboard*, Ruth states,

> I know that [Larry] is very, very good at math, and I’m not sure if that’s from the program or not, but he is very good at the math that we do in our class, so if that’s help from the program, I am thrilled! (teacher interview, April 29, 2010)

When asked about Larry, Miss Jones states, “[Larry]! Oh my goodness! Very creative…[Larry] is super, super creative” (teacher interview, May 4, 2010). She sees Larry as a very divergent thinker who loves to take things and look at them from totally different perspectives. He is very observant in her class and “can be a handful at times,” but she really enjoys that about him and notes that his behavior is likely linked to his divergent thinking. She states,

> If you get him focused on something…I hate to say get him focused on something because he is constantly thinking and he is a very quick thinker which is hard when you have slower thinkers [in the same class], because he is ready to move on once he’s got it. He is the one that insists that the character cards are always in the right order. He will remember anything. And so it was hard when he missed class because he wants to figure things out for himself. He was the only one that did not know the story of the turtle and the hare and it really bothered him that everyone knew the story and he did not get to go through that process and think through it himself. He likes to think through it himself, not be told it, but think through it. (teacher interview, May 4, 2010)

Larry appears to enjoy the active learning that is part of the *All Aboard* curriculum, but as Miss Jones stated earlier, he was usually thinking beyond the activity. Larry demonstrates this during an activity using *William Tell Overture* in class (field notes, February 8, 2010). Miss Jones asks all the students to lie down and listen as she plays the excerpt from the CD with the overture that she had played in the previous class. She reminds the students of the horse race idea they had put together during the previous class. They had decided that during the introduction the students would stand and get ready to race. During the first section they would gallop around the room. During the next section they would run and, since the last section was just like the first, they would return to the galloping motions they used for the first section. Miss Jones plays the recording again and as the students engage in this activity, things get a “bit out of hand” during the running portion as Larry and the other boys begin to run into each other. Miss Jones is forced to erase one of their smiley faces from their pattern chart. Larry complains mildly, but was quickly motivated to listen again and get back to the activity. As soon as she sees that students are ready to listen again, Miss Jones draws the smiley face back on the chart and moves on with the lesson.

> Miss Jones says, “Let’s pretend for the galloping part, we’ll label it with a ‘1,’” and she held up a card with a yellow star that had a number one printed in the center. Immediately Larry spoke up and pointed out that they had not labeled the introduction yet. This started a lively discussion among the students as they tried to determine a solution. Because there are not enough cards to label the introduction and three parts, Miss Jones modifies her instruction discarding the cards and picking up *unifix* cubes instead. Working as a group, the class decides to label the sections with the following colors: (a) introduction - black, (b) galloping section – red, (c) running section – blue. The students lay out the pattern of black, red, blue, red on...
the floor, then Miss Jones restarts the music and asks the students to move according to the form of the music. The students initially want to start immediately with the gallop when they hear the music, but Larry notes for all that they should not gallop until it is the “right color.” With this, Miss Jones points to each color as the sections come up in the recording and the students move accordingly. Miss Jones then removes the black cube from the floor and labels only the “race” sections. She puts the number one card next to the red cube and the number two card next to the blue cube. The class was willing to label these sections according to these numbers now.

Two weeks later, Miss Jones starts class by saying, “We went to the tunnel last week” and Larry immediately smiles and says, “Can we go again?” Miss Jones grins and asks, “Do you remember counting your steps?” (field notes, February 22, 2010). She holds up two pictures of footprints—one with four large prints and one with eight small prints. Larry points to the small footprints and says, “These are the fast steps, ’cause when you go faster, you take more steps” (video transcript, February 22, 2010). Miss Jones invites the class to stand and go through the tunnel with her. She turns on the CD to the Tunnel Song and gets out her flashlight. She and the students then creep around the room as if in a tunnel. During the music’s slow sections, Miss Jones shines her light on the four footsteps and the students move slowly. During the fast portions she shines her light on the small footsteps and they move quickly around the room.

Larry demonstrates his ability to recognize order and pattern in another activity a few weeks later. Miss Jones starts with a story. “We’re going to pretend we’re going to the top of the mountain! In some parts we have to go fast and others you have to go slow” (field notes, March 23, 2010). Miss Jones has the children stand and follow her as she plays Top of the Mountain from the CD. They pretend to crawl during the slow portions of the song and walk fast during the fast sections. Miss Jones asks about the character they met last week on the trip from camp. Larry remembers that Freddy Fast and Sammy Slow helped them travel up the mountain. Miss Jones reviews the chronology of events in the Top of the Mountain song. Holding up a camp picture she says, “We left from our camp. We walked slow on level ground.” She places a picture of level ground next to the camp picture. “We climbed up the hill” and she places a hill picture next in line. “We made it to the top” she says as while placing the mountain top picture next to previous one. She adds another picture of a hill while saying, “We ran down the hill and came to level ground again,” She continues this process of picture placement until reaching the final camp picture. Miss Jones then asks, “Is this a pattern?” A discussion ensued among the students, and Larry finally concludes it is a pattern because the pictures repeated with “camp, level ground, hill, top, hill, level ground and camp” (video transcript, March 23, 2010).

Nearing the end of the year, Miss Jones introduces the class to a new character named Patti Pattern (field notes, April 19, 2010). She first holds up a picture of Patti who is wearing clothes with different patterns. Miss Jones tells them that the character’s name is Patti Pattern and asks the children to look for patterns in the picture. Larry immediately notes her clothes are like “pattern hopscotch,” and points out the border pattern around the character card (video transcript, April 19, 2010). Miss Jones must stop and look at the border because she had not considered that when she was looking for patterns, and then agrees with Larry’s observation.

Miss Jones had Larry come to the classroom to administer the TCAM battery. Larry enjoyed the activities, especially when asked about how many different ways he could think to do something. He did not like trying to act like an object or animal, and asked if he could do something else quite often during that portion of the assessment (video transcript, April
Larry scored in the 84th percentile for fluency and also for originality. The imagination score—derived from the activity that asked Larry to move like an animal or object—resulted in a 26th percentile score. His ability to think about many different things while engaged in an activity matches his high fluency and originality scores. The low score for imagination may reflect more a dislike for the assessment’s structure than his ability to imagine.

Jerry – Case 3

Jerry, a four-year old boy, lives with his mother, father and older sibling. Jerry’s mother, Kerri, does not work outside the home, although she previously worked in early childhood education for 15 years. Jerry’s father is in the Air Force. Jerry attends Mellon Berry three days a week and this is his first year to attend the school. He has not attended any other schools prior to Mellon Berry. Neither of Jerry’s parents have a musical background. Jerry’s father, Kyle, claims to have very good math knowledge and skills. Kerri believes Jerry is, “following in his dad’s footsteps as far as his [math] abilities.” She believes he enjoys math and is “fascinated with numbers; completely fascinated with them.” Kerri stated that she enrolled Jerry in All Aboard because, “Schools cut program like this…so I wanted him to get it while he could.” Her primary goals for Jerry are that he has fun, but she does “hope that he makes some connections as far as…math and things like that” (parent interview, April 27, 2010).

When asked if she has seen evidence of impact from Jerry’s exposure to All Aboard, Kerri states that, “He enjoys it! He talks quite a bit about it...about the counting activities that they do and things like that” (parent interview, April 27, 2010). She also notices Jerry applies what he is learning in All Aboard to regular daily activities. “He definitely picked up the patterns, and he’ll notice patterns just in everyday life now that he wasn’t necessarily getting before” (parent interview, April 27, 2010.) She attributes this, in some degree, to natural developmental maturation, but also notes it may correspond with the All Aboard instruction. Kerri cites her background in preschool work as helping her make these conclusions concerning Jerry’s progress.

Miss Jones considers Jerry to be an equally convergent and divergent thinker during class. “He is creative, but when he is done with something he is done. If he gets what he thinks is the right answer he is done” (teacher interview, May 4, 2010). To her, Jerry appears to prefer things in order and will be insistent about having things in his order preference. Miss Jones cites that, “An example of this would be the character cards. This is the first year that...[any student has insisted] they had to be in the right order of when we met them.” She states Jerry as so insistent that, “I stopped going over the characters that way and just put them out in order, because, we would spend our whole class debating who went first” (teacher interview, May 4, 2010).

Those observing Jerry in class have noted his apparent lack of focus. Comments like, “Three of the four students seemed to grasp the concept by the second hearing. [Jerry] was having a hard time focusing, [he] was very fidgety,” are common among observational notes of his classroom interactions (field notes, October 26, 2009). When asked to sit with the group, Jerry will tend to find ways to remain up and moving. His actions do not appear acts of defiance, but rather a need for movement. He tends to be more engaged with highly-active learning activities such as the scarf activities. When activities were less active and required students to discuss or listen, Jerry commonly wandered around the room. He showed evidence of minimal engagement in the activity, but rarely remained stationary while doing so.
Although there are numerous references to Jerry’s apparent lack of attention during class, there is also evidence of learning, particularly during lessons related to patterns. The opening class activity is choosing the pattern of drawings to be used to fill in the smiley-face chart. Most every class, Jerry has input on the pattern and his responses vary from two-object patterns of related symbols like “triangle, square” and “boy, girl,” to three-object patterns encompassing more elaborate and seemingly unrelated objects like “snake, fire truck, heart.” In fact, Jerry’s pattern recommendations became so dominant in class that Miss Jones resorted to student rotation to allow others an opportunity for input (teacher interview, May 4, 2010).

Jerry’s fascination with patterns at times overwhelms his desire for constant motion. At one point in the All Aboard journey, the train stops at the lake. The students start the class period by pretending to fish in the lake with their scarves from the opening activity. Jerry is minimally engaged in this activity, as he throws his scarf up in the air (video transcript, March 1, 2010). Miss Jones brings out a number of 5x7 yellow and orange “fish cards,” lining them on the floor in a yellow-yellow-orange-orange-yellow pattern and says, “Clap every time I point to a fish.” Miss Jones points to each fish and the students clap five times in a steady beat. Miss Jones then brings out a black bar she calls the “best friend bar.” She places the bar over the second and third fish in the pattern. Miss Jones claps and says, “fish, fishy, fish, fish” and the children echo. Jerry is engaged in this activity and soon asks if a fish could “swim away to make a new pattern.” Miss Jones provides him green and orange cards to make a new pattern. Jerry was very excited to get his cards, and makes a green-orange-green-orange pattern. Miss Jones asks him where she should place the best friend bar in his pattern and he say, “Over the orange fishes [sic] because they are friends.” He then notes, “My pattern has the same parts as yours, but they are in a different order” (video transcript, March 1, 2010).

During a subsequent lesson, Miss Jones brings out a pattern poster (field notes, March, 23, 2010). The poster contains sixteen squares (See Figure 2).

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Figure 2 – Pattern Poster

Miss Jones points to the poster and states “Pick your favorite pattern in here.” Jerry initially appears confused by the request and which surprises Miss Jones. Because he normally demonstrates an ability to understand patterns, Miss Jones probes further and asks Jerry why he was having trouble. He informs her that there are so many patterns on the poster it is hard to choose. Miss Jones turns and looks at the poster and realizes what Jerry means. The original intent of the poster is to read all the patterns from left to right, therefore producing four alternating color patterns. Jerry, however, is reading the poster in all
directions he thought possible, (i.e. top to bottom, bottom to top, right to left, etc.) resulting in many more emerging pattern choices. Miss Jones told him for this lesson to limit the patterns to only those that go from left to right eliminating Jerry’s apparent confusion (teacher interview, May 4, 2010).

Jerry also participated in the TCAM assessment. His scores were as follows: 95th percentile for fluency, 73rd percentile for originality, and 50th percentile for imagination. Jerry’s overall percentile score was 77, the highest percentile score of all students assessed. He appeared to genuinely enjoy every assessment activity and would continue to develop new ideas as long as Miss Jones would ask, “Can you think of another way?” He appeared to enjoy working alone and would take the time he deemed necessary to complete his task. Even when Miss Jones thought he might be done with one idea, he would inform her, “that wasn’t it yet” and proceed to further develop his actions or movements (video transcript, April 14, 2010).

Cross Case Analyses

Integrated Learning Concepts in Math and Music

Four themes emerged from these cases concerning how young children combine learning concepts in integrated math and music instruction—pattern recognition, concept development, physical analysis of data, and cross-subject problem solving. Each of these themes will be discussed in more detail below.

Pattern recognition remains dominant through the All Aboard curriculum, in written documents and during actual classroom practice. Patterns based in mathematics include sequences of numbers, shapes, and symbols, and are used during all instructional aspects. Children are repeatedly asked to analyze repeating and growing patterns and to generate their own patterns. Patterns are often presented in child-initiated or child-directed games. This practice empowers the children to own the patterns they find or generate and creates a natural motivation to continue this practice outside the classroom. Evidence exists supporting the transferring of knowledge to other learning areas.

Musical pattern recognition is a substantial component of the curriculum and most often addressed in either musical form or rhythms. Form at the macro and micro levels is explored as students demonstrate the ability to hear and respond to form in music. This auditory recognition and response serves to develop additional pathways to knowing and understanding patterns. Combined with mathematical understanding of patterns, evidence from these cases demonstrates children can cross subject boundaries and use understanding in one subject area to inform understanding in another.

Concept development is most easily recognized in the characters that populate the stories written for the All Aboard Curriculum. Concepts are presented in a story format intended to engage students’ imaginations. Evidence from these cases demonstrates that students can recognize the characters and the concepts they represent. Each stop on the journey develops larger overarching concepts (e.g., the counting farm, metronome mountains, pattern lake, etc.) while individual characters (e.g., Moe Math, Catlin Counting, Grayson Graphing, Patti Pattern etc.) represent recurring knowledge and skills necessary for understanding these concepts. The characters continue to visit at each stop when their particular knowledge or skill is necessary to enlighten or solve a particular issue. Evidence from these cases shows character recognition appears to trigger certain thinking strategies.
that utilizes previous learning in both subject areas to increase current understanding. Further, the combination of characters tends to elicit more integrated thinking. This process of creating stories of explanation allows the cases in this study to combine background knowledge and skills resulting in an integrated learning process.

In the process of physically analyzing the data presented in each lesson, the cases in this study demonstrated an ability to combine knowledge and skills from music and mathematics to show students’ knowledge. Of particular interest is the use of the floor graph to help children physically represent number line concepts and music concepts (tempo, meter and pitch). The combination of number line concepts with the temporal elements of music allows the cases in this study to demonstrate critical thinking skills many might assume beyond their age-level abilities. These lessons often emerged from the data as some of the most “intertwined” (Ingram, 2006) moments of integrated instruction. Further evidence from these cases demonstrates that understanding can move fluidly between subject matters allowing for the cases to base their decision-making in the subject understood most completely. There is also evidence in these cases to show that understanding in both subject areas can increase through integrated instruction.

The cases in this study engaged in integrated thinking and learning most effectively when ideas were presented as problems needing resolution. Often when new ideas emerge from the curriculum, their appearance would result in a new problem to be solved (e.g., Mikey Middle needing to find the middle seat on the train). As solutions are sought for problems, evidence, shows cases in this study called upon previous learning to help resolve the issues. It is further demonstrated among these cases that such knowledge was then transferred to other areas and applied to other learning. Not only was this effective for the problem solving within the All Aboard curriculum, but it also appears to have developed a “habit of practice” among these cases. As the school year progressed, this habit of practice appeared to be applied increasingly to all problems presented in class. There is also evidence from those outside the All Aboard classroom that suggests the habit of practice was transferred to other endeavors (teacher interviews, March 25, 2010, April 27, 2010, & April 29, 2010).

Divergent Thinking

The stimulation of divergent thinking among the cases in this study appears to rely on a number of issues. Contributing factors in the data include: the teacher’s receptiveness to new ideas, the ability to think in both a mathematical and musical language simultaneously, and that music tends to lend itself to multiple solutions. Each factor is discussed below.

Admittedly, a teacher’s receptiveness to new ideas in a lesson can be the result of individual openness and comfort in the classroom. There is, however, evidence in this study that suggests the concept-based curriculum on which All Aboard is founded allows for broad instructional applications that can accommodate child-initiated and child-directed learning. Evidence from these cases demonstrates a number of times when a child’s understanding moved beyond the intended lesson outcome, and—because the instructor moved outside the preset parameters of the lesson—understanding was increased. At times, the instructor admits to learning from her students and discovering ideas she had not considered prior to this interaction (teacher interview, May 4, 2010). This instructional freedom allows the teacher to move in and out of the curriculum as required by the students. Had this curriculum been a rigid sequence of lessons based solely on activities, such responsiveness would not be possible. As the curriculum was founded on large overarching concepts, knowledgeable teachers can navigate the journey according to student
learning demands rather than teacher presentation, resulting in a student-based curriculum. This not only allows for more divergent thinking among the students, but also allows the teacher to model such thinking for the students in the process of teaching each lesson.

The ability to think simultaneously in a mathematical language and a musical language allows cases in this study to develop divergent ideas. Cases demonstrated use of cross-subject language as they worked to develop conceptual understanding during lessons. It does not appear that cases are aware of their combination of languages and do not attempt to assign language elements to either music or math, but rather a language shared across both subjects (i.e., patterns) can be developed. This case evidence suggests it is possible to engage in new learning holistically, calling upon all prior understanding to help deconstruct new ideas into parts that can be understood (Phillips, D. & Soltis, J. 2004). These understandings can then be used to construct new knowledge based on this holistic world view. Among the cases in this study, these constructions were complex with varied forms, much like the natural structures existing in actual problem solving. This is unlike many educational problem-solving endeavors where thinking is often compartmentalized to one subject and solutions are expected to meet certain well-defined predetermined parameters.

The combination of music with mathematics appears to allow the latitude for multiple solutions. Evidence among these cases suggests that multiple ways of making music can be transferred to multiple ways of thinking about mathematics. With the acceptance that musical or mathematical thinking is the same, cases in this study appeared to apply the same divergent strategies in both areas. Case evidence further suggests this disposition of multiple solutions increases engagement in the learning process. Divergent thinking in mathematics leads to additional discoveries outside the intended curricular outcomes (e.g., Jerry’s issues with the pattern poster) and has the power of enriching understanding.

**Practice in Divergent Thinking and Creative Ability**

Across all cases in this study there is increased evidence of expanded divergent thinking over time. It appears that length of enrollment in *All Aboard* impacts the divergent thinking demonstrated in problem solving and creativity among these cases. A chronological examination of field notes throughout the year indicated cases grew increasingly comfortable in providing complex solutions that required multiple understandings and skills. Some of these solutions were not always practical, but did demonstrate multiple approaches to the subject matters and problems being considered. The cases in this study demonstrated increased ability to think divergently with practice, suggesting that divergent thinking is not simply a preexisting personality trait, but can be learned and therefore taught.

Creativity assessment revealed two of the three cases demonstrated high levels of fluency and originality in their answers. The third case did not match these high levels in fluency and originality, but scored in the upper percentiles in imagination. While there is no causal evidence that participation in *All Aboard* affected these abilities, one might posit an existing connection. Previous studies show connections between divergent thinking and creativity (Kaufman, Plucker & Baer, 2008). There is evidence among these cases that *All Aboard* activities stimulated divergent thinking and increased instances of such over time. Indicating a relationship between the *All Aboard* curriculum and young children’s creativity development. This evidence is not conclusive and should be studied further.
Assertions and Conclusions

Case study research does not allow for generalization of findings, but does allow for an in-depth analysis of phenomena that examines practice and the context in which such practice takes place (Creswell, 1998). This year-long examination of three cases within a math and music integrated program can, however, shed light on the impact of this type of curriculum on young children’s thinking and learning. It appears that under certain conditions, some children can engage in integrated learning in ways that may have previously been considered difficult for their age. This type of learning appears to develop a habit of practice allowing some children to apply integrated understanding and inquiry to diverse situations. Through the application of this habit of practice, some children may develop increased divergent thinking abilities or at least a disposition of acceptance toward divergent thought. Combing these results with those of previous research (Harrington, Block, & Block, 1983), it appears that an increase in divergent thinking abilities impacts the development of creativity among children.

With this evidence, it appears that All Aboard can be considered a viable curriculum for the young children’s creativity development. Therefore, more investigations are warranted. First, this study needs to be expanded to include multiple sites and multiple All Aboard instructors. Some of the phenomena observed in this study, may be explained via teacher-student interaction and not necessarily as curricular impact; more cases need to be examined in light of the findings from this study to explore these interactions. Second, the teacher development portion of All Aboard needs to be studied to see if the knowledge, skills, and dispositions that facilitated learning among these cases is a product of the All Aboard approach or of individual teacher personality. A third area of study to investigate is the differences between classroom teacher’s assessment of the students’ cognitive abilities and the All Aboard teacher’s assessment of the same.

Children’s abilities to think creatively and the impact of such thinking on the future endeavors of our society cannot go without serious consideration. The needs of our modern global 21st century society are vastly different from those of even fifty years ago. With this realization, educational approaches that stimulate critical and creative thinking are worthy of increased application and examination. The All Aboard curriculum appears to provide such an approach for educators of young children. Learning more about this approach may provide early childhood educators an exemplar of integrated arts instruction that maintains individual subject matter integrity while providing means for stimulating creative and critical thinking among young children.
References


Pre-Service Music Teachers as Composers: A Pilot Study

Christian Hauser, University of North Texas

Abstract

The purpose of this study was to expose pre-service music educators (N = 12) to three composition tasks of various structure—rhythm, poem and unstructured—and to examine their preferences and perceptions of composing. The study inquired if a “learn by doing” approach might influence their perceived ability to teach composition. Participants composed using xylophones and were given 10 minutes to complete each task. Data were gathered through surveys and interviews. The results showed that composing was a novel experience. Participants seemed to enjoy the composition tasks, regardless of assigned compositional method. Though the poem task was rated higher than the other conditions, the difference was not significant. A majority of the participants indicated that this experience positively changed their opinion on incorporating compositional activities in the classroom. Many remarked that this experience was fun and engaging; since they enjoyed the creative endeavor, they surmised their future students would also enjoy it.

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Historically, music education has had to continually justify its place within the public school curriculum (Bess & Fisher, 1993; Elliott, 1995). One of the justifications music educators have used is that music instruction can foster creativity and self-expression (Austin & Reinhardt, 1999; Reimer, 1989a). While many music educators emphasize creative performance (Barrett, 2003; Elliott, 1995), music composition, which is considered to be one of the highest examples of creative self-expression (Goodkin, 2002; Hickey, 2003; Reimer, 1989b), tends to be neglected (Byo, 1999; Orman, 2002; Strand, 2006).

Music educators have cited several reasons for not incorporating composition in their classroom. Some of these reasons include low self-efficacy regarding their own compositional ability (Randles, 2009); lack of training in compositional pedagogy (Bell, 2003; Morin, 2002; Strand, 2006), and a tendency to view composition as an individual endeavor reserved only for the musically elite (Sherman, 1991; Strand & Newberry, 2007). Research corroborates these sentiments among teacher educators and pre-service music educators (Forsythe, Kinney & Braun, 2007). Though studies have shown that music educators value composition (Forsythe, Kinney & Braun, 2007) its lack of implementation deserves to be examined, particularly among pre-service music teachers.

There is limited research investigating the perceptions of pre-service music teachers engaged in music making activities. Furthermore, insight into activities that would encourage pre-service teachers’ willingness to teach composition is also lacking. This is a need for future research and the aim of the current study.

Review of Literature

In 1994, the National Association of Music Education (MENC) published The School Music Program: A New Vision, which introduced the nine National Standards for Music Education. These Music Standards included 1) singing, 2) playing instruments, 3) improvising, 4) composing/arranging, 5) reading/notating, 6) listening/describing music, 7) analyzing/evaluating music, 8) understanding relationships between music and the other disciplines, and 9) understanding music in relation to history and culture. MENC designed these standards to establish a vision of music education and to help direct curriculum design (Orman, 2002). The Standards offered music educators a conceptual framework to guide instruction; it gave them the what to teach, not the how (Patchen 1996). Though they were created to be strictly voluntary, studies have showed that music specialists in schools seek to implement the Standards within their curriculum (Byo 1999; Fallis, 1994; Orman, 2002). Furthermore, according to Fonder and Eckrich (1999), over 70% of accredited universities and colleges belonging to the National Association of Schools of Music have modified their curriculum to better match the National Music Standards.

While little objection has been raised regarding its substance, many researches have reported that music specialists have difficulty incorporating all the standards in the music classroom setting (Byo, 1999; Orman, 2002; Reimer, 2004). Music teachers do not teach all standards equally (Byo, 1999; Reimer, 2004). While music educators have done well implementing standards 1 and 2 (singing and playing instruments), standards 3 and 4 (composing, arranging and improvising) tend to be neglected (Byo, 1999; Orman, 2002; Reimer, 2004). Music teachers tend to accentuate the standards with which they are most comfortable (Byo, 1999; Orman, 2002).

Music specialists have cited several reasons for neglecting composition in their instruction. According to Morin (2002) and Strand (2006), educators lack a basic understanding of the creative process. Others cite that they have low self-efficacy with regard to their creative ability (Randles, 2009) and have not received instruction in
composition during their pre-service training (Bell, 2003). Educators also tend to view composition as an individual endeavor reserved only for the musically elite (Sherman, 1991; Strand & Newberry, 2007). Others cite a lack of materials to teach composition and lack strategies to assess their students’ creative products (Strand, 2006). Music teachers also report that they lack class time to effectively incorporate composition (Byo, 1999; Morin, 2002; Orman, 2002; Strand, 2006), while others claim they teach too many students (Strand, 2006).

These concerns raise a number of questions concerning the inclusion of composition in music programs. How can music specialists encourage creative experiences if they are unclear of the creative process? How can music teachers be expected to offer instruction in composition if they themselves lack compositional instruction? Furthermore, why is it that, “untrained musicians, such as garage band guitarists, are more comfortable creating music than we who are trained musicians” (Strand & Newberry, 2007, p. 15)?

**Composition Research**

**Overview.** According to Kratus (1989), composition “refers to both process (the activity of composing) and product (the resulting music). A composition, when referring to a product, is a unique sequence of pitches and durations that its composer can replicate. . . . When referring to a process, composition is the act leading to the production of a unique, replicable sequence of pitches and durations” (p. 7-8). Though improvisation is also a creative activity involving process and product, composition is unique in that it involves revision and replication (Kratus, 1989; Tafuri, 2006).

Most of the research literature in composition has focused primarily on the process and/or product of children’s creative efforts. For example, Christiansen (1993), Delorenzo (1989), Gromko (1996), Kratus (1989), Levi (1991) and Wiggins (1989) have studied the creative process of children engaged in composition tasks. Other researchers have examined the culminating work the students create—the compositional product (Doig, 1942; Laczo, 1982; Loane, 1984; Scripp, Meyard & Davidon, 1988). Kaschub (1999), Kratus (1994), and Smith (2004) have examined both the compositional process and product of children’s creative work. Kaschub (1999), McCoy (1999) and Smith (2004) investigated students’ perception and preference for composing. While most of the research has focused on individual composition, several researchers have also explored children’s creative efforts as they worked in groups (Christiansen, 1993; Hamilton, 1999; Kaschub 1997; Loane, 1984; McCoy, 1999).

Research investigating the compositional process and products of adult composers has not received as much attention, but can be found in the works of Bowles (1991), Draves, (2008), Scripp, Meyard & Davidon (1988), and Strand (2006). There seems to be, however, a lack of research investigating the compositional efforts of pre-service music teachers.

**Levels of structure in composition.** Structure is an important facet when teaching composition in the classroom. According to Smith (2004), a structured composition task involves “any directions for a composition that specify some parameters for that composition and at the same time establish how much of the composition students can decide for themselves” (p. 10). In all levels of structured tasks students are invited to express themselves freely within the parameters as defined by the researcher/practitioner (Stephens, 2003). Strand & Newberry (2007) cited three levels of structure: heavily structured, moderately structured and unstructured.

Examples of a heavily structured task might petition students to write a melody to a given chord structure (Hamilton, 1999), finish a phrase or motive (Laczo, 1981; Smith, 2004)
or compose pitches for a given rhythm (Smith, 2004). Within a moderately structured task, students may write in a certain meter (Priest, 2002), compose music to a poem (Kaschub, 1999; Kennedy, 2002; Priest, 2001; Smith, 2004), write music using ABA form (Regelski, 1986; Wiggins, 1994), describe an emotion through music (Smith, 2004), or accompany a storyline (Barrett, 2003; DeLorenzo, 1989; Hamilton, 1999; Levi, 1991).

An unstructured task is defined as a compositional exercise that is free from teacher/researcher imposed boundaries or restrictions (Hickey, 2003; Wiggins, 1990). Students writing unstructured compositions are not given a form, meter, tonality, text, or subject matter. They are encouraged to explore musical ideas freely, allowing their individual creativity guide their work. Some examples of unstructured tasks might include composing on a keyboard (Kratus, 1989, 1994; Nelson, 2007), inputting notes on a computer (Hickey, 1997; Jennings, 2005; Kennedy, 2002; Nelson, 2007; Wilson & Wales, 1995; Younker, 2000), spontaneously creating songs on the playground (Campbell, 1991), or composing on recorder (Priest, 2001; Smith, 2008) or xylophone (Auh, 1995; Pond, 1981). It is important to note that in any unstructured task there are inherent parameters such as the expressive constraints of the instruments, the timbres available to the composer, the range of the instruments or length of time given to finish the composition (Smith, 2004).

Benefits and challenges of structured composition. Researchers have advocated for structured composition activities because they help students’ progress in their creative development. Dunn (1992) observed that beginning composers who used words and poems as a basis for their composition became more secure in their ability to create new music. Similarly, researchers have found that structured tasks not only gave students an entry point to undertake the task and help provide initial success (Brophy, 1996; Burnard, 1995; Hamilton, 1999; Kratus, 1989), but also offered students a step-by-step sequence of instruction that provided a framework to guide and assess their work (Brophy, 1996). Additionally, DeLorenzo (1989) discovered that structured exploratory activities helped students reach higher levels of creativity and presented students with new ways to approach composition that might enhance their problem solving skills. Stephens (2003) argued for a structured approach because we, as humans, gravitate toward and associate with organized patterns and routines. Stephens (2003) stated: “Freedom does not come from the absence of guidelines or rules, but through the establishment of clear parameters within which decisions can be made” (p. 129).

However, structured activities may not be appropriate for all students. DeLorenzo (1989) cautioned that structured composition activities should be presented in such a manner that students realize the limitless creative possibilities within the task and are not focused on the task’s limitations. Wiggins (1999) offered an excellent metaphor to explain this predicament:

Music teachers who ask students to compose a piece that is twenty notes long should remember what it was like to write a hundred-word essay and spend more time counting words than thinking about its content. . . . In the same way, compositional assignments with restrictive parameters can cause students to focus on the extramusical, nonexpressive aspects of a project, and this can hamper rather than enable or promote the creative process. (pp. 31)

Structured activities might also limit the creativity of the individual student. Amabile (1996) remarked that constraint tends to impede creativity, but a “freedom in deciding what to do or how to accomplish the task stimulates creativity” (p. 231). Furthermore, Wiggins (1999) noticed that some music educators had a propensity to take children’s creative abilities for granted and would impose structured parameters on their students in an effort to promote...
compositional success. Csikszentmihalyi (1996) and Webster (1989) emphasized the need to find a balance between one’s ability and the degree of difficulty of the task for creativity to flow. The compositional task—structured or unstructured—should be aligned with the students’ cognitive and musical ability. Though an advocate for unstructured composition, Wiggins (1990) cautioned, “Free composition is the most difficult type of student composition and it should be attempted only after students have worked as a class and in small groups. It is not necessarily appropriate for all students” (p. 38).

Even in the most unstructured composition tasks, many researchers have observed children who demonstrated an innate ability to organize sounds into meaningful patterns (Campbell, 1991; Dunn, 1992; Kratus, 1989, 1994; Pond, 1981; Smith, 2004). In these studies children, in essence, naturally imbued a sense of structure within their unstructured composition task.

Preference and perception of composition. Whether participating in structured or unstructured composition tasks, appraising student preference is an important element when evaluating their perception of composition, as it might provide insight into their creative process. However, since student preference might be highly affected by the degree of difficulty (Kaschub, 1999), the two need to be evaluated congruently. However, few composition studies have documented student preference and only a small number of these studies asked students to rate the difficulty of task. This is a need for further research.

Studies revealed that preference was a convoluted theme in student composition activities. In Smith’s (2004) study with twelve 6th-grade children, the students completed two unstructured and four structured compositions—motive, phrase, poem and mood. Smith reported that the phrase task was perceived as the most difficult and was the least preferred. Smith surmised that the phrase she gave to the students might have been too long and difficult—as it contained a harmonic modulation (p. 201). Students preferred the unstructured tasks over the structured, even though these compositions were ranked lower in musicality. The structured poem was the second most preferred activity by the participants and was ranked as the second easiest work to compose.

This study contradicts the findings reported in Smith’s earlier research. In this study, Smith (1994) asked 18 children between six and twelve to compose in three different conditions: (1) unprompted, (2) using a five note motive, and (3) using a four measured phrase. Smith found that students preferred to compose without researcher imposed guidelines even though they rated the unprompted activity as being more difficult than the unstructured activities. These pieces were not as highly rated musically as the structured composition tasks.

In a study with 39 sixth-grade students, Kaschub (1999) found that two-thirds of the participants preferred unstructured parameters over the structured guidelines in a poem-setting task. She attributed the findings to the constraints of the poem used in the study, as the poem did not have regular phrases or a rhyme scheme.

McCoy (1997) reported that beginning sixth grade composition students (n=53) who participated in the most structured tasks would not enjoy additional composing opportunities, but those who participated in the less structured activities indicated a continued interest in creating new music. Conversely, in a study involving secondary school students who had previous musical experience, Burnard (1995) and Van Ernst (1993) found that students preferred compositional tasks that were more structured.

Student evaluations of preference and perceived degree of difficulty in these structured and unstructured composition studies were idiosyncratic. However, it could be
surmised that student preference mirrored their freedom of choice in making creative decisions (McCoy, 1999). Students’ perceived creative control seemed to positively affect their intrinsic motivation and perception of the composition task (Smith, 2004; Stephens, 2003).

**Pre-Service Teachers as Composers**

A review of the literature has revealed a lack of research investigating pre-service teachers as composers. However, several studies have examined pre-service music teachers’ acquisition of pedagogical content (Baker, 2010; Ballantyne, 2006; Gohlke, 1994; Fonder & Eckrich, 1999; Rohwer & Henry, 2004). Researchers have also investigated pre-service teacher’s self-concept and motivation (Schmidt, 2005; Schmidt, Zdindki & Ballard, 2006), and their opinions of effective teaching (Butler, 2001; Teachout, 1997). Pre-service music teacher identity has been studied through the work of Froehlich and L’Roy, (1985), L’Roy (1983) and Isbell (2008), Stauffer (2003), while others have examined creative identity within music education (Bennett, 2008; Draves, 2008; Randles, 2009, 2010a).

Research investigating pre-service music teacher’s creative self-efficacy seems to be lacking. Schmidt (1979) and Austin (1990) have measured upper elementary and junior high students’ musical self-efficacy using Schmidt’s Self-Esteem of Music Ability (SEMA) assessment. More recently, Draves (2008) used the SEMA to determine the musical self-efficacy of college students enrolled in a songwriting course. Though the students in the study included pre-service teachers, students outside of music education and non-music majors were also part of the study.

Randles (2010b) used the SEMA as a basis for his researcher-designed Creativity Identity questionnaire. In his study, Randles compared the creative self-efficacy of pre-service teachers in England and the United States. Randles (2010b) found that pre-service teachers in England had significantly higher creative self-efficacy than their American counterparts. However, Randles’ survey study did not ask participants to engage in any formal music making activities.

Forsythe, Kinney & Braun (2007) surveyed pre-service and in-service teachers and teacher educators to investigate the degree of importance they placed on certain activities in the field of music education. They found that though participants valued composition, they rated composition second lowest in importance out of a possible 48 categories. Furthermore, pre-service teachers ranked composition as the most difficult activity for students to learn (Forsythe, Kinney & Braun, 2007).

According to Reid (2003), music teachers typically teach as they were taught, with their instruction centering on performance based musical experiences. If music composition is to be taught within the classroom setting, instruction and compositional activities need to be offered to pre-service music teachers (Randles, 2010).
Purpose of Study

The purpose of this study, therefore, was to explore the perceptions and preferences of pre-service music teachers engaged in compositional tasks of various levels of structure. The study was guided by the following research questions:

1) Under which method of task structure—high, moderate or unstructured—do pre-service music teachers prefer to compose? What factors influenced their opinions?

2) Under which method of task structure did pre-service music teachers find easiest and hardest to create? What factors influenced their opinions?

3) By participating in several compositional tasks, does the experience influence their perceived ability to teach composition in their future classrooms?

Seddon and O’Neill (2001) suggested that participating in composition exercises could enhance a student’s creative self-confidence. Furthermore, Dewey (1938) advocated a learn by doing approach to education. Therefore, insight could be gained by having pre-service teachers participate in composition activities. Furthermore, exploring their perceptions and preferences might illumine pedagogical practices in music teacher education.

Method

Twenty undergraduate pre-service teachers enrolled in an elementary music methods course at a large southwestern university participated in three different composition tasks and reflected upon their experiences in a written survey. Before the actual composition task began, students were invited to explore Studio 49 xylophones—bass, alto or soprano—in an improvisatory fashion with two mallets to establish familiarity and comfort. Afterward, students completed three composition tasks: heavily structured, moderately structured and unstructured, as referenced by Strand & Newberry (2007) and Kaschub (1999).

The heavily structured task asked participants to compose a melody using a given rhythm. The rhythm was taken from a children folk rhyme, Queen, Queen Caroline:

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\[ \begin{array}{c|c|c} \hline & & \\
\hline & & \\
\hline & & \\
\hline \end{array} \]
```

Participants could use any pitches (or sounds) they deemed appropriate, but were confined to the given rhythm.
The moderately structured composition task required students to write music to a poem. In a similarly structured task, Kaschub (1999) found that students did not enjoy the poem task. She hypothesized that the poem task was too limiting and suggested that students should be given the option to choose between two poems. Thus, the two poems used in this study were:

- Cobbler, cobbler mend my shoe
- See the stars up in the sky
- Get it done by half past two
- Shining brightly through the night
- Stitch it up—stitch it down
- Light falls down—upon me
- Then I’ll give you half a crown
- Giving life for all to see

For consistency purposes, two poems had a similar metric beat and rhyming pattern. In an effort to encourage their creativity, participants were specifically not told to “put music to the words” or “describe the poem with music,” but were merely instructed to compose a short piece of music on a xylophone using a poem.

The last composition task invited the participants to compose a piece on xylophone without any guidelines or structure. The participants had 10 minutes to complete each composition. Previous research has indicated that this would allow sufficient time to compose each piece (Kratus, 1994; Smith, 2004). The participants completed each of the three tasks in a counterbalanced order to eliminate possible order effects. Each composition was videotaped to ensure the resulting product was consistent with the specific guidelines of the structured parameters.

Upon completion of each task, participants were immediately asked to reflect upon their experiences in an open-ended written survey. The questions were based upon a similar study by Kaschub (1999) and asked six questions ranging from degree of difficulty of the task, preference, and their rating of their composition (see Figure 1).

After completing all three music composition tasks and their corresponding written individual reflections, participants were asked to complete a short survey to encapsulate their experience. The questions compared the participants’ preference of all three composition tasks, degree of difficulty of said tasks, their perceptions of composition and its application to the music classroom (see Figure 2).

Three participants were randomly selected for a post-study reflected interview. The interview was conducted 2 weeks after their participation in the composition exercises. These selected students were videotaped while composing each piece to capture their creative process. During the interview, the participants watched themselves compose their pieces under the three task conditions and were invited to comment on their thought process and reactions as they were participated in the music making activities. The researcher asked the participants to elaborate when necessary during the interview to garner further insight and clarification.

Data were gathered through qualitative analysis of the surveys, interviews and responses from the participants. The results were coded for key words and trends. The coding was reviewed through peer-review analysis and deemed valid. Most of the participants were able to complete and reflect upon each composition task. However, due to time restrictions, this was not the case for every student. Participants who did not complete and respond reflectively to each task were removed from the study. Twelve, of the original 20, participants completed in each composition task and offered written reflection. This number included the three individuals who were selected for the interview.
Results

Preference for the resulting product of each of the three composition tasks appeared to be idiosyncratic. When asked, “Which piece did you like the best out of all three composition tasks?” the participants showed no favoritism. However, their mean scores, ranging from 1 (low) to 10 (high), reflected that they did not like the final product of their non-structured composition ($M = 6.67$) as much as the pieces composed under rhythmic task ($M = 6.96$) or the poem task ($M = 7.17$). Though the participants rated the poem task higher than the other two conditions, the difference was not statistically significant and had a negligible effect size, $F(2, 22) = .201, p = .819, \eta^2_p = .08$ (see Table 1).

Participants found that the non-structured task was the easiest condition to compose, and preferred it, along with the poem task, over the rhythmic task. In this study, composing to a given rhythm proved to be the least favored method of composition of the three methods.

When asked what they liked about each piece, most of the participants indicated that they liked the musical qualities of the rhythm and poem compositions. Interestingly, four participants remarked that they liked their use of harmony on their unstructured compositions. The overlying aspect that the participants liked least about the unstructured composition was that their piece was too simple. Most of the participants did not like being constrained to the rhythmic pattern on the rhythm task.

Regarding degree of difficulty, a majority of the participants found the unstructured and poem methods of composition easier than the rhythm task. When asked what aspect about the task made it hard or easy, participants’ responses were not definitive. For the unstructured composition, four students remarked that they enjoyed having no guidelines, however, others remarked that having no structure actually made the task more difficult. Similarly, participants cited that the limiting nature of the rhythm task proved to be challenging, whereas others reported that the structure made the task easier.

Participants indicated they enjoyed the overall composition experience, regardless of assigned compositional method. Several participants expressed frustration with the limitations of the instrument; they wished they had more sharps and flats or that the range of the instrument was larger. When asked if this experience changed the way they perceived composition, a majority of the participants indicated it had. A common theme in their response revealed that this was a new approach to composition that they had not thought of and that the structure offered them a place to begin the creative process. One of the interviewed participants remarked, “I liked doing this. . . I was a lot more creative than I gave myself credit for” (Cynthia, personal communication, May 3, 2010). Another student offered similar insight:

“I liked this. I felt like a kid (in a good way). It brought me back to the days in elementary school. It was exciting. I could break rules and not get into trouble. In theory class, we’re told we can’t play parallel 5ths, but here I could do whatever I wanted.” (Andrew, personal communication, April 20, 2010)

When asked if this experience changed their opinion on incorporating compositional activities in the classroom 9 of the 12 participants indicated it had. Many remarked that this experience was fun, engaging and creative; since they enjoyed participating in this creative endeavor, they surmised their future students would also enjoy it. One student remarked, “Yes, I would use this with my students. It is a way to get people interacting and get them involved. It opened ideas. Composition = involvement = enjoyment” (Johnson, personal
communication, April 20, 2010). Another participant commented, “I found that I can do this and not have to teach [composition] by computer” (Crystal, personal communication, April 20, 2010). Those that indicated that this experience did not influence their opinion on incorporating it in their classroom remarked that they still “do not understand how to incorporate [composition] into the band setting” (Robert, personal communication, April 20, 2010).

**Discussion**

Clearly, asking pre-service music teachers to engage in selected composition tasks was a novel experience for them. The results of this study, however, should be tempered due to a small sample size. There also was an inherent bias due to the study’s non-comparative experimental design. Nevertheless, there was indication that creative music making experiences with pre-service music teachers deserves consideration for further research.

The results of this study corroborated the findings of Kaschub (1999) and Smith (1994, 2004) who reported that compositions created in the poem task were rated higher than pieces written in other conditions. Similarly, this study was congruent with previous research that found unstructured compositions were preferred over the heavily structured pieces (McCoy, 1997; Smith, 2004), but were rated lower in overall musicality (Smith, 2004). However, this study contradicted Smith (2004) whose elementary subjects rated the unstructured task as very difficult. Pre-service music teachers in the present study perceived the unstructured and poem methods of composition easier than the rhythm task. This might be explained by the developmental differences between the subjects in the two studies, as previous research has suggested that one’s cognitive development could influence their compositional process (Kratus, 1989, 1994; Pond, 1981; Swanwick & Tillman, 1986).

As mentioned above, four participants remarked that they enjoyed incorporating harmony within their unstructured compositions. While there were no restrictions within any of the compositional tasks against the use of harmony, the participants seemed to incorporate harmony predominantly in the unstructured task more so than the other structured conditions. This discovery seems to agree with Loane (1984) who hypothesized that less structured pieces seemed to give students more ownership and freedom to be creative. Though only two participants used harmony within the poem task, harmony was not explored in the participants’ rhythmic compositions. This is an area that might garner further study.

Composing under the rhythm condition seemed to be disliked by the pre-service music teachers. Smith (2004) found a similar result. It might be assumed that while students’ perceived creative control seemed to positively affect their intrinsic motivation and perception the composition task, their lack of control might negatively impact their enthusiasm (Smith, 2004; Stephens, 2003).

Participants in the study mentioned that they were frustrated with the restrictions of the instrument, citing the lack of sharps and flats and the limited range of the xylophone. Others expressed a desire to compose on their principle instrument. Having pre-service teachers compose on their principle instrument might influence their creative self-efficacy and overall perceptions of composition. This also is an avenue for future research.
Researchers have documented student compositions that have displayed remarkable amounts of creativity and musicality in any task condition (Auh, 1995; Dunn, 1992; Jennings, 2005; Kaschub, 1999; Kennedy, 2002; Kratus, 1994; Wiggins, 1989), but also within teacher/researcher imposed guidelines (Levi, 1999; Smith, 2004; Wiggins, 1989). The findings in this study seemed to agree, based upon positive participant feedback under each condition. The notion that pre-service music teachers in this study found this experience to be “fun, creative, engaging, and like play” (Thomas, personal communication, April 20, 2010) while others learned, “I was a lot more creative than I gave myself credit for; I realized I could compose; and it challenged my creativity” (Jessica, personal communication, April 20, 2010). These comments might suggest that compositional activities need to be included in the music teacher-educator curriculum.

The results of this study warrant further research. There seems to be relatively few studies that have investigated pre-service teachers as composers. Studying the relationship between the pedagogy of composition and pre-service teachers’ creative self-efficacy might provide additional insight into their perceptions of composition. Furthermore, exploring different compositional methods or activities and measuring their effectiveness to improve pre-service educators’ degree of confidence in teaching composition might be useful to the field of music education. If music specialists are to present effective modeling techniques when teaching composition (Kaschub, 1997), they should be competent composers (Randles, 2009; Webster, 2003) as well as excellent pedagogues (Stephens, 2003; Wiggins 2003). Furthermore, if music educators and pre-service music teachers value student self-expression, then consideration should be given to activities that encourage their creative identity.
References


National Association for Music Education (MENC) (1994). *National standards in arts education: What every young American should know and be able to do in the arts.* Reston, VA: MENC.


Figure 1.

Composition Task #1 – Unstructured

1. What do you like about your piece?

2. What do you like least about it?

3. What was this experience like?

4. Was this experience hard or easy? What made it (hard or easy)?

5. Did you feel prepared to do this task (why or why not)?

6. On a scale from 1 to 10 (with 10 being the highest) how would you rate your piece? _____
What about the piece deserved the rating you gave it?
Composition Task #2 – Structured - Rhythm

1. What do you like about your piece?

2. What do you like least about it?

3. What was this experience like?

4. Was this experience hard or easy? What made it (hard or easy)?

5. Did you feel prepared to do this task (why or why not)?

6. On a scale from 1 to 10 (with 10 being the highest) how would you rate your piece? _____
   What about the piece deserved the rating you gave it?
Composition Task #3 – Structured Composition – Poem

1. What do you like about your piece? What did you like least about it?

2. What was this experience like?

3. Was this experience hard or easy? What made it (hard or easy)?

4. Did you feel prepared to do this task (why or why not)

5. How did the music match the poem?

6. On a scale from 1 to 10 (with 10 being the highest) how would you rate your piece? _____
   What about the piece deserved the rating you gave it?
Interview Form

(Fill out interview form after the completion of all three composition tasks.)

1. Which piece did you like the best out of all three composition tasks? Why?

2. Which piece was the easiest to create? Why do you think that was?

3. Which way of making up a piece did you like the best? Why?

4. Which way was hardest for you? Why?

5. Which way of making up a piece did you like the least? Why?

6. Does this experience change the way you perceive composition? How so?

7. Does this experience change your opinion on incorporating compositional activities in your classroom? If “yes” or “no,” then how so or why?
Table 1

Preferences and degree of difficulty for composition tasks

<table>
<thead>
<tr>
<th>Question</th>
<th>Rhy.</th>
<th>Poem</th>
<th>NS</th>
<th>NR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Which piece did you like the best out of all three composition tasks?</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2. Which piece was easiest to create?</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>3. Which way of making up a piece did you like the best?</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>4. Which way was hardest?</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>5. Which way of making up a piece did you like the least?</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>6. On a scale from 1 to 10, how would you rate your piece?*</td>
<td>6.96</td>
<td>7.17</td>
<td>6.67</td>
<td></td>
</tr>
</tbody>
</table>

Note: n = 12.
Rhy = Rhythmic Task (heavily structured)
Poem = Poem Task (moderately structured)
NS=Non-Structured Task
NR = no response
* Rating reflects the mean score.
Remain Or React: The Music Education Profession’s Responses To Sputnik and “A Nation At Risk”

Lauren Kapalka Richerme, Arizona State University

Abstract

The 1957 launch of Sputnik and the 1983 publication of “A Nation at Risk” shifted national education policy. Music educators promoted an “intrinsic value” of music philosophy following Sputnik and advocacy through politics and public performances following “A Nation at Risk.” Examining the history of the “intrinsic value” philosophy and advocacy reveals that music educators responded by continuing their existing language and practices rather than reacting to and transforming after either event. The political, social, and cultural contexts of these events may explain why music educators’ responses differed over time.

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A difference exists between responding and reacting. One would hardly say that a cat that lies motionless while its owner teases it with feathers is having a reaction. While the cat may be aware of the feathers and blink (a response), its lack of movement is a continuation of its current state rather than a reaction to something in its environment. Historically, the music education community has behaved much like the aforementioned cat, remaining stationary when confronted with new information. While the Soviet launch of Sputnik in 1957 and the Reagan administration’s release of *A Nation at Risk: The Imperative for Educational Reform* in 1983 transformed national education policy, a journey through the pages of the *Music Educators Journal* demonstrates that music educators were not transformed. Music educators recognized these events, but the rhetoric and philosophy of the music education profession did not result in an immediate change. A shift in language did occur in the years between Sputnik and *A Nation at Risk*, but other political and socio-cultural shifts during this time may better explain the change in music educators’ language.

**The Feathers: Sputnik and *A Nation at Risk***

On October 4, 1957, the Soviet Union successfully launched Sputnik I, the world’s first man-made satellite. According to NASA’s (2007) website celebrating the fiftieth anniversary of the event, “The Sputnik launch changed everything. As a technical achievement, Sputnik caught the world’s attention and the American public off-guard.” Prior to Sputnik, Americans thought of themselves as the world’s technological leaders, but the satellite launch suddenly demonstrated that Americans were not without competition. Beyond feeling uncomfortable with the thought of lagging in scientific exploration, Americans worried that Sputnik signaled a military threat from Russia. NASA (2007) reports: “The public feared that the Soviets’ ability to launch satellites also translated into the capability to launch ballistic missiles that could carry nuclear weapons from Europe to the U.S.” As a result of Sputnik, critics asserted that American schools should better match the “rigorous, science-based Soviet curriculum” (Rudolph 2002, 108).

Twenty-five years later, the 1983 report *A Nation at Risk* cited dropping test scores and lagging international competitiveness as indicators of poor teaching and inadequate student learning in American schools. The authors of *A Nation at Risk* proposed numerous solutions, including more rigorous graduation requirements, increased time in school, more competent teachers, and higher student expectations. The report mentioned the arts briefly: “A high level of shared education in these Basics, together with work in the fine and performing arts and foreign languages, constitutes the mind and spirit of our culture” (NCEE 1983).

Sputnik and *A Nation at Risk* produced markedly different initiatives in America’s education systems. Following Sputnik, President Eisenhower signed the 1958 National Defense Education Act, which provided Department of Health, Education and Welfare with one billion dollars - over the span of four years - for various science initiatives including loans and fellowships for college students and new school laboratory equipment. The National Science Foundation also received vastly increased funding for initiatives such as the Course Content Improvement Program, which led to changes in physics, chemistry, math, earth science, and biology curricula (Rudolph 2002, 109).
While historians of the Sputnik era viewed the reforms as aimed at increasing the number of scientists and implementing and developing curricula with “hard-science content,” those scientists producing the new curricula interpreted their work assignment differently. The curricula writers asserted that their work was “designed to foster an understanding of science among the majority destined for nonscientific occupations” (Rudolph 2002, 170). Thus, a major emphasis of post-Sputnik education reform was to provide the average person a basic understanding of current scientific discoveries and their importance through new curricula. For example, physics curricula expanded to cover waves and atomic energy (Rudolph 2002, 175).

After the publication of *A Nation at Risk*, in 1983, education topped the domestic policy agenda for the next twenty years (Fuhrman 2003, 7). *A Nation at Risk* impacted many aspects of school life, in contrast to the reforms following Sputnik, which centered primarily on math and science curricula. According to Fuhrman, the immediate reaction to *A Nation at Risk* was the “excellence movement,” which focused on raising student and teacher standards. Fuhrman argues that most improvement efforts occurred at the state level through increased funding coupled with “excellence policies.” While some states had initiated work on reform packages prior to *A Nation at Risk*, its release prompted other states to do the same (8).

Following *A Nation at Risk*, states also began to reexamine teacher certification requirements and to develop new accountability approaches center primarily on state-wide tests for students. In the late 1980s, some states began to create coherent policies detailing what students should be able to know and do in various subjects; these policies eventually led to the national standards movement, which encompassed many subjects (Fuhrman 2003, 10). This comprehensive standards movement following *A Nation at Risk* differed from the reform movement following Sputnik, which primarily involved science and math education.

So how did music educators respond?

**The Cat: Music Educators and their Responses to Sputnik and *A Nation at Risk***

The music education community took note of Sputnik and *A Nation at Risk* when they occurred and responded to these events in different ways. The pages of the *Music Educators Journal* reveal that the language in the years immediately following Sputnik differed from the language in the years following *A Nation at Risk*. In this section, I show that the launch of Sputnik, music education leaders such as Ensor and Benn espoused a belief in the “intrinsic value” of music and encouraged practitioners to promote their programs using this philosophy, which had been evident in the profession’s rhetoric for more than twenty years. In contrast, after the publication of *A Nation at Risk*, music educators foregrounded advocacy, a movement developed over a decade prior to *A Nation at Risk*.

**Sputnik**

Initially, the music community seems to have received the news of Sputnik with optimism. Writing in the *Music Educators Journal* in 1958, Fawcett (1958), Hanson (1958), and McBride (1958) asserted that music education would remain just as important as science education. They found support for this position from other education professionals; for example, the National Association of Secondary School Principals devoted an entire issue of the 1959 *Bulletin* to music education’s importance in secondary schools (Mark and Gary 1992, 220). Although some members of the music education community did not view Sputnik as a major threat to their profession, others posited that music educators must rally behind the idea of music for its own sake, arguing that music provided enrichment to human life in a manner that no other subject could (Richman, Dutsch, and Somers 1958).
Ensor 1959). The “intrinsic value” of music philosophy permeated much of the rhetoric of the day.

In the 1958 February-March issue of the *Music Educators Journal*, authors wrote about the need for the arts as a necessary foundation for all students. For example, Richman, Duntsch, and Somers (1958) state:

Scientists and technicians, yes, and the more the better. But the essential base before becoming a scientist or technician or anything else, is to obtain a glimpse of the broader horizons of life, the literature, the arts, the history, the philosophy, the language, the humanistic studies that constitute the foundation for our culture and place in relation with the ages and the experiences of mankind that have gone before. (64)

Similarly, in a 1958 article entitled “An Educator Looks at Music and the Arts in a Day of Science,” Fawcett argues that music teachers should take pride in their occupations and their role in educating a well-rounded human rather than solely a technological worker (23). These authors espoused the value of art for art’s sake; they considered music as a unique and necessary part of education.

Other music education leaders challenged practitioners not only to promote the intrinsic value of music, but also to share that value with their communities. Benn (1959) saw the post-Sputnik era as a time in which the public was becoming more concerned with traditional values and asserts that music teachers should better explain the values found within music to their communities. Benn writes:

But I believe that in a climate which is turning the public mind toward a heightened sense of values that the subjects which represent those values cannot be lost unless we, ourselves, allow it. What we need to do in this day is to equip ourselves musically and humanly to the demands of an expanded job, not a curtailed one. We must become much more articulate in making the nature of our subject, its demands and its values, known to administrators, townsfolk and students. (31)

Clearly, Benn viewed emphasizing the intrinsic value of music education to the public as an effective means of garnering community support.

Likewise, Ensor (1959), the supervisor of music in Easton, Connecticut, also admonished music educators to espouse a philosophy of music education that highlighted the properties of music that science lacked. Ensor writes, “Music is an interpretation of life which is emotional and appeals to the senses. Science, in contrast, is an interpretation of life which is addressed to the mind and deals with facts” (78). Ensor thought that music educators could most effectively promote their programs by recognizing what music could provide that science could not.

Six years later, an article entitled “Music Education in Transition,” Van Bodegraven (1965) considers the impact of Sputnik on music education writing, “The stress on academic excellence which was the aftermath of the shock induced by the 1957 launching of Sputnik, with its implied threat to the arts, also launched music educators on a re-examination of the position and function of music in our schools, the extent and intensity of which is unmatched within my memory” (1965a, 27). However, Van Bodegraven asserted that music education should be justified by pointing to the inherent qualities of music. Van Bodegraven speaks about the problems of justifying music education on non-musical grounds and states that “music belongs in an educational program because of its intrinsic values, values which have long been recognized by society” (28). Similarly, Leonhard
thought that music educators should respond to the post-Sputnik education climate by justifying their work using a philosophy that addressed music's unique power (1965, 60). Like Ensor and Benn, Van Bodegraven and Leonhard base their arguments in support of music education on the idea of music for its own sake.

While music educators took note of the launching of Sputnik, their language did not change. Figure 1 shows the number of references to “intrinsic value” and “advocacy” in the Music Educators Journal from 1928 until 2009. Music educators began using the phrase “intrinsic value” in 1928 and continued to use the phrase throughout the 1930s, 1940s, and 1950s. The Music Educators Journal contains five references to “intrinsic value” in 1954, one in 1955, and two in 1956. Ensor, Benn, Van Bodegraven, and Leonhard all discuss the importance of music’s intrinsic value after the launch of Sputnik. Thus, this rhetoric did not constitute a serious departure from the decades old ideologies in music education. Sputnik clearly entrenched rather than shifted music educators’ language.

Figure 1: References to “intrinsic value” and “advocacy” in the Music Educators Journal

A Nation at Risk

While music educators generally greeted Sputnik with optimism, they showed concern following the publication of A Nation at Risk. Although A Nation at Risk did not lead to calls for a unified music education philosophy, it did lead to increased pleas for advocacy from music education professors. Leaders of the profession viewed public performances, political involvement, and new music curricula electives as the most effective means of music education advocacy.

Shortly after the release of A Nation at Risk, some music education leaders maintained optimism. For example, LeBlanc (1983) argued that music “is not guilty of many of the shortcomings pointed out in the commission’s report” (31). Although both LeBlanc and Patchen (1984) noted the exclusion of the arts as one of the “basics” in A Nation at Risk could cause problems for music educators (27).

Other members of the music education community were more overt in showing their dissatisfaction with A Nation at Risk. The then current president-Elect of MENC, Paul Lehman (1984), wrote: “We are deeply disappointed that the Commission [that wrote A Nation at Risk] assigned the arts to a second tier of priority, clearly subordinate to the highest-ranked fields of study” (66). More alarmingly, other education professionals seem
to have abandoned music education. Following *A Nation at Risk*, the National Association of Secondary School Principals offered no statement of support as they had done following Sputnik.

Music education leaders saw increased advocacy as the remedy for their precarious situation. Leblanc (1983) listed recommendations for music teachers to follow in order to ensure the continued success of their programs, including taking initiative in national and local politics, keeping one’s program visible to the public by way of “showy” performances, not offering to do more work for less money, and asking for the necessary resources to accomplish one’s job (31). The use of “showy” performances is in direct contrast Ensor’s (1959) warning that “Music teachers will have to produce more than peppy bands and big shows to justify their existence” (78). These suggestions clearly lack the promotion of music’s intrinsic value that writers after Sputnik so passionately championed.

In “Your Role in Educational Reform,” Patchen (1984) lists a number of problems that might result for music educators as a result of *A Nation at Risk* and offers numerous suggestions for overcoming these problems. Patchen’s suggestions include reemphasizing community related activities, promoting more composition and improvisation, and including more world music into the music curriculum (27). Again, the emphasis is on performing in the community rather than explaining the intrinsic value of music to the public.

The then current president of MENC, Paul Lehman (1984) also asserted that music teachers advocate for their programs by stating, “We need to do a better job of informing the public of the value of our work and how well we are doing it” (66). He, along with Leblanc and Patchen, saw an array of possible advocacy efforts that music educators should undertake. In general, their advocacy ideas revolved around public performances.

Figure 1 illustrates that music educators did not change their language or tactics following the publication of *A Nation at Risk*, just as they failed to change in response to Sputnik. Music educators began using the term “advocacy” in the 1970s and continue to use it today. Mark claims the advocacy effort was the outgrowth of an increased emphasis on public relations in the mid 1960s (2002, 45). Throughout the 1970s, music education leaders began to advise practitioners to advocate through political means rather than a given philosophy. Articles such as “What to Do Now, before Crisis Strikes” (1981) demonstrate the strength of the advocacy effort prior to *A Nation at Risk* (Likens 39). The recommendations for increased advocacy that followed *A Nation at Risk* simply sustained a movement that began more than a decade beforehand. While it may have appeared that music educators reacted to Sputnik and *A Nation at Risk*, they actually continued promoting preexisting philosophies and advocacy strategies.

**Political, Social, and Cultural Context**

Music educators cannot escape the political, social, and cultural world in which they live; inevitably, their language and ideas derive from this world. Nealon and Giroux (2003) write: “If we avoid encountering the reflexive or critical questions of ‘theory’ – if we avoid asking ‘where do opinions come from?’ – then we risk a situation in which ‘Each day seems like a natural fact’: Everything seems self-evident; everything is the way it’s always been, the way it’s supposed to be” (5). In the intervening years between Sputnik and *A Nation at Risk*, music educators changed their approach to handling national education policy events. Different political, social, and cultural events from the 1950s to 1980s may help explicate possible reasons for the shift in the music education field’s thinking.
In the 1950s, conformism, respect for authority figures, and a fear of the other permeated society. Riesman, Glazer, and Denney’s 1950 book, *The Lonely Crowd*, explains that Americans had become “other-directed,” seeking approval by mimicking their neighbors’ behaviors and politics (22). As most Americans sought to adopt the ways of their peers, they also grew increasingly apprehensive about those who did not share their values. The Second Red Scare, which lasted from 1947 until 1957, sought to blacklist those who were “un-American,” hence uniting the average American against a common enemy. Similarly, victory in World War II increased Americans’ pride and patriotism. The rise of television as the dominant media in 1950s America also suggested a unified view of the country. With limited channels and shows such as “I Love Lucy” and “Leave it to Beaver,” television reinforced the community ideals of the time, at least for some. Together, these events and attitudes created an appearance of common values among Americans. Consistent with the spirit of conformism, a philosophy based on the “intrinsic value” of music seems only natural.

The 1960s saw increased funding for education and the start of drastic social changes in American society. The Elementary and Secondary Education Act (1965), one of President Lyndon Johnson’s Great Society initiatives, provided additional funding for schools. Additionally, both the Johnson administration and the Civil Rights Movement promoted education as a way to end racial inequality (Berube 1991, 62). During this time, music educators made more references to the “intrinsic value” of music than at any other time in history (See Figure 1). Perhaps a positive public view of education coupled with increased government funding allowed music educators to feel unassailable; therefore, they saw no reason to respond to changing social currents.

Recognition of multiple viewpoints would soon replace the 1950s idea of singular American values. Friedan’s 1963 book *The Feminine Mystique* explored the frustrations of educated women who felt unsatisfied with their roles as mothers and housewives. The sexual revolution, questioning of authority and conformism in the counterculture movement, and the anti-war movement all surfaced in the 1960s. Clearly, one value system could not encompass this increasingly disparate American society. However, music educators would wait until the 1970s to change their philosophy. In the 1970s, music educators almost completely ceased using the term “intrinsic value” while the term “advocacy” made its first substantial appearance (See Figure 1). Continuing re-evaluation of the Western value system, as well as an increased state and federal government role in education, may help explain this change in language.

As the counterculture, feminist, and anti-war movements continued outside of the classroom, teachers also began to move towards a more pluralistic view of the world. Leaving teacher-directed, behaviorist psychology behind, the education field became dominated by the cognitivist philosophy of Piaget and Bruner. Piaget and Bruner identified children as independent learners, beings capable of creating their own meanings from given learning materials (Rideout 2002, 34). At the same time, schools disposed of singular value systems, turning toward curricular initiatives such as multicultural education (Grant and Tate 1995).

As American education became more mired in national and state politics, the idea of music education advocacy filled the void left by “intrinsic value.” Nixon and Ford maintained but did not improve Johnson’s Great Society initiatives (Berube 1991, 47), and

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73 The First Red Scare (1919-1920) grew out of fears following the Bolshevik Russian Revolution of 1917. The Second Red Scare (1947-1957) resulted from concerns of communist espionage after World War II.
the public opinion began turning against education. In 1969, Gallop polling indicated 45% of Americans would have voted for increasing local taxes to fund education. However, by 1970 and 1980, the number had declined to 37% and 30% respectively (Elam 1990, 186). The advent of integration busing may account for part of this decline. While segregated schools were banned in 1954, the 1971 Swann versus Charlotte-Mecklenburg Board of Education Supreme Court decision upheld the constitutionality of using busing to end segregation. In 1971, when asked to rank their most pressing concern for their local schools, Americans ranked integration busing as second only to discipline. This trend continued throughout the 1970s (Elam 1990, 182). Busing, along with an increasing number of suburban enclaves, led not only to the replacement of geographic neighborhoods with artificial ones, but also may have increased white flight to the suburbs (Farley et al. 1980, 131). These new, disparate communities may account for music educators’ increased use of the term “advocacy.” Small communities create interpersonal lines of communication, therefore the transfer of knowledge and value occur without added advocacy efforts. As school busing caused neighbors to attend different schools and suburbs created a more geographically-divergent society, advocacy suddenly became imperative.

Political involvement by both anti-war protesters and the National Educators Association’s (NEA) may also account for music educators’ increased use of advocacy. As the anti-war protests continued into the early 1970s, average citizens became increasingly aware that they could voice their opinions about government policies. Later, for the first time in history, the NEA supported a presidential candidate, Jimmy Carter, in his bid for office. The NEA then pressured Carter to create the national Department of Education, which was established in 1979 (Berube 1991, 50). If the largest teachers union in the country could use politics to gain political favors, it seems reasonable that music educators would turn to politics and advocacy as well.

By the 1980s, individualism and consumerism dominated society while standards dominated education. During this time, music further became a product of the media and the market; America saw its first MTV music video in 1981 and its first CDs in 1982. 1980s phrases such as “If you’ve got it, flaunt it!” “You can have it all!” and “Shop ‘til you Drop!” expressed both individual empowerment and a society that preferred image over values. In education, a backlash against the cognitivist school of thought led to an emphasis on standards and norms. President Reagan appeared to value standards, preaching the language of “excellence reform” while simultaneously seeking to reduce the education budget (Berube 1991, 87). The 1980s may have been the period in which music educators became most disconnected from society. Music educators focused on local advocacy rather than recognizing the growing need for national political involvement. Music educators also appeared to ignore the growing public and political language of standards. While Patchen initially posited the possible need for local, state, or national standards in 1984 (6), the next article in the Music Educators Journal to mention standards did not appear until 1990 (Collegiate, 17). Furthermore, music educators failed to address the continued rise of music as a commodity and what that might mean for the music they taught and thus sold. Music educators’ language and ideas from the 1950s to 1980s did not exist independently from the changing political, social, and cultural world. The conformity of the 1950s allowed a philosophy praising the “intrinsic value” of music to flourish while the pluralistic 1960s and 1970s made such an idea untenable. Advocacy arose just as communities became more geographically isolated and the NEA became more politically involved. Other factors may have also influenced the shift in music educators’ thinking throughout these decades.
Conclusion

In the years following both Sputnik and *A Nation at Risk: The Imperative for Educational Reform*, music educators wrote about the decline of music education programs, attributing this downturn in part to these two watershed events. For example, Van Bodegraven (1965b, 68) and Leonhard (1965, 60) wrote that the increased emphasis on science following Sputnik had detrimental effects on music education. Similarly, Richardson (1986, 30) and Delzell (1987, 43) mourned that *A Nation at Risk* did not list the arts as one of the new basics. To what extent Sputnik and *A Nation at Risk* hastened a decline in music education programs remains uncertain. However, the profession’s decision to continue current language and practices following each event did not help the status of music education.

It is imperative for music educators to be cognizant of the political, social, and cultural contexts of their statements. While it may seem only natural that an idea such as the “intrinsic value of music” - which derives from the first part of the twentieth century in music education - has lasting power, history has proved this assumption false. Due to technology and globalization, society and culture change more rapidly now than at any other time in history. The language and ideas of the past may no longer be appropriate for our current and future interactions. Policy makers and community members at all levels must find their discourses informative and meaningful. Anything less alienates society as a whole.

With these lessons in mind, I offer suggestions for how music educators might work within the current political, social, and cultural climate. The Obama administration continues to use the language of standards and accountability, as evidenced by the criteria for receiving funding from the “Race to the Top” program (see Figure 2). States gain 23% of the points in their “Race to the Top” applications by developing standards and assessments and using data to support instruction (Parts B and C). The current discourse necessitates that music teachers use the language of standards and assessments to explain and justify their practice to administrators and the public. We must ask ourselves many tough questions regarding our current national standards: Are these standards sufficient to meet our profession’s current needs? Are we teaching these standards? Are we assessing our students on these standards? Absent these standards, do we disappear?
Race to the Top Selection Criteria

**A. State Success Factors (125 points)**
(A)(1) Articulating State’s education reform agenda and LEAs’ participation in it (65 points)
(A)(2) Building strong statewide capacity to implement, scale up, and sustain proposed plans (30 points)
(A)(3) Demonstrating significant progress in raising achievement and closing gaps (30 points)

**B. Standards and Assessments (70 points)**
(B)(1) Developing and adopting common standards (40 points)
(B)(2) Developing and implementing common, high-quality assessments (10 points)
(B)(3) Supporting the transition to enhanced standards and high-quality assessments (20 points)

**C. Data Systems to Support Instruction (47 points)**
(C)(1) Fully implementing a statewide longitudinal data system (24 points)
(C)(2) Accessing and using State data (5 points)
(C)(3) Using data to improve instruction (18 points)

**D. Great Teachers and Leaders (138 points)**
(D)(1) Providing high-quality pathways for aspiring teachers and principals (21 points)
(D)(2) Improving teacher and principal effectiveness based on performance (58 points)
(D)(3) Ensuring equitable distribution of effective teachers and principals (25 points)
(D)(4) Improving the effectiveness of teacher and principal preparation programs (14 points)
(D)(5) Providing effective support to teachers and principals (20 points)

**E. Turning Around the Lowest-Achieving Schools (50 points)**
(E)(1) Intervening in the lowest-achieving schools and LEAs (10 points)
(E)(2) Turning around the lowest-achieving schools (40 points)

**F. General Selection Criteria (55 points)**
(F)(1) Making education funding a priority (10 points)
(F)(2) Ensuring successful conditions for high-performing charters and other innovative schools (40 points)
(F)(3) Demonstrating other significant reform conditions (5 points)

(U.S. 2009, 3)

Figure 2: “Race to the Top” Selection Criteria

Our profession must reexamine the content of our national standards, as well as how current practitioners teach and assess these standards. Nealon and Giroux (2003) write that:

Social customs are deeply ingrained, and the conventions of social systems are therefore impossible to change simply through any given individual’s action. Language, Saussure points out, is perhaps the greatest example of this point: Because language is an arbitrary social system of meaning based on long-held conventions, it’s highly resistant to change. (138)

Historically, as demonstrated in this article, music educators’ language changes very slowly. The standards movement grew out of *A Nation at Risk*, and yet even now, almost three decades later, the music education field has not fully adopted this language, particularly that of assessment. We cannot continue our uncritical and often superficial use of the language of standards and assessments. Benedict (2007) argues the music education field should stop defining itself by the goals and language of other subjects. I believe we must either fully adopt meaningful standards and assessments in all schools or redefine ourselves without such language.
Similarly, as the idea of pay for performance becomes ever pervasive in Washington, the use of standards and assessments may someday help calculate our salaries. Twelve percent of a state’s “Race to the Top” points come from improving teacher and principal effectiveness based on performance (Part D2). If we as music education teachers and leaders do not take the lead in defining our success, either by standards or by some other metric, others will most certainly define “success” for us.

Additionally, the Obama administration continues to emphasize the importance of raising achievement for all students. Sixteen percent of a state’s “Race to the Top” funding points target the improvement of low performing schools and closing the achievement gap (Parts A3 and E). As states look for ways to help low achieving students, music educators have an opportunity to be part of the solution. However, doing so will require effecting large changes in music educators’ practice. Music teachers must reach out to low performing students and make them feel at home in their music classrooms. By offering classes that students want to take, such as guitar, African drumming, or electronic music, teachers can help students find an entryway into music. Too often, these nontraditional classes are seen as filler rather than as an integral part of our work. Koza (1993) writes: “Music education has a history of adopting inclusive rhetoric while simultaneously reinforcing hegemony” (227). Our current political and social climate necessitates that we offer all students meaningful musical experiences.

Sputnik and A Nation at Risk shifted American education policy. Unfortunately, music educators’ failed to change their language or actions as a result of either event. The music education community is the motionless cat. As politicians again wave feathers in front of us, we must now decide whether we remain passive or react.
References


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