Editorial Note

I am pleased to present the Proceedings of the 2009 Desert Skies Symposium on Research in Music Education. This year the Desert Skies Symposium on Research in Music Education celebrated its 11th anniversary and continues to be the music education research symposium with the most longevity of those symposia not associated with a professional organization. The text from Dr. Rideout’s opening presentation provides an overview of research in the 20th century, while Dr. McCarthy’s and Dr. Sevigny’s keynote speeches focus on The Sounds of School Music in Sync with the Currents of a Global Society: Music Education Research in a New Key and Critical Diagnostics and Performance Appraisal in the Art, respectively. The seven full-length papers in these Proceedings address a wide variety of research topics and methodologies, and it is my hope that readers find them informative and thought-provoking.

Shelly Cooper, 2009 Director
Desert Skies Symposium on Research in Music Education
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The Program
of the

Eleventh Biennial
Desert Skies Symposium on Research in Music Education

Sponsored by
The University of Arizona
College of Fine Arts
School of Music

February 19-21, 2009

The Windmill Suites at St. Philip’s Plaza
Tucson, Arizona

Symposium Director:
Dr. Shelly Cooper
Welcome

Welcome to the eleventh biennial Desert Skies Symposium on Research in Music Education. Participants in this symposium will share diverse research topics and methodologies. It is my hope that the 2009 Desert Skies Symposium will prove to be a stimulating forum for you to encounter new ideas, view traditional topics in innovative ways, and enjoy the collegial atmosphere of mutual interests in music education research.

Shelly Cooper  
Symposium Director

2009 National Advisory Board

Shelly Cooper, Symposium Director  Robert A. Cutietta  
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Florida State University  Trinity University

Roger Rideout  Joanne Rutkowski  
University of Massachusetts  The Pennsylvania State University

Sandra Stauffer  David J. Teachout  
Arizona State University  University of North Carolina at Greensboro

Linda Thompson  
Lee University

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

Dr. Maurice J. Sevigny, 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

This project has been made possible by a grant from the College of Fine Arts Dean’s Fund for Excellence and the School of Music Director’s Discretionary Fund.
THURSDAY, FEBRUARY 19, 2009

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

6:00 pm  Opening Remarks

6:00 - 7:00 pm  Opening presentation by Dr. Roger Rideout (Opening Speaker)
Looking Backward: Research in the 20th Century

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:

Frank Abrahams, Westminster College of the Arts at Rider University
Examining the Preservice Practicum Experience of Undergraduate Music Education Majors — Exploring Connections and Dispositions Through Multiple Perspectives: A Critical Grounded Theory

Karel Butz, Indiana University—Bloomington
Bowing Sequence and its Effect on Tone Quality and Intonation

Tami Draves, University of Arizona
Music Achievement, Self-Esteem and Aptitude in a College Songwriting Class

Mark Montemayor, University of Northern Colorado—Greeley
Differences in Ensemble Evaluation Judgments among Secondary-Level and Collegiate Instrumentalists

Karen Salvador, Michigan State University
Perspectives on Voice Amplification and Occupational Voice Disorders in the High School Choral Classroom: An Instrumental Case Study

8:45 - 9:45 pm  Evening Reception
FRIDAY, FEBRUARY 20, 2009

9:00 - 10:00 am  Dr. Marie McCarthy (Keynote Speaker), University of Michigan  
*The Sounds of School Music in Sync with the Currents of a Global Society: Music Education Research in a New Key*

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

10:30 - 10:45 am  Break

10:45 am - 12:15 pm  SYMPOSIUM RESEARCH SESSION #2

  10:45 – 11:00  2-Minute Overviews from Presenters
  11:00 – 12:15  Rotation of 3 Breakout Sessions

*Presenters:*

**Bernadette Colley**, Boston University & **Gillian Clements**, St. Ignatius College Preparatory, San Francisco  
*Toward Applied Research in Music Education: The Case of Bi-musicality in situ*

**Donald Hamann**, University of Arizona & **Joshua Russell**, University of Arkansas—Fayetteville  
*Perceived Impact of String Programs on K-12 Music*

**Nathan Kruse**, University of North Texas—Denton  
*Adult Community Musicians’ Self-Esteem of Music Ability*

**Peter Miksza**, University of Colorado—Boulder & **Kevin Watson**, Indiana University—Bloomington  
*An Empirical Investigation of Pre-Service Music Teacher Identity and Development*

**Mitchell Robinson**, Michigan State University  
*From the Band Room to the General Music Classroom: Why Instrumentalists Choose to Teach General Music*

**Jeff Ward**, East Carolina University  
*A Study of The Effects Of Perceptual Modality And Interrelated Arts Instruction on Student Achievement In The High School Choral Classroom*

12:15 - 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:

Beth Gibbs, The Pennsylvania State University
*Assessing Pre-Service Music Teachers: Piloting a Measure of Pre-service Teacher Responsiveness*

Neryl Jeanneret, The University of Melbourne
*Arts Partnerships, Schools, and Research*

Julie Kastner, Michigan State University
*Young Children’s Responses to Familiar and Unfamiliar Activities*

Melissa Mills, University of Maryland
*The Effects of Participation in a Community Children’s Choir on Participant’s Identities*

Elizabeth Parker, University of Nebraska—Lincoln
*Student Experiences of Belonging within an Urban High School Chorus*

Kevin Tutt, Sara Black, & Catherine McCulloch, Grand Valley State University
*An Analysis of Selected Musical Concepts Present in Significant Band Repertoire*

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:

**Wesley Brewer**, Arizona State University
*Inside/Outside: School Music on “The Line”*

**Julie Hagen**, Michigan State University
*The Importance of Environmental, Musical, Performance, and Referential Factors on Middle School Choral Students’ Preferences for Performance*

**Steven Kelly**, Florida State University & **Jay Juchniewicz**, East Carolina University—Greenville NC
*An Investigation of Social and Musical Objectives and Experiences Sought by Instrumental Students Attending a Summer Music Camp*

**Constance McKoy**, The University of North Carolina at Greensboro
*Cross-Cultural Competence of Student Teachers in Music Education*

**Diane Persellin**, Trinity University & **Rachel Nardo**, University of Utah
*Developmentally Appropriate Assessment in Early Childhood Music*

**Joshua Slagowski**, University of Colorado- Boulder
*Reed-Making and Oboe Community of Practice*

The evening is free
SATURDAY, FEBRUARY 21, 2009

9:00 - 10:00 am  Dr. Maurice Sevigny (Keynote Speaker), University of Arizona
                 Critical Diagnostics and Performance Appraisal in the Arts

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:

Matthew Garrett, Florida State University
An Examination of High School Chorus Directors’ Attitudes Toward
Non-Traditional Music Classes

Lori Gray, Arizona State University
The Enduring Qualities of a Music Teacher: An Autoethnographic
Reflection On my Experiences as a Music Teacher

Wendy Mazon, University of Arizona
The Effect of the Breath Builder™ on Various Lung Functions and
Musical Performance Abilities of Clarinet Players

Dale Misenhelter, University of Arkansas & Keith Kaiser, Ithaca College
Functions of Music: Teacher and Student Perceptions of Sociological Value

James Reifinger, University of Louisiana—Monroe
The Effect of Instruction with Solfege and Related Songs on Second Graders’
Acquisition of Pitch-Reading Skills

Virginia Wayman Davis, University of Texas—Pan American
An Exploratory Study of Secondary-School Pupils’ Perspectives Regarding
the Student Teachers in their Classrooms (Preliminary Results)

12:15 - 12:20 pm  Concluding Remarks

12:20  The Conference ends
Symposium Speakers

Dr. Roger Rideout (Opening Speaker)

For the last ten years Roger Rideout has been Professor of Music Education at the University of Massachusetts. For eighteen years prior to that he taught at the University of Oklahoma. He has published twenty-six articles, four book chapters and edited five collections of papers presented at symposia relating to issues and topics in music education. He has been on the Desert Skies board since 2000.

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Dr. Marie McCarthy (Keynote Speaker)

Marie McCarthy is Professor and Chair of the Department of Music Education at the University of Michigan. Prior to this position, she was on the faculty of the University of Maryland from 1990 to 2006. She has taught courses on general music, music learning theories, music cultures in the classroom, and research methods in music education. Her research studies have focused on the historical, social and cultural foundations of music education. Publications include two books, *Passing It On: The Transmission of Music in Irish Culture*, and *Toward a Global Community: A History of the International Society for Music Education, 1953-2003*.

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Dr. Maurice Sevigny (Keynote Speaker)

**Dr. Maurice J. Sevigny** currently serves as the Dean of the Faculty of Fine Arts at the University of Arizona. He was born in Amesbury, Massachusetts and taught high school art after graduating from the Massachusetts College of Art. He then completed M.A. and Ph.D. degrees from The Ohio State University and was a participant in both "Project Zero" and later the Management Development Program at Harvard University. He also spent a post-doctoral sabbatical in painting and figurative art in LaNapoule Art Foundation, in France. Prior to moving to Tucson, Dr. Sevigny held the position of Marguerite Fairchild Centennial Professor of Art and Chairman of the Department of Art and Art History at The University of Texas at Austin. He was visiting Scholar and researcher at the Rohampton Institute, London. Previous to that he served for nine years as the Director of the School of Art at Bowling Green State University, in Ohio. He began his university teaching career at Western Kentucky University in Bowling Green, Kentucky. Dean Sevigny is a recognized leader, consultant and scholar of teaching in the visual arts and frequent consultant to the National Gallery of Art and the Getty Center for Education in the Arts. He is listed in *Who’s Who in American Art* and has served as an Executive officer for the National Art Education Association, The National Council for Art Administrators, the National Council for Policy Studies in the Arts and is past-President of the International Council of Fine Arts Deans. He also maintains an active painting and digital arts studio in the Tucson Arts District Partnership.

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Abstracts
(Listed Alphabetically by Author)

Examining the Preservice Practicum Experience of Undergraduate Music Education Majors — Exploring Connections and Dispositions Through Multiple Perspectives: A Critical Grounded Theory

This grounded theory studied the relationship between the college methods class and the off campus practicum experience. The study included nine undergraduate music education majors enrolled in a methods course designed to prepare them to teach music in secondary schools. Also included were three in-service teachers who served in the role of cooperating teachers for the practicum portion of the experience. Content for the on campus methods class was altered to accommodate the programs where students would be working. Data included reflections from the students during a weekly on campus seminar, informal interviews with the cooperating teachers, observations of the students at the practicum sites, and written evaluations of the students by the cooperating teachers. As a result of open, focused and axial coding several themes emerged that confirmed literature stating that despite best efforts, the on campus course and off campus practicums do not connect. The study did reveal that the on campus methods class and off campus practicum experience did contribute to emerging teaching dispositions.

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Inside/Outside: School Music on ‘the Line’

Three students of differing racial backgrounds share their stories of participation in school band in a rural community on “the Line,” the U.S./Mexico border. While the population of the schools was over 90% Hispanic and Spanish language was prevalent, the demographics of the school band did not mirror those of the community. Through exploration of three students’ experiences of race, language, class, and culture in relation to school music, I examine the possibilities of my complicity in perpetuating potentially exclusive teaching practices.

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Bowing Sequence and its Effect on Tone Quality and Intonation

The purpose of this study was to examine whether instruction in the martelé, detaché, or legato bow strokes would affect achievement in tone quality and intonation among beginning violinists. A total of 27 sixth grade violinists from three separate schools participated in this investigation. Each school group was randomly assigned to one of three treatments: martelé (n=8), detaché (n=11), and legato (n=8). Data were collected based on participants’ pre- and post-test performance scores of a melody composed by the principal investigator. Results of an ANOVA procedure indicated a statistically significant difference (p < .05) among the martelé, detaché, and legato groups in tone quality favoring the martelé treatment. No statistically significant differences were found for intonation among the martelé, detaché, and legato groups. However, the martelé treatment group showed a significant gain (p < .01) in intonation from pre- to post-test. These findings suggest that learning the martelé bow stroke results in better tone quality and intonation in sixth grade level violinists.

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**Toward Applied Research in Music Education: The Case of Bi-musicality in situ**

This presentation makes a case for applied research in music education by presenting first an overview of its benefits as a research model in other fields, suggesting its particular usefulness in educational and cultural institutional settings. An operational distinction between action research and applied research is clarified as a basis for discussion. Examples of applied research from industry and technology, sports education, tribal education are presented as examples relevant to applied research in music education. Secondly, results from an applied research project testing Mantle Hood’s concept of bi-musicality at the Mount Kenya Academy in Nyeri, Kenya are presented. The study addressed two questions: how was bi-musicality schooled at the Mount Kenya Academy, and to what degree did students achieve bimusicality? Data from interviews, questionnaires, participant-observations, program document analysis, videotape analysis, and daily journaling support the claim that bi-musicality, as it is achieved by certain students Mount Kenya Academy, is inextricably linked to biculturalism. Thus, when theoretical constructs of “bi-musicality” and “authenticity” are studied as contextualized phenomena situated in a dynamic evolving environment, the need for an applied understanding of these terms is underscored. The presentation concludes with suggestions for similar applied research prospects in music education.

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**An Exploratory Study of Secondary-School Pupils’ Perspectives Regarding the Student Teachers in their Classrooms (Preliminary Results)**

The purpose of this study is to determine how pupils view the student teachers in their classrooms. In this exploratory study, secondary school music students were asked to evaluate the student teachers assigned to their music classes as well as discuss their feelings regarding the experience of being taught by a student teacher. Participants in this study were 136 middle- and high-school students from a medium-sized southern city, who were enrolled in one of three types of school ensemble: band, choir, and orchestra. All of the students were in music classes with a student teacher in residence. Three student teachers were represented in the preliminary phase of this study. Based on the information compiled from the related literature, a questionnaire containing 20 questions was constructed to survey the pupils regarding their experience with the student teacher. In the questionnaire, pupils were asked to respond to questions regarding the student teacher’s delivery, classroom management, knowledge of subject matter, and warmth/enthusiasm/fairness. Results indicate that pupils rated the student teachers favorably in creating good relationships with the students and in improving their teaching skills. Certain delivery and classroom management skills were rated lower. Some
gender differences were also shown, with girls rating the student teachers more favorably on some items than did male students.

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**Music Achievement, Self-Esteem and Aptitude in a College Songwriting Class**

The purpose of this mixed-methods study was to examine the relationships between music achievement, musical self-esteem, and music aptitude of subjects ($N = 20$) in a Songwriting course for undergraduate non-music majors. Criterion measures used were *Advanced Measures of Musical Audiation, Self-Esteem of Musical Ability*, and ratings of subjects' original compositions. Two judges rated the compositions using a researcher-designed rating scale. Journals kept by students throughout the semester were coded and analyzed for the following themes related to musical self-esteem: Personal Desire/Interest, Support/Recognition from Others, and Perceived Music Ability. Significant relationships (at least $p < .05$) were found between all criterion measures. With encouragement from teachers and opportunities for social music-making, more students may develop a greater interest in music, achieve at higher levels, and be more likely to continue music instruction. Replication with larger samples, samples of different age levels, and in other geographic areas is recommended.

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An Examination of High School Chorus Directors’ Attitudes Toward Non-Traditional Music Classes

This study examined high school chorus director’s attitudes toward non-traditional music classes. Participants (N = 96) completed a 4-part survey by first ranking their preference for teaching 10 non-traditional music classes. Subjects then rated items from 1 (would not motivate/deter me) to 5 (would definitely motivate/deter me) regarding their attitudes toward teaching a non-traditional music class. Remaining questions collected demographic data including: (1) school music program size, (2) community profile, and (3) years of teaching experience. Results suggest classes that received the highest mean scores, Music Theory (M = 7.44) and Piano (M = 6.96), may be more familiar to teachers on some level. Classes with the lowest mean scores were Music Synthesis/MIDI (M =3.88) and Audio Recording/Engineering (M =3.69). Perhaps the specialized nature of these courses made them less appealing to the subject pool. MANOVA computation indicated no significant difference among teacher attitudes and program size, community profile, and years of experience. Findings suggest that the attitudes of teachers reflect their uniquely individual personalities and may not be influenced by any common factors.

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Assessing Pre-Service Music Teachers: Piloting a Measure of Pre-service Teacher Responsiveness

The purpose of the study was to determine the suitability of a researcher developed observation rating form to measure teacher responsiveness during peer teaching episodes. Specific questions addressed in the study included: Does the measure yield consistent observations among raters? Is the measure an accurate reflection of raters’ perceptions of pre-service teacher responsiveness? What do raters perceive to be the strengths and weaknesses of the measure?

The raters for this study were music education graduate students and faculty who viewed peer teaching excerpts from an instrumental music education class. Each rater will independently viewed the peer teaching excerpts two times, a week apart. Upon the first viewing, the raters completed the researcher designed Teacher Responsiveness Observation Flowchart. A week later, the raters viewed the peer teachings again, using the Teacher Responsiveness Observation Flowchart to record their ratings. Following the second viewing, raters were interviewed about the strengths and weaknesses of the tool and completed a questionnaire to provide
suggestions for improvements. Results of this study may be helpful in providing information about the development of assessments for pre-service teachers.

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The Enduring Qualities of a Music Teacher:
An Autoethnographic Reflection On my Experiences as a Music Teacher

In this autoethnographic study (Diamond, 1992; Ochs and Capps, 1996), I examined qualities of my teaching—my actions, responses, and decision-making—in two different school communities, to better understand the personal and professional qualities of music teachers and to examine whether and/or how those qualities endure or change in different settings. Data were obtained through journaling, informal discussions with fellow teachers at each school setting, written narratives of personal experiences, and an interview conducted with me by a colleague. The four pairs of narratives, each pair containing a narrative from each school community, were analyzed for teacher personal qualities. This study examined the intersection of teacher personal qualities, teacher practices, and the nature of different school communities.

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The Importance Of Environmental, Musical, Performance, and Referential Factors
On Middle School Choral Students’ Preferences for Performance

The purpose of this study is to determine what factors affect middle school choral students’ preferences for performance literature. The specific problems were (1) to determine which factor(s) (environmental, musical, performance, or referential) most affect middle school choral students’ preferences for performance literature, and (2) to determine if there is there a difference in importance of any of the factors by gender. Subjects (N=81), choral music students in the seventh and eighth grades, completed a questionnaire that included gender and grade level. Additionally, the questionnaire asked to students to list their favorite choir piece and respond to 16 musical preference statements regarding that piece. Each of the 16 statements was representative of one of four preference factors, with four statements representative of each of the four preference factors.
musical, performance, and referential. Results indicated that musical factors ranked significantly higher than performance, referential, or environmental factors. Also, performance factors were ranked significantly higher than either referential or environmental factors. It was found that the female participants ranked each of the factors significantly higher than did the males.

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**Perceived Impact of String Programs on K-12 Music**

The purpose of this study was to examine music teacher perceptions regarding the impact of string programs on overall music programs in K-12 schools. A researcher-created questionnaire was sent to all music educators who were members of MENC during 2007 in two southwestern MENC states (N = 308). Data were analyzed using principal components analyses and correlational analyses. It was found that 98% of music teachers felt that string programs were beneficial: they offered expanded opportunities for student musical, social, and intrapersonal growth as well as enhanced interaction and programmatic development among all music/arts programs. Which, in turn, strengthens community, parental, and administrative support for music and arts programs.

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**Arts Partnerships, Schools, and Research**

In addition to a growing number of arts partnerships with education in Australia, there has also been an increasing interest by arts organizations in investigating the impact of their programs through more rigorous examination and in collaboration with researchers (for example, ArtPlay, 2006; Arts Victoria, 2008; The Song Room, 2008). In 2006 the Australia Council for the Arts funded an ambitious two year arts partnership project between one of Australia’s premier music organizations and a regional community. The aim was to involve a whole community in a music enrichment program that brought together elementary and secondary students,
teachers, community musicians, members of the community and musicians from outside the area with a broad range of objectives. Part of the funding was to be devoted to researching the impact of the project in relation to the proposed outcomes sought. This paper reports on a number of difficulties that arose in the research process which also highlights the importance of collaboration and negotiation with all parties concerned with a project. The data were examined in relation to two frameworks developed by Ofali (2004) for the Arts Council England report Artists Working In Partnership With Schools- Quality Indicators And Advice For Planning, Commissioning And Delivery with suggestions of how a research arm for such projects might be considered in light of these frameworks.

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**Young Children’s Responses to Familiar and Unfamiliar Activities**

In order to determine whether familiar and unfamiliar activities elicit more responses in young children, two early childhood music classes were administered a treatment during two tonal and rhythm activities immediately following the greeting song. The treatment consisted of 5 weeks of familiar activities and 5 weeks of unfamiliar activities. Fifteen children, aged 9 to 36 months, demonstrated three main categories of responses: looking, movement, and vocal responses. The responses were videotaped, and two early childhood music teachers counted the the responses from the videotapes. The interjudge reliability was .42 for looking responses and .63 and .61 for the movement and vocal responses. The low interjudge reliability may have been due to insufficient judges’ training. The results showed that there was a statistically significant difference in the movement responses, demonstrating greater responses in the familiar activities at the .05 level. However, there was not a statistically significant difference for the looking and vocal responses. These findings suggest that music teachers should continue to employ both familiar and unfamiliar activities, but children may need exposure to familiar activities before they have readiness to respond. Further research is needed to discover if factors other than the activity affect children’s willingness to respond.

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An Investigation of Social and Musical Objectives and Experiences
Sought by Instrumental Students Attending a Summer Music Camp

The purpose of this study was to investigate specific social and musical objectives and/or experiences students hope to achieve as a result of attending a summer music camp. Specifically, this study sought to determine: (1) What specific social and musical objectives do students hope to achieve during their summer music camp experience? (2) Is there a difference between the social and musical objectives students hope to achieve in their music camp experience? And (3) Are there differences in social and musical objectives and/or experiences between males and females, grade levels, and previous summer music camp experiences in what students hope to achieve?

Five hundred ninety-one middle and high school instrumental band and string students attending a large comprehensive summer music camp completed a researcher-designed survey regarding potential social and musical objectives they hoped to achieve by participating in the camp. The results indicated that students hoped to achieve objectives that were more musical in nature than social. The overall highest rated objective was to “Develop/improve musical skills.” The lowest rated objective was the “Chance to be away from home.” Statistical analysis found no significant differences between the variables of gender, grade level, and the number of years students had attended a camp and the musical and social factors. Implications of the study for music camps, music teachers, students, and parents are discussed.

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Adult Community Musicians’ Self-Esteem of Music Ability

The notion of self-esteem among students is a recurring theme within general education literature, yet research devoted to this same topic within music education has received only modest attention. Research on self-esteem, including those studies utilizing a measure known as the Self-Esteem of Music Ability scale (the SEMA), provides several implications for improving music classroom instruction as well as raising students’ self-awareness and self-realization regarding music participation. Of particular interest is the role that self-esteem plays in the lives of adult musicians. Thus, this study examined beliefs of self-esteem held among adult community musicians, with specific focus on the extent to which self-esteem differed between age groups, gender, and ensemble venue (choral or instrumental).

Participants in this study were adult members from 14 different volunteer community bands and choruses in Indiana, New Mexico, Michigan, and Texas. Using the SEMA as a model, the researcher adapted a 47-item
questionnaire that measured adults’ self-perceived musicianship as it related to overall self-esteem. Detailed research results will be shared during this session that may enhance our understanding of adults’ self-assessed music ability and of the factors that can influence music learning within community ensembles.

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The Effect of the Breath Builder™ on Various Lung Functions and Musical Performance Abilities of Clarinet Players

The purpose of this study was to focus on the efficacy of a dynamic breath exerciser called the Breath Builder™ and its effects on clarinet players’ performance abilities and/or lung functions. The study sample consisted of 15 clarinetists, a combination of undergraduate and graduates (ages 18-27) from a clarinet studio at a major university in the southwest. The eight-week study consisted of two phases. During Phase 1, experimental group 1 used the Breath Builder™ three times per day, five times a week. The control group was not given Breath Builders™ and continued with their normal practice routine. In Phase 2, the control group was given Breath Builders™ and relabeled as experimental group 2. Experimental group 1 stopped using the Breath Builder™ and was relabeled experimental group 3. Following this cessation, the subjects in experimental group 3 were measured to note any change in lung function or performance. Some of the pulmonary lung function measurements used for this study were, Forced Vital Capacity (FVC), Maximal Inspiratory Pressure (MIP), Maximal Inspiratory Pressure in 1 second (MIP1), and Maximal Expiratory Pressure (MEP). Musical abilities measured were tone, note duration and phrase duration. RESULTS: A significant interaction effect was found regarding MIP and MIP1.

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Cross-Cultural Competence of Student Teachers in Music Education

The purpose of this study was to investigate the cross-cultural competence of music education majors enrolled in student teaching. Study participants (N = 86) from 19 colleges and universities in the Southeastern United States completed a survey designed to assess their cross-cultural competence as related to: factors (a) fostering and (b) constraining readiness for teaching in culturally diverse educational environments, and (c) educational experiences during teacher preparation relative to multicultural education and multicultural music education. Study results indicated that the majority of respondents were aware of how cultural differences may impact their teaching and students’ learning, had encountered music of a variety of cultures in their own music education, had received specific instruction on creating and executing multicultural music experience for students, and had opportunities to be involved with projects related to multicultural music education. Study results neither confirmed nor negated that respondents held attitudes and beliefs hindering their readiness to teach in culturally diverse educational environments. Results of the current study suggest that additional investigations involving a larger sample are warranted and should include an examination of the effects of specific demographic variables on music student teachers’ cross-cultural competence.

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The Effects of Participation in a Community Children’s Choir on Participant’s Identities

The purpose of this study was to explore the effects of participation in a community children’s choir on choir participants. Questions included: (1) How are participants’ identities shaped by their participation, and (2) What role do participants’ relationships with peers and the conductor play in shaping participants’ identities? Six choir members, ages 12 to 14, participated in focus group interviews. Follow-up interviews were held with three choir members and their parents, one former choir member, and the conductor. Data collection also consisted of 9 hours of rehearsal observations, a choir background questionnaire, and observation fieldnotes. Analysis involved coding of interview transcriptions and identification of emerging themes.

Results of the study indicate that participating in the children’s choir enhanced choristers’ self-concept, self-esteem, and self-efficacy. Self-concept was enhanced in the areas of commitment, self-discipline, social skills,
respect, confidence, and leadership. In contrast to school, where they experience harsh peer judgment, children’s choir is a safe place where the choristers feel unconditional peer acceptance. The choristers’ frequent comparisons between children’s choir and other ensembles facilitated differentiation of their emerging self-concepts, although they did not appear to fully comprehend choir’s role in this process.

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An Empirical Investigation of Pre-Service Music Teacher Identity and Development

The purpose of this study was to investigate whether music teacher identity roles described by Bouij (1998) empirically emerged in a sample of 80 pre-service music teachers from the United States. Secondary purposes of the study were to examine participants’ perceptions of dualistic vs. relativistic approaches to effective teaching in terms of Perry’s (1970) model of intellectual development, and to assess participants’ personal sense of developmental readiness to teach. Data was collected by means of a researcher-created questionnaire. Results of cluster analyses suggested a dichotomous teacher vs. musician self-reported identity division, aligning with the role identities proposed by the horizontal axis of Bouij’s model. Results also indicated: (a) significant differences among Perry scheme items, with the highest mean ($p<.01$) found for the commitment within relativism item; (b) no significant differences ($p>.05$) in perceptions of dualistic vs. relativistic approaches as a function of self-reported role identity; and (c) significant differences ($p<.05$) in sense of readiness to teach items in favor of those reporting a teacher role identity.

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Functions of Music: Teacher and Student Perceptions of Sociological Value

In this study, in-service music teachers (N=115) provided scaled data and written statements in response to questions regarding "functions of music" as described by anthropologist Alan Merriam; in particular, how social and emotional functions are represented in school music curricular planning and teaching activities. Both teacher and student responses (ratings of importance) indicated relatively favorable impressions of the functions. Student responses (N=375) were also gathered using the same basic questionnaire, slightly modified for age groups. Statistical analyses did reveal significant differences between teacher and student responses on 5 of 6 rated statements of functions. The student response data were highest regarding the description of music as "enjoyable, …entertaining," which teachers rated lowest in importance.

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Differences in Ensemble Evaluation Judgments
Among Secondary-Level and Collegiate Instrumentalists

Previous research has shown that music students' discrimination abilities vary according to the nature of their prior experience, and that ensemble evaluation tends to be inconsistent, especially with regards to subcategories of global performance evaluation. The purpose of this study was to identify differences in and reliability of evaluation responses among middle school, high school, and university instrumental music students. Subjects (N = 273) who were members of either a middle school band, one of four levels of a high school band program, or a university wind ensemble, listened to 14 excerpts of band performances of music at various stages of preparation and were asked to identify the categories thought to be in most need of improvement. Results indicated that middle school and high school musicians identified Blend/Balance most frequently and that university musicians identified Intonation most frequently. There were significant group differences for responses in 10 of the 14 listening examples, and summed across all listening examples, no similarities were found between or among groups when making several selected comparisons. Reliability scores were highest for university students.

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Student Experiences of Belonging within an Urban High School Chorus

The purpose of this action research study was to describe adolescent singers’ experiences of belonging within one urban high school choral ensemble. Understanding student perspectives on belonging within music ensembles can assist choral educators, parents and administrators in order to more fully support adolescent emotional and social development in school. Ten through twelfth grade students were selected from one northeastern high school choral program in a large city. Twenty-six participants were interviewed in small groups, containing three to four students each, and were asked to describe their experiences of belonging within the ensemble. Interview data was open, descriptively and analytically coded. Codes were gathered into categories. Five themes were developed, including choral experience as uncompetitive, sectional bonding as social bonding, singing as shared experience, chorus as safe space and trips as pivotal bonding experiences. Implications for future research include examining student belonging as part of choral teaching practices, studying school choral participation as stress reduction and investigating social belonging as embedded within the choral experience.

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Developmentally Appropriate Assessment in Early Childhood Music

The purposes of this preliminary two-part study were to evaluate: 1) early childhood music assessment tools 2) ease of use of these instruments by caregivers and music educators, and 3) music skills of young children using these assessment instruments. Four assessment instruments, Singing Activity Assessment (Krechevsky, 1998), Preschool Perception Inventory (Burnett, 1988), Audie (Gordon, 1989) and the Echo-Song Game (Persellin, 2007) were selected to test four-year-olds (n = 20) in an urban Head Start Center in South Texas and five-year olds (n = 20) in a kindergarten class in a suburban school in Utah. Feedback about the efficacy of testing instruments was also sought from caregivers, classroom teachers, music specialists, and college elementary methods students. Results indicated that all four instruments proved to be appropriate for use in this age group. Children were highly motivated to take part in these assessment activities. Caregivers preferred assessment instruments that could be administered easily as a classroom activity. Concerns included: time required to
administer tests, pacing of a pre-recorded test, and complexity and objectives of tests. It is hoped that this information will be helpful to caregivers, early childhood educators, and music educators working with young children.

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*The Effect of Instruction with Solfege and Related Songs on Second Graders’ Acquisition of Pitch-Reading Skills*

This study examined the effects of instruction with solfege versus *loo* and related versus unrelated songs on second graders’ (*N* = 193) sightsinging achievement with tonal patterns. Students in general music classes participated in 25 minutes of sightsinging instruction for 16 sessions. Each session introduced a new four-note pattern and song, and reviewed previously learned patterns. Instructional treatment, school, and sex were examined as independent variables. Pre-, post-, and retention tests assessed children’s pitch and contour accuracy on familiar and unfamiliar patterns. Results indicated that sightsinging skills improved significantly from pre- to posttest; differences from post- to retention test were nonsignificant. Sightsinging skills transferred to unfamiliar patterns. Treatment effectiveness differed by pattern familiarity. Contours were significantly more accurate with solfege on familiar patterns and with *loo* on unfamiliar patterns. Relating patterns to songs had no significant effect on accuracy. Significantly greater mean improvement occurred for students enrolled in a school with higher mean IMMA tonal, school ability, and reading fluency scores.

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From the Band Room to the General Music Classroom:
Why Instrumentalists Choose to Teach General Music

The purpose of this study was to investigate the reasons given by music educators who were trained as instrumentalists for choosing to teach elementary general music rather than instrumental (band) music in the schools. Analysis of participant responses to an emailed questionnaire resulted in the following four emergent themes:

- A clear preference for working with young children;
- A concern that the demands of a band teaching position would not allow for the sort of work/life balance they wished to have in their own lives;
- A strong aversion to the “culture of competition” they perceived to be prevalent in the band world;
- and, a concern regarding the perceived limitations of instrumental music teaching and learning as it exists in the schools.

The paper continues with a discussion of the “goodness of fit” between specific personality types and teacher candidates’ vocational choices, and the relationship of competitive types (i.e., hypercompetitiveness and personal development competitiveness) to teachers’ perceived feelings of success, achievement and career satisfaction. Implications for music teacher education, including increased emphasis on socialization strategies and reconceptualization of the enterprise of instrumental music as practiced in the schools, are also included.

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Perspectives on Voice Amplification and Occupational Voice Disorders in the High School Choral Classroom: An Instrumental Case Study

Teachers are known to be at high risk for developing voice disorders, but the literature is inconclusive as to causes, prevention and treatment. Vocal music teachers have been found to be particularly at risk, but few studies have focused on choir directors and their vocal health. In addition, few studies have attempted to document the subjective experiences of a teacher struggling with voice problems. Use of a microphone is one way some choir directors try to save their voices. With the intent of improving the vocal wellness of choir directors, the purpose of this instrumental case study was to reveal one choir director’s experiences as he made the transition to using a microphone in his classroom. In order to form a more complete picture of the director’s struggle with his voice, data for this study included observation of rehearsals and interviews with the director and a focus group of his students. Analysis of field notes and interview transcripts revealed five themes: (1) symptoms that led to microphone use, (2) positive impact of the microphone, (3) negative impact of
the microphone, (4) perceptions of voice disorder etiology, and (5) possible treatments of occupational voice disorders. One emerging theme of this study suggested that connections among personality, emotional investment in the choir, and classroom management style might contribute to voice problems for choir directors. This study suggests the need for more research regarding occupational voice disorders in choir directors, including: baseline epidemiological data to determine the range and extent of the problem; further qualitative study of the roles of classroom management, emotional investment, and personality in the development of occupational voice disorders; and descriptive research regarding the habits of vocally healthy choir directors.

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Reed-Making and Oboe Community of Practice

The purpose of this study was to investigate the community of practice within an oboe studio at a medium-sized western university. The features of the community and the process of becoming a full participant were studied, with an emphasis on the role of reed-making. Transcripts of formal interviews, informal interviews, and observations were coded and analyzed. The results suggest that peers play an important role in this oboe community of practice through supporting one another in reed making efforts and providing friendly competition. Additionally, reed-making plays a central role in identity formation for the oboists investigated. Success and competence at reed-making leads to more full participation; whereas difficulty with reed-making can lead to a trajectory out of the community of practice. Preliminary findings also indicate that reed-making may be its own community of practice, separate but concurrent with the oboe community of practice.

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An Analysis of Selected Musical Concepts Present in Significant Band Repertoire

Professional music educators have long stressed the study of specific, quality repertoire as the most important goal of public school music. Numerous opinion-based articles from the last 20 years, however, have advocated that students must receive a comprehensive musical education, which should include the study of musical concepts. Through the study of musical concepts, students gain a deep understanding not only of the foundations of the music they are currently studying, but the principles and properties inherent to all music. The problem faced by most music educators is that lists of quality repertoire exist but the specific musical concepts that can be taught in each work are not identified. This project sought to identify which of 8 musical concepts could be taught in 461 pieces of standard band literature and provide a quantitative analysis of all the data collected along with an assessment of needed instructional material for music education.

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A Study of The Effects Of Perceptual Modality And Interrelated Arts Instruction on Student Achievement In The High School Choral Classroom

The purpose of this research was to investigate interrelated arts instruction in addressing the needs of visual and mixed modality strength learners. Using the Swassing-Barbe Modality Index, the researcher identified the perceptual modality strength of choral students from three selected high schools. Choral directors from these high schools taught a researcher-created interrelated arts unit. Using a pretest-posttest design, the researcher concluded that perceptual modality strength was not a factor in achievement in an interrelated arts unit. This researcher recommends that this study be expanded to learn more about the use of interrelated arts instruction in the choral music classroom. This researcher also recommends further study of the role of perceptual modality strength in the teaching and learning process.

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Looking Backward: Research in the 20th Century

by

Roger Rideout

Opening Address made to the
Participants of the Desert Skies Symposium
The University of Arizona, Tucson, AZ
February 19, 2009

(Presented for Roger Rideout by Jill Sullivan, Arizona State University)

I want to thank Professor Cooper and the Desert Skies staff for this opportunity. I’ve had the honor of being on the Desert Skies board since 2000 and have enjoyed many presenters over the years. When Professor Cooper and I discussed a topic for tonight, I suggested that we look at music education research of the last sixty years and ask whether it’s achieving what we want it to achieve here at the beginning of a new century.

I had two reasons for suggesting that topic. First, this is the 60th anniversary of the Music Education Research Council (MERC) and the Journal of Research in Music Education (JRME). 1949 was the year that Allen Britton proposed their creation and it was a watershed moment. Our largest professional organization joined similar ones in sponsoring a forum for the dissemination of original research with the intent of improving practice. The JRME was the first journal devoted solely to original research in music education whose editorial board consisted of practicing music educators. We can say with some accuracy that research formally entered music education sixty years ago. (I realize there are some in the room who have argued that research didn’t begin until after 1973 when Britton retired as the JRME editor, but that is a topic for another discussion.)

The second reason, as several persons here have noted elsewhere, is that each century of American music education has been defined by a different mode of music making by students and within the larger society. The 18th century had the singing schools and their direct connection to church choirs and community music making. The 19th century had the establishment of music education in the nation’s schools and the development of curricula to teach sight-singing to all children. The 20th century was primarily a playing century rather than a singing one. While choral singing still thrived, it was the band and orchestra movement and, to a lesser extent, the music appreciation movement, that became the dominant modes of student participation in public secondary music education in America. Here in the first decade of the 21st century we should be asking what new modes of music making will engage our children and our society? And how will our research efforts inform them?
So, meeting in the sixtieth year of our formal research tradition seemed to warrant some sort of review. The problem is determining what criteria one should use to assess that tradition. I jotted down a few approaches that I would like to share with you quickly. Time will only allow a closer look at three and, as you will see, each is fraught with problems.

First, one approach is to ask if our research efforts have addressed the major events, trends, or issues affecting music instruction in our schools. If we look at the 20th century through very large lenses and ask our cultural critics to identify those things, then we come up with a list something like this:

**Societal Events/Trends that Affected Music Education in the United States**

1. The End of The West
   A. What does it mean to be American?
   B. Copland, Hanson, Thompson, et al. gave one answer
   C. Jazz, rock-and-roll, etc. gave a different answer
2. Recorded Music
   A. The past is available for the first time
   B. Individual relationship to music changes
   C. Mode of contact is idiosyncratic
3. Radio
   A. Changed dissemination of music
   B. Expanded 2B and 2C above
4. Industrial Model for Education
   A. Efficiency in mass production, education for all
   B. Psychology as the leading theory generator
5. The Great Society
   A. Empowered teachers as professionals
   B. Propelled groups and programs toward a Jeffersonian Ideal
6. From Melting Pot to Multicultural Society
   A. Changed the conversation from unity to variety
   B. Challenged the European/Western models of music
   C. Introduced Sociology as a corollary to Psychology
7. The 1983 Report: A Nation at Risk
   A. Replaced the Jeffersonian model with an economic one
   B. Dis-empowered teachers and schools as authorities
8. The Virtual World
   A. Based experience in technological models/worlds
   B. Altered consciousness from a “reading” brain to a “visual” one
   C. Reduced further the individual’s association with live music
If we consider those musical issues affecting music education, we get the following:

**Musical Events that Affected Music Education in the United States**

1. The transcription of European masterworks for school ensembles
   A. Brought the classical tradition to schools
   B. Established the ensemble model for secondary public education
2. The European move away from tonal/modal models
   A. Reduced public identity with contemporary classical music
   B. Removed social/cultural ends from music instruction
   C. Made the classical tradition difficult to defend
3. The rise of popular music
   A. Changed the locus of origination and authority
   B. Allowed for music designed outward toward the consumer
4. The advent of the personal recording device
   A. Allowed greater intimacy
   B. Increased further the idiosyncratic relationship with music
5. Digital Recording and MIDI in the early 80s
   A. Standardized the commercial industry
   B. Generated a new generation of musical instruments
6. The appearance of iPod and iTunes (see 8 above)
   A. Established individual’s authority in music
   B. Removed all need for making music from the lives of students

If we consider those events within academic music education we find that:

**Events within Music Education**

1. The Transformation of NEAMD to MSNC
   A. Established independent organization for music education
   B. Broke with larger educational identity
2. The Formation of the NASM
   A. Established specific criteria for college-level music study
   B. Removed occupations from central goal of music study
   C. Protected a specific set of competencies at the expense of others
3. The Band Movement
   A. Replaced the choral music as the knight errant of public school music
   B. Led to competition as the model of success
4. Growth of music appreciation
   A. Introduced non-performance based music knowledge
   B. Allowed schools to claim music education for all
5. The establishment of the MERC and the JRME
   A. Grounded music learning in professionally-guided research
   B. Shifted authority from practice to theory
6. Appearance of specific elementary methodologies
   A. Provided frameworks for elementary study
   B. Balkanized music study
   C. Set impossible goals for American schools

7. Acceptance of jazz in the schools
   A. Changed music performance from replication to personal creativity
   B. Introduced rival authorities for music content
   C. Began the breakdown of the European ensemble model
   D. Aided the multicultural redefinition of music

Now one can say that these items have nothing to do with pedagogy or with music learning and valuing, per se, and are not the purview of music education research. Yet, with that assertion we have an indication of how music education and research have defined and delimited themselves. The scope of our research has been borrowed from educational psychology and within that model learning is defined as the mental processes of perception and cognition or as the proprioceptive construction and reinforcement of performance behaviors. I liken that definition to the mind/body dichotomy that ruled Western medicine for so long. Believing that the mind had nothing to do with disease, doctors considered such claims as voodoo medicine and misguided science. Equally, our efforts to understand learning have ignored all aspects of culture and society that inform learning. Just as mainstream Western medicine now accepts the mind as an integral part of body health so, in this new century, we should engage more actively in the social foundations of learning. And it’s nice to see that this view is well represented in this year’s conference papers.

Second, an approach is to ask if practicing music educators are reading and using research. Here I offer two quick snapshots, one objective, one anecdotal. For the first snapshot, I chose to look at the current subscription numbers for the JRME and the BULLETIN of the Council of Research in Music Education (CRME). The reason for the JRME is obvious, and the BULLETIN is a personal choice because I served as editorial assistant to that journal over thirty years ago. When I was an assistant we sent out around 1350 copies each quarter. Some 600 of those went to libraries and the rest to college professors, the few music supervisors that still existed, and to graduate students. So roughly, 750 copies went to music educators. According to the current editorial assistant, 750 copies are printed today with approximately 540 to institutions and 210 to individuals. Since international subscribers make up approximately 15% of subscriptions that leaves about 460 American institutions and about 180 American citizens reading the BULLETIN. The drop of nearly 600 subscriptions is due, in part, to the fact that few libraries keep paper subscriptions to individual journals. Most of them now pay a fee to EBSCO or any of a half-dozen other companies for a package or “consortia” of music journals delivered electronically. Also, thirty years ago the JRME and the BULLETIN were just about all there was, along with Contributions to Music Education and two or three state journals. Today, that is not the case. I don’t have exact numbers but there are probably five to ten times that number of journals publishing music education research. Some of those BULLETIN subscribers now either read a different journal or read the BULLETIN online through their institutional library. But if you take the current number of individuals subscribing we can say about 1/5th of 1% of the current National Association for Music Education (NAME) membership have subscriptions to the BULLETIN.
At the time the BULLETIN published 1350 copies, JRME was publishing 1500 copies quarterly. In preparation for this lecture, NAME staff and the JRME publisher, Sage Publications, provided subscription information for the second half of 2008.

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**JRME Online Usage in 2008**

**Full Text Downloads**

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**JRME Yearly Subscription Numbers**

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As one can see, that number is now 4330 individuals and 538 institutions, a substantial growth in subscriptions over the last thirty years. Sage provides free access to its journals one month each year and on those months the hits on the JRME spike precipitously. This one month accounts for one-half of the full text downloads and about one-fifth of the total hits. That is because in that month one can print out articles without paying any fee to SAGE. I suspect all of our graduate students know this and plan their literature reviews.
around this option. But with 4000+ individuals reading one can say that the JRME subscriptions are over 4% of NAME membership. Now both percentages seem small but we have no way of judging those who might have subscribed even twenty years ago who now access the electronic journals anonymously. So this mode of judging research interest led to a dead end. But it seems fair to say that subscriptions and have increased and that’s a good sign that people are reading research.

Now whether subscribers actually apply research findings to their teaching is another matter. The snapshot above doesn’t actually answer that question. One still has to ask: Is research making a difference in practice? How is one to answer that?

The second snapshot is anecdotal. In my forty-one years in this business, I have never entered an elementary or secondary music teacher’s classroom, office, or home and seen a copy of the JRME or the BULLETIN lying about on a desk or table. I have known a number of teachers who invoked research findings to justify what they do, but they learned about the research, not by reading it, but by attending workshops where it was presented or discussed. And that leads me to ask again whether practicing music educators read research. That isn’t a new question as we know. Some years ago NAME and MERC created UPDATE to respond to that very concern. What I have seen on those desks and tables are journals specific to that teacher’s interest. Band directors read The Instrumentalist. Elementary teachers read the Orff Echo or the Kodály Envoy. Choral directors read the American Choral Directors Association journal and string teachers read American String Teachers Association publications. Teachers are reading for guidance but they want that guidance from individuals they know share their instructional specialty, a boutique research approach. I suspect, although I cannot prove, that this is the same in other fields. I doubt if every medical doctor reads the New England Journal of Medicine, but I bet they read professional journals in their area, be that oncology, pediatrics, etc. They read for their specialties, as do our teachers.

So what can one say about these snapshots? First, they are informal and incomplete measures of research interest among music educators. Second, they imply that a very narrow range of individuals read research. Personally, I have no problem with 1% to 4% of the FAME membership subscribing to the JRME, the BULLETIN, or any other such journal—if they represent the stratum of the membership that writes the textbooks that prepare teachers, that teaches our methods and technique courses, our philosophy and curriculum courses, and that provides the workshops that apply research findings to real instructional problems. And determining if that 1% to 4% comprise that stratum is rather easy. Just check the bibliography of their books, the references in their workshop handouts, and the readings in their syllabi. And with that method one can feel very good about our research. The right people are reading it. By that I mean the people who will prepare and guide our next generation of teachers.

So the implied question from the start was “Is our research tradition addressing the issues, trends that affect music instruction?” There my answer is an absolute and unqualified maybe. We have tried to understand perception and cognition. We have tried to examine the development of performance behaviors. We have tried to apply research to practice. We have not tried to understand the motivations and socio-cultural
influences that lead children to opt for music instruction in middle school and high school or to continue study as adults. As an example of this oversight, Campbell’s most recent article, jointly authored with Soto and Lum, cites no literature from JRME or the BULLETIN save one of her own JRME articles. They report on a university-school music partnership with a culturally distinctive community and reference research completed outside of music education. Campbell is one of our most prolific researchers and if she feels that she can find no relevant sources in music education for her work, then we should begin to wonder if we are focusing where we should. Also, I recently reviewed a chapter for an upcoming research text. The authors had over 200 references. Only three were from JRME and one from the BULLETIN. Again, this makes me pause and question our direction. I suggest that we know nothing about the topics I listed in the slides and, in that, we are failing our society. As a humorous example, twelve dissertations and five masters theses have been completed in the last three years on the use of the IPod. Three of those sources examine the IPod as a tool for learning and information dissemination. NONE was written by a music educator. We have to ask if our research base is current when we do not address the changing modes of connecting with and experiencing music. Yet, such an observation is unfair. Hargreaves, The Social Psychology of Music was an effort to call our attention to socio/cultural influences in learning. The chapters on the Sociology of Music Education on the 2nd Handbook on Music Teaching and Learning and Froelich’s 2006 book on the subject, TITLE, are all indications that our foundations are shifting. Music educators are widening their definition of learning. They are expanding their research interests. So it is fair to say that, here at century’s beginning, there are some signs that a broader set of resources will inform our research as we redefine music education and music research for a new century.
The Sounds of School Music in Sync with the Currents of a Global Society:
Music Education Research in a New Key

by

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A Keynote Address made to the
Participants of the Desert Skies Symposium
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It is an honor to be invited to address the Desert Skies 11th Biennial Symposium. I wish to thank Shelly Cooper and the symposium Advisory Board for giving me this opportunity to contribute to the Symposium. Desert Skies has been an important presence in the profession since its beginnings just twenty years in 1989. As we gather here in 2009, we celebrate the vision of those who saw the need for a symposium focused on research in music education separate from the mainstream conferences such as MENC state, regional and national meetings. The only regular research conference that I’m aware that was happening prior to 1989 was at the international level -- the ISME Research Commission of the International Society for Music Education which was founded in 1968 and was an integral part of the ISME biennial conferences.

In the two decades of Desert Skies, 1989-2009, we’ve witnessed a transformation in the nature and form of research in our field. As I prepared for today’s presentation and reflected on those years, (which almost coincide with my career in higher education), the magnitude of the changes came into focus. Consider, for example, the proliferation of journals during that time. In 1989, the number of journals was relatively small—JRME, CRME, the Bulletin of Historical Research in Music Education, Contributions to Music Education, the British Journal of Music Education, and the Australian Journal of Music Education. The number of new research journals founded since 1989 is concrete evidence of the extraordinary level of activity in that area:

Southeastern Journal of Music Education, 1989
The Quarterly Journal of Music Teaching and Learning, 1990
Boletín de Investigacion Educativo (Argentina), 1993
Philosophy of Music Education Review, 1993
Research Studies in Music Education, 1993
Research Perspectives in Music Education, 1997 (?)
Music Education Research, 1999
International Journal of Education & the Arts, 2000
During that time, there was also an increase in the number of special interest groups (such as new SRIGs within MENC) and conferences on special topics, among them philosophy, general music methods, technology, cultural diversity, teacher education, sociology and history (see Rutkowski & Hedden, 2007). And it’s worth noting that in the same time period, the first two research handbooks were published, significant milestones in the history of research in the profession. Based on the unprecedented increase in research activity evident in all of these developments, it is reasonable to assume an equally impressive increase in the number of music educators involved in research.

Of equal significance was the transformation and expansion of research paradigms and methodologies in education and now in music education. Eisner (2002) summarized what he called “the revolution in thinking about the meaning of research.”

Some of these changes have been influenced by the demise of foundationalism, the increasingly problematic character of positivism, the emergence of postmodern thought, the rise of feminist theory, the growth of multiculturalism, and dissatisfaction with the modest usefulness in education of conventional research methods in the social sciences… (p. 210)

As researchers, we are now standing on different ground, looking at different horizons with new lenses that allow for deeper insights into how music functions in human life and learning.

In this presentation, I will examine the currents of our global society that have contributed to such intense research activity and that have changed the soundscape of school music. The plan is as follows: orientation to the topic, identification of global currents that impact music education practice and research, application of global trends to developments in research, and closing remarks.

**Sounds of School Music in a Global Society**

In the title of my paper, *The Sounds of School Music in Sync with the Currents of a Global Society: Music Education Research in a New Key*, I place changing perspectives and practices in school music (captured in the phrase ‘the sounds of school music’) alongside changing perspectives and practices in research (symbolized by the image of research moving to a new key). I argue that the quality of the dialectic between research and practice is more vital than ever to the healthy development of music education. As the sounds of school music change to be in sync with a global society, the mission of music education
research expands accordingly to the point where it serves as a catalyst for change in practice, rather than maintaining its traditional marginal role in relation to practice.

The sounds of school music can be interpreted in a number of ways—first at the level of practice as we observe the kind and variety of sounds that are now integral to the culture of P-12 schools, the traditional site of music education. In primary and elementary schools there is much live music—for example, free play with classroom instruments in a kindergarten setting, an Orff instrumentarium accompanying creative movement, recorder ensembles, the elementary choir, or the sounds of the fiesta at the school’s international night. At the secondary level, the range of ensemble sounds has expanded from the traditional band, orchestra, choir, marching band, and the more recent jazz ensemble, to include guitar and world music ensembles such as African drumming, mariachi, Celtic music, steel drum orchestras, ska, rock bands that may have originated as garage bands, the sounds of electronic music shared virtually, or songs written by students in after-school song writing clubs.

The range of sounds transmitted by recorded music has also added to the infinite variety of sounds found in P-12 classrooms, reflecting a move to integrate popular and world musics into the curriculum. To this collage of colorful sounds and textures, add the music of artists in residence, from symphony musician to blues singer, West African master drummer to dulcimer player, and so on. Compared to a similar survey of school music a century ago, the soundscape of the music classroom has undergone considerable change. In the course of that century, school music first became cloistered, cut off from the well-springs of music in society. By 1966, sociologist Max Kaplan reflected on the need to open the doors of school music when he presented the music education profession with a challenge: “Whereas in 1907 a new MENC was committed to put music education into the schools, the task of 1977, 1987, and 1997 will be to get music out again into the full daylight of the community and the society (1966, p. 237). By 1997, Kaplan’s words were beginning to come alive, with school music much more in sync with the music of the surrounding community and society at large. What is heard today in schools is clear evidence that the worlds of school and societal music are in dialogue.

As the chasm narrows between these worlds, what we find in school reflects more broadly the music valued by young people and alive in local and global communities. It is not simply the sounds that are changing. At another level, the new sounds of school music speak to a recognition of other musical accents and cultures that were not previously part of the curricular canon. Thus, the very foundations of school music are expanding to accommodate the socially relevant alongside the traditional. I argue that it is the currents of our global society that have been instrumental in changing the sounds of school music.

I found the word ‘current’ useful in this context, because it means a stream that is flowing steadily and implies that there is an onward, progressive movement in a particular direction. By global currents, I mean those forces that influence how we think, communicate and interact with one another, determine the quality of our ecology and environment, shape our beliefs and determine our priorities, and change what we know about the phenomenon of music and the human condition. The currents that flow through culture today do so with great speed and intensity, perhaps more so than in any other period of human history.
In the case of music, there is more access to the world’s musical traditions; values that were once placed in hierarchical order (for example, folk or traditional music regarded as primitive moving upward to classical music which represented civilization) are now viewed as lateral and contextualized, with far less concern about which musics are good musics and more concern for what music is ‘good for’ in a particular context. Enabled by information and communication technology and driven by the commercial enterprise, music is most frequently presented as a multisensory experience that engages the eye as well as the ear, and often elicits a kinesthetic as well as an aesthetic response. Music technologies have changed forever the form and diversity of musical engagement, the scope of creative musical expression, the mediated nature of musical production, and the range of musical taste among the public.

The image of research in a new key serves as a metaphor for transformation, just as moving to a new key in musical performance represents a shift not only in pitches and harmonies but in mood and overall effect. A new conceptual key can open doors to new vistas for thinking, expand consciousness, and change how we construct meaning out of our experiences. The metaphor of a new key was used by philosopher Suzanne Langer in her book Philosophy in a New Key. In the preface to the second edition, she writes that as philosophy settles into a new key, “the main themes of our thought tend to be transposed into it. As every shift of tonality gives a new sense to previous passages, so the reorientation of philosophy which is taking place in our age bestows new aspects on the ideas and arguments of the past” (1951, vii).

By examining the global currents impacting music education and looking at the changes evident in research paradigms and practices, my hope is that such interfacing will serve to critique the profession’s response to globalization and to inform future directions in research.

Globalization and the Philosophy and Practices of School Music

The idea that world events and developments impact the course of music education is not new. In the 20th century the two world wars, plus the Cold War had tangible effects on the philosophy and practices of school music. What is new for the current era is the figurative downsizing of the globe, into a village, and the speed with which information is sent through the networks of that village.

For several years I have been conscious of the effects of globalization on the direction of music education in various countries. Writing the history of ISME’s first fifty years, 1953-2003, brought globalization into the foreground, especially after 1990. Three themes—democracy, diversity and international dialogue—clearly reflected global events and developments during the same fifty years. More recently, when MENC was celebrating its centennial, I offered a portrait of the fourth quarter of that century, 1982-2007, and used a global lens to examine how music education responded to a “new world order.” A central theme was how institutions negotiated the demands of global popular culture and media and the traditions of school music.

Friedman (2000) put it well when he wrote that globalization is “… not simply a trend or a fad but is, rather, an international system…. [It] has its own rules and logic that today directly or indirectly influence … virtually every country in the world” (ix). This system enables people to reach around the world “farther, faster, deeper and cheaper than ever before,” as it allows the world to reach them in
similar ways (pp. 8-9). With this system integral to daily life, our global consciousness has expanded. If we live in the proverbial ‘global village’ then indeed the events and catastrophes of that community impact us and become part of the global-local dialectic, or the glocal, the footprint of global processes in local experiences.

How can globalization and the raising of global consciousness translate into the practices of school music and the domain of music education research? I chose five global influences as particularly relevant to the practices of music education and research: communication, access and learning in a digital age, epistemologies of practice, democracy, diversity, and ethics, interdisciplinarity, and interdependence and collaboration.

Communication, access and learning in a digital age

In the past twenty years, we have witnessed significant developments in electronic media that enable instantaneous communication and access to information and music – email, the internet in 1993, mp3s in 1999, the iPod in 2001, podcasts in 2004, webcasting, blogging, wiki nodes or other knowledge management systems, and the list goes on. The world has become an increasingly interwoven place (Friedman, 2000), with transformative effects on learning and the learning environment. Spending time in P-12 classrooms brings this to life: music from a variety of cultures across the globe is presented to students through multimedia instructional materials; student composers share their creative work with peers in other parts of the country/world; a teacher can find information, pictures and sound samples online and can download a musical example from iTunes; find a world music lesson plan by going to the Smithsonian Global Sound or PBS websites; student teachers report back to their university supervisors and peer student teachers on the happenings of their teaching day through blogs and online chat rooms.

The learner whose primary socialization takes place in this digital age comes with a different orientation to learning. She is at ease learning in and manipulating a virtual learning space; assuming a virtual identity in the form of an avatar is second nature; and communicating with others in that environment is found to be motivating and relevant. In cyberspace the learning environment is radically different from traditional modes and scholars are beginning to address this and ask if constructivism as a learning theory is adequate for explaining what goes on in digital learning spaces. Canadian scholar George Siemens suggests a theory of connectivism (http://www.elearn.space.org). John Seely Brown, scientist with the Xerox Corporation, identifies shifts in learning due to cyber age in the areas of literacy, learner roles, reasoning, and learner actions.

How can research advance our knowledge about the learner who learns in a digital age? What is unique about the digital learning environment in music and what will such inquiry tell us about music learning in general? Another learning environment that has been transformed by technology is inservice teacher education. As Hebert (2007, 2008) shows, hundreds of teachers have participated in the Boston University online degree programs that began in 2005. Little or no research exists as to the effectiveness of distance education, Webster (2007) points out. One thing is clear, though, that in a culture of convenience where individuals can sit at home and do a literature review without going to a library, write and submit papers electronically, it is not surprising to find that they would also prefer to complete their entire degree without being required to go to campus.
Perhaps blended learning, a combination of online and face-to-face instruction, is a viable alternative. Hebert (2008) reported research that looks at blended learning as an effective way to transmit knowledge in a global world, particularly if implemented between the programs of two or more international institutions. He concludes that “it seems quite possible that blended learning through international-collaborative partnerships may become one of the most important future growth areas in our field” (p. 100).

What do these developments in communication, access and learning in a digital age mean for the research process? Life in classrooms can be documented in multiple ways through audio and visual media to capture the complexity and multilayered levels of activity of the learning environment. There is unprecedented access to literature and primary sources. The role of the library in the research process has changed radically. It is not so much a physical as a virtual space and, as Marcum (2001) says, Google is now the reference librarian. Data can be collected through electronic and digital media. For example, Campbell, Connell, & Beegle (2007) analyzed the responses of 1,155 13-18 year olds who had entered a national essay contest sponsored by Ban deodorant and run by the Music Edge.com and Teen People’s magazine to study adolescents’ expressed meanings of music in and out of school. Here the researchers collaborated with industry to draw on a huge databank of responses. The dissemination of research has also been impacted, and the time lag between when a study is finished and when the results are published has decreased, due often due in part to the electronic submission and review process.

The research agenda itself is shaped by the presence of technology in the lives and learning of children and youth. In a study of children in Singapore, Chee-Hoo Lum (2008) found that technology was an integral part of the soundscape in the home and musical repertoire was closely associated with electronic and pop-influenced music. The first compendium on the topic of researching music education in digital classrooms was edited by John Finney and Pamela Burnard and published in 2007, Music Education with Digital Technology. Topics include composing with graphic technologies, learning through on-line collaborative music making, and music e-learning environments. In considering the prevalence of information and communication technology in music education, the editors ask: “Where is music education? The answer is complex: all around, in and out of school. It is regular, ritualized, spontaneous, irregular and pervaded by ICT (p. 11).

‘Knowing’ music: Epistemology revisited

At the same time that the knowledge age advanced, so also did interest in what it means to know, different ways of knowing, the embedded and holistic nature of knowing. All of these areas contribute in significant ways to inquiry on what it means to know a practice-based art form like music. New areas of philosophy and inquiry such as performance studies and performativity and arts-based research became central to developing epistemologies of practice.

The uniqueness and complexity of ‘knowing’ music was one of the central themes of David Elliott’s book, Music Matters (1995). Here he went beyond the two fundamental forms of knowledge (knowing that and knowing how) to more implicit, tacit ways of knowing – informal, impressionistic and supervisory knowledge. According to Elliott, these forms of implicit musical knowledge come from being inducted into a musical practice and learning by osmosis. And, as Elliott (2007) more recently
acknowledges, the process is complex and embedded in sources other than musical culture: racial, economic, moral and social tensions are inscribed in the learning and knowing. He illustrates this in relation to his experiences teaching in Puerto Rico, drawing on “critical performative pedagogy” to show that “the performances we call “schooling,” “teaching,” and “learning” are among the most scripted and performed dramas that teachers and students act out for audiences of gatekeepers (e.g., parents, administrators, corporations, and governments) who, like drama critics, observe, measure, and rank students’ achievements” (p. 8).

A third area of development impacting research about what it means to know music is neuroscience and related disciplines that inquire into music and the human condition. Recently there is a return to the nature and role of music (and art in general) in the evolutionary origin of humankind (Dissanayake, 2000). Dutton (2009) claims that art is an instinct and that beauty is inborn. Also attempting to find universals in the origins of art, Levetin (2008) asks if music has lasted so long in our species, what are the cultural and biological forces driving its forms and uses? (pp. 13-14). In his book, The World in Six Songs: How the Musical Brain Created Human Nature, he identifies six types of songs that shaped human nature—friendship, joy, comfort, knowledge, religion and love songs. This emphasis resides alongside a renewed interest in music and the lifespan, how music can function in the lives of individuals at different stages in the lifespan, from early childhood to old age.

Democracy, Diversity and Ethics

Each historical era has its own iteration of democracy and these past two decades are no different. A dominant theme of the period has been the rise of new democracies and the further acknowledgment of the rights of all persons to be heard and their voices to be valued. In 1989, the fall of the Berlin Wall heralded a series of revolutions in the name of democracy. In 1991, perestroika and the freedom of the Baltic states proceeded as a singing revolution along the Baltic coast. South Africa too used song to provide momentum on its way to dismantling apartheid in 1992-93. The rise of suppressed peoples to freedom is but one manifestation of democracy.

A political ideology of recognition and identity, manifest in mandates such as affirmative action, inclusive education, multicultural education, and equity education, speaks to the ways in which democracy and identity politics have found their way into education. Phrases such as representation and authenticity are widespread in the literature as music educators seek not only to diversify music but also to do so in an authentic manner that honors the people from whom the music was given. When we address these issues in a sensitive and empathetic way, we are carried into areas such as ethics, compassionate living, culturally sensitive pedagogy, social justice, and global citizenship. Although these areas are not directly related to the transmission of music in education, in a world where global ecology needs to be considered as well as local and national affairs, there is a responsibility to teach from a place of ethical concern. “Good work”, as Gardner, Csikszentmihalyi, and Damon (2001) point out, is “where excellence and ethics come together.”
And a similar concern needs to permeate our research endeavors, from selection of sites and participants to analysis and interpretation of data, and dissemination of research reports. Changes in research culture over the past twenty years highlight the need for educating researchers in ethics and being vigilant as a profession that our collective inquiry adheres to the highest of ethical standards. Qualitative research methodologies often bring the researcher into conversation with teachers and students on topics that overlap with individuals’ out-of-school personal lives. A narrative approach has proven to be a valuable way to gather data and, as Eisner (2002) says: “much of what needs to be understood and conveyed [in arts education research] needs a narrative more than it needs a number” (p. 210). In the process of qualitative data collection, stories are shared, personal ‘property’ and sometimes sensitive material are exchanged. It is not that ethical considerations should limit the research process; rather, reflecting on ethical implications should give the researcher a level of confidence that what is collected is analyzed with great sensitivity to context, interpreted with an ear to the deeper resonances of participant responses or stories, and an eye down the road, imagining how the study might be read at a future date by all participants and the community to which they belong.

As a profession, we would benefit from more support in this area. Our university institutional review boards (and school systems where relevant) are gatekeepers at the beginning of the journey, but they do not have a role when a researcher encounters dilemmas along the way. A set of ethical standards for researchers may prove of immense value. The Ethical Standards of the American Educational Research Association were adopted in June 1992 “as an educational document to stimulate collegial debate and to evoke voluntary compliance by moral persuasion” (www.aera.net). Another discipline that is close to ours in the field of research is ethnomusicology and the Board of SEM approved a statement on ethical considerations in 1998.

The values of democracy, the realities of diversity and the importance of ethical standards which permeate school life are also integral to each and every step of the research process.

Interdisciplinarity

Tom Regelski (2007) talks of the narrow silos that represent disciplines in the university, their disconnect from life and from other disciplines. He wants to see the research paradigms we draw on be grounded in the everyday life, not in the university-framed epistemology that has underpinned research in the past (pp. 2-3). There is a move in higher education to look beyond the narrow confines of individual disciplines. Some of the most cutting-edge research is carried out in groups of interdisciplinary scholars. The call for interdisciplinary projects and degrees has become an integral part of the culture of higher education. The limitations of the disciplinary silos we know so well are being challenged in an era that seeks multiple perspectives gained from looking across disciplines.

Looking outside the individual silo of a discipline takes much energy and even courage. Beginning with the Tanglewood Symposium, there has been a steady (although gradual) increase in outreach to related disciplines: to psychology in the Ann Arbor Symposia in 1979, 1981, 1982, and to ethnomusicology in the meeting at Wesleyan University which produced the book, Becoming Human through Music in 1985; and it seems that such activity ceased in the 1990s as groups within music education focused on
specialized areas such as philosophy, history, sociology, qualitative research, teacher education. In the 2000s there has been an increase in interdisciplinary dialogue in our field --music and medicine, arts education, and technology, to name but some.

In the area of literature, the second research handbook in 2002, *The New Handbook of Research on Music Teaching and Learning*, set a new standard for interdisciplinary work in the profession. Editors Dick Colwell and Carol Richardson invited scholars from a variety of disciplines to contribute to the project either as sole authors or in partnership with music education scholars. The disciplines included art education, ethnomusicology, jazz studies, medicine, psychology, public policy, science education, and sociology. The *International Handbook of Research in Arts Education*, published in 2007, is another example of a major interdisciplinary venture. Editor Liora Bresler saw the need to create a new dialogue that *softens the boundaries* and thus allows border crossing (Detels, 1999, cited on p. xvii) between the arts and enlarges the vision of the arts in education.

As models of research become more interdisciplinary and international in their reach, the scope and content of research changes accordingly. The *International Handbook of Research in Arts Education* includes non-traditional areas of research such as museums and cultural centers, informal learning, the body, and spirituality. This expansiveness of vision sets a new standard for crossing the ‘soft boundaries’ of the disciplines and drawing on interdisciplinary perspectives, and for collaborating with scholars in related disciplines.

In general, the profession’s advancement toward sustained research that involves scholars of different disciplines has been underdeveloped, but that is changing. Consider the research projects that Don Hodges is coordinating at the Music Research Institute at the University of North Carolina at Greensboro: biomusic, neuromusical research, music-related hearing loss, and ethnomusicology. The Center for Music Education Research at the University of South Florida is another initiative whose mission is to expand “knowledge in music education from international and interdisciplinary perspectives.” (http://cmer.arts.usf.edu)

CMER facilitates collaborations in music education research, recruits and develops researchers in music education, promotes international and cross-disciplinary understanding through music education research, and initiates and maintains scholarly exchanges among international music education programs and related disciplines.

I anticipate that we will see an increase in the number of centers focusing efforts on interdisciplinary research. This kind of research implies collaboration among scholars in multiple disciplines, another trend that surfaces in today’s global society.

*Interdependence and collaboration*

There are now many more instances of university faculty working on research studies with P-12 teachers than a few decades ago. New learning theories such as Lave and Wenger’s communities of practice provide a theoretical framework for studying teacher communities. I see an increase in attention to collaborative action research, something that was beginning to be popular in general education in the
1990s and is now returning as a form of professional development and a mode of researching one’s own practice in the context of a group of teachers who have a special research interest.

At the institutional level, ISME has played a significant role in promoting international research networks and teams; as we know, ISME started out as a small collaborative group in 1953. The network was based on goodwill and friendship, and one might add, serving music educators in Western countries. In the last two decades, the vision has been enlarged considerably, thanks to several leaders who brought a truly global vision to the Society. The group expanded its brief and made some radical moves to reach out to music educators in third world countries. Using the UN Human Development Index, dues were assigned according to the country of residence of the member. This opened up possibilities for teachers in Africa, Eastern Europe, and elsewhere, to join, and to attend conferences. More recently, ISME members who are English-speaking and engaged in research are assisting researchers in underdeveloped countries to participate in research forums and to prepare papers for conference presentation and for publication in journals. I have assisted scholars in South Africa and Eastern Europe; in the process it has become clear that I have much to learn from engaging with a colleague whose first language is not English and who brings to the research enterprise a different set of assumptions about music education.

The Commissions of ISME have grown significantly in the past 15-20 years, and technology allows for communication and for exchange of research between researchers in various countries. As a member of the ISME History Task Force, I have witnessed this development. In the past two years, Gordon Cox of the UK and Robin Stevens of Australia have gathered a group of international historians of music education to contribute to a book on the origins and foundations of music in compulsory education. This and similar projects (the most ambitious one to date being the International Handbook of Research in Arts Education) will begin to build a literature of comparative music education.

Closing Remarks

In 1997, the Arts Education Partnership in collaboration with Goals 2000, published Priorities for Arts Education Research. The research agenda outlined here focused on student learning (at-risk students, diversity, teacher preparation) and policy development (public opinion, international comparisons but only in relation to US). The following year, thanks to the leadership of then president of MENC, Carolynn Lindemann, A Research Agenda for Music Education (1998) was created and published in Teaching Music. Three broad areas of study were identified: music teaching and learning in a time of innovation and reform; music education for new, diverse, and underserved populations (diversity and inclusion, school and community); and, supporting and surrounding issues (history, research and dissemination, and advocacy).

These documents were important for their time, and addressed research in the US. Now a decade later, it is clear that the globalization of music education is changing the world view and requiring that we think beyond the confines of P-12 schools into communities and related networks of learners and teachers. We are in need of creating a new agenda, this time an ecological map to visualize the expanded scope of research in this global, digital age. Scholars are already paving the way for completing this task.
 Folkestad (2005) wrote that music education researchers need to be everywhere, focusing not only on formal musical learning but also on “the full global range of popular, world and indigenous musics in their studies” (p. 286). They must be (to use his phrase) ‘here, there and everywhere’, “in the schools doing all kinds of various research in the class rooms, but also … out there where children and students encounter musical learning in all its various forms” (p. 286). Regarding the scope of research, he wrote, “While music education as a field of praxis (music pedagogy) is defined as all kinds of formal musical teaching and institutionalized learning settings, music education as a field of research must deal with all kinds of musical learning, irrespective of where it takes place (or is situated), and of how and by whom it is organized or initiated” (pp. 280-81). In a sense, research efforts can be leading practice, interrogating it, using transformative methodologies to examine practices.

In a recent article in *Music Education Research*, Estelle Jorgensen (2008) created a conceptual map for research in the form of questions for future investigation by the field’s scholars. What are and should be the dimensions of music education and the institutional agencies of music education; what disciplines should inform music education? Taking all of her questions together, they expand the scope of music education research to include “an array of institutions, aspects of music education, functions, and activities designed for people at all stages of the life cycle beyond those that are traditionally the focus of scholarly interest in music education” (p. 341).

Just as the sounds of school music echo that of our global society, both literally and figuratively, the research enterprise must align itself similarly and lead the way in shaping practice that is based on inquiry that is informed by multiple perspectives. It is a truly exciting time to be working at the frontiers of knowledge in an area of human activity that is being investigated by scientists who see music-making as significant in the evolution of human emotion, cognition and spirit. We are on the cusp of receiving new wisdom about that mysterious and spiritually significant human impulse we call music.
References


Critical Diagnostics and Performance Appraisal in the Art

by

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“Good Morning and welcome back.” I am Maurice Sevigny, an arts educator and the Dean of this College of Fine Arts. Let me begin this Keynote Address with my personal welcome by thanking the faculty of the Division Music Education and particularly Shelly Cooper for her “beyond the call of duty” efforts to organize this successful eleventh research symposium. I have been invited to share some research and career observations about teaching and performance appraisal in the arts. I began my career teaching art in the public schools where I developed a practitioner’s concern for raising the quality of the teaching profession. This concern inspired my life-long journey into the study and reform of teacher education curriculum. I have been driven by a strong personal belief in the power of a supportive and creative environment that encourages students in the arts that the arts can make a difference. My research is based on a conviction that the potential of the arts will never be fully realized unless we seriously engage with social change and to integrate arts making into the broader cultural context. My dissertation research some 30 years ago looked at the acculturation of artists and the learning transition between high school and a life in the visual arts professions. Let me begin with some basic premises:

Some Basic Premises

First, teaching in the arts is premised upon a basic tenet that qualitative feedback and performance criticism is good for the individual and that learning is best facilitated through critical feedback from a practicing professional. During the creative act, the student artist and/or performer, and the artist/professor, each is involved with the continuous interplay between making art and one’s continuum assessment scale of artistic adequacy from good to bad art. (My piano pedagogy colleagues, Paula Fan, in the School of Music once delivered an important parallel to the act of assessment in Music to the diagnostic sequencing in medical diagnosis practice.) Ongoing judgment of artistic adequacy makes teaching in the arts an adaptive process that integrates perceptual skill, with knowledge of art tradition, technical proficiency, process, as filtered through creative, critical, and judgmental thinking. Arts educators should recognize this process as the integration of the “essential fundamentals” of art learning.
I have been engaged in the study of arts assessment for the past 40 years. In the mid 1970’s I was fortunate to be selected as a participant research subject for the creative thinking research program, at Harvard University called, Project Zero (from which Howard Garner evolved his theory of “multiple intelligence”). David Perkins and Howard Gardner, the project’s directors, inspired me to initiate research and document the nature of judgmental thinking and subjective appraisal discourse. Our shared belief was that talk about art helps members of a classroom group learn vocabulary to help them identify with aesthetic concepts and values. Most of you in this audience are teacher educators. Thus, it follows that novice teachers have to learn how to regulate talk to focus attention to auditory or visual stimuli and those aesthetic standards that qualify good to great performance. My premise was that it should follow that teacher educators should do a better job at making prospective arts teachers aware of and refining critical and creative thinking skills to become proficient in the fine line discrimination of assessment practice with linguistic terms that pertain to the critical judgment of a specific art discipline.

In the late 1970’s I was awarded the Dissertation Excellence Award from the Journal of Research in Arts Education for both my work on “Triangulating” data to refine qualitative research methodology and my innovative approach to examine the subjective and aesthetic judgment thinking process.

Language requires linguistic phenomenon and art is a visual phenomenon. I study how beginning students invent language or cope with the initial ambiguity of the teacher’s invented or borrowed vocabulary within specific studio classroom contexts and how students translate language to create their performance to the ideal cannons of the art community. Over the past decade, I have periodically assumed a hidden observer stance, enrolling incognito as a full-time art student of drawing, painting, group piano, acting, and opera. And, while pretending to be a novice arts student, I have applied anthropological ethnography and participant observation research methods to document my participation as student to filter my observations into appropriate scientific form. This special focus for my research was initiated many years ago when I began teaching foundation drawing in a college in Kentucky. Back then I began to experiment informally with novel methods of observation and developed various recording techniques to collect observation data relative to the decision and choice selection practices of my students. As a studio arts teacher and teacher educator I was perplexed by the difficult task of translating visual knowledge into a dialogue that could transfer my understanding of abstract concepts and convey relationships between complex aesthetic values. This informal research led to a desire to get sanctioning for my informal observation through scientific method. My dissertation research and post doctoral residencies have evolved to a concentrated focus on gender variables and the adequacy of artist/professor communication through the study of student interpretations of what drawing professors say and do over the course of a semester.

Since those early days I have focused most of my inquiry as a participant observer in visual arts educational contexts at the university level both here and abroad. The collective observational wisdom from such studies over time would allow me to conclude that, although talk about art is an inescapable task, many artists and many arts teachers shy away from talking about an art piece because they too often assume that rigid criteria might stifle student creativity. The possibilities for worthwhile talk about art are good; however, the actual practice of talk about art knowledge or art skills is often bad. It has been my position that the field of art teacher education has not done enough to prepare future teachers to know the difference. This morning I wish to share examples of how talk about art can make mischief as well as magic. The challenge of this
keynote address is for each one of you from the music education discipline to know better the ways both can happen.

**Appraisal Behaviors**

Let us begin with a typology of appraisal behavior in terms of at least five basic types of assessment: (1) Judgment of Correctness, (2) Judgment of Incorrectness, (3) Personal Positive Judgment, (4) Personal Negative Judgment, and (5) Neutral Acknowledging. Four of these require that the person exhibiting the behavior exercise judgment about a person, a behavior, or the product of another or the self. In the fifth, judgment is absent but an acknowledgment of the person, the behavior, or the product is evident in some form.

We can issue favorable or unfavorable judgments in two ways. The first is with objective, well described, publicly defensible, and publicly acceptable criteria. Judgments of correctness can be defended on logical grounds, on the basis of observable empirical evidence, or by appealing to normative standards. Such judgments usually provide feedback as to the appropriateness or inappropriateness of the response for the assigned task (i.e. “Look at Shirley, she has the correct positioning of her hands on the instrument.” The second way we call personal or private judgment. That is, the judgment of the art, person, or art process is defended by appealing to a personally held values, preferences, or feelings. Such judgments are subjective rather than empirical. For example, "I like what you did in this drawing," or, "Matisse is my favorite Impressionists painter." or, "I think Mary's ceramic pot is the best solution to the assignment."

Appraisal behavior may be exhibited through the spoken word but need not necessarily be. In fact, much judgment in the classroom is unspoken and inferred by non-verbal cues. Nods of approval, frowns, ignoring students, thumbs up, selecting some students work to exhibit, picking some students over others in auditions, or hanging work in prime view and other work behind an obstructed corner or below eye level are examples of typical context cues that students rely on to interpret summative judgment.

In addition to being spoken or unspoken, appraisals can be expressed in ordinary or accentuated ways. For example, a change in voice volume, change in facial expression, use of exaggerated gestures, choice of words, arrangement of words, or use of selected figures of speech, etc.

We can also be neutral in our appraisal behavior. A common practice for many art teachers is to defer judging until perception, description, and interpretation have occurred. While at the perception stage we simply gathering visual data or engaged in aesthetic perception. Sometimes we acknowledge the work neutrally by simply describing what we perceive or take in without judgment. Because students anticipate the teacher's primary role as critic, they regularly assume that teachers are always at the judgment stage of criticism and will assign positive or negative weighting to any statement or action because they anticipate that judgment is in process.

Teachers frequently use neutral appraisal as a typical strategy for facilitating critical skills development in others. In such cases art teachers defer judgment and make use of "the group critique" to solicit critical thinking from the students. Critical thinking can be developed in students through a sequencing of perception and analytical discourse - walking the students sequentially through the steps of formal art criticism. Teachers solicit perceptual focus through control of group attention to selected attributes of the
work. I call this strategy flash appraisal. Flash appraisal provides the group with a quality continuum to rank performance. Once one perceives the range of quality one is prepared to move to the stage of interpretation through public discussion of the aesthetic properties. At the analysis stage a teacher will review the objective of the assignment or introduce a new standard or criterion for comparing and evaluating the work. In the final stage, the teacher or group suggests judgmental questions about the art products or the production behaviors that led to success or could ensured better success in subsequent work. In this case the art teacher is not appraising the work publicly but is guiding or suggesting that some judgment be made by others.

**A Standard**

The group critique can be thought of as a process of enculturation into the art community- a "right of passage" to transfer students to accepted standards of practice within a specific community. Every social community (including a classroom) has its set of rules to guide behavior. "What is a standard?" Having a standard implies a passion for excellence and a habitual attention to quality (Wiggins 1991). In order to raise the performance levels of students, he would ask you to ensure that your students routinely be given quality performance or work to do. This suggests a strong correlation exists between quality curriculum, effective teaching, and the individual student's habits of quality.

In the post-modern era the visual arts embrace aesthetic pluralism and do not promote a single model for excellence in curriculum, teaching strategy, or student performance. In issues of art and culture, there will always be a variety of exemplars to emulate. Cultural pluralism also teaches us that excellence should never narrow to a singular cultural ideal. A quest for a standard of excellence that honors pluralism is indeed complex and multi-faceted. Adopting a standard is resolved by formulating a composite set of criteria that one infers from a variety of styles and/or standards for performance. I have labeled such standards of excellence an aesthetic eclectic (Sevigny, 1977).

**Social Group of Art**

Social groups, whatever their size, are bound together by their language. Recall, if you will, the ancient but vivid illustration of the importance of language for binding groups together - the Tower of Babel. As you recall, construction ended abruptly when various groups of workers could no longer communicate with one another. How does the language of classroom contribute to the emerging culture? And how does appraisal behavior help art students learn to communicate with their teacher and peers?

Whatever the approach for appraising art performance, language is the vehicle most used to convey judgment. This brings us now to issues of language, interpretation, and meaning in criticism. Art students and studio teachers are especially victim to the limits of verbal language. Whether it is a consequence of limited vocabulary or inadequate awareness of the standards, studio art teachers and students regularly avoid, evade, hedge, struggle, abuse, invent, or borrow terms for which the other must infer meaning.

Language is indexical and evolutionary. That is vocabulary is indexed to a setting and is modified by creative individuals who challenge the traditions and utilization of specific terms or expressions. Because slang words are invented and new they strike students more vividly. Like stylish clothing slang judgments work best when they are novel, appealing, and able to gain group acceptance quickly. I've heard art students
use the term, *Velveeta*, to refer to tacky or cheap looking artwork. If they feel you’re asking for the impossible they may liken your action to “nailing Jell-O to a tree.” The point here is that apart from the teacher’s vocabulary there exists another language to support an alternative system of peer standards that often contradict authority and power. Peer influence is strong and does influence the outcome expectation within the group situation. Any socially constructed reality in an arts classroom is a fragile reality. A teacher must monitor, patrol, persuade, and sustain that reality to be effective.

**Instructional Criticism as Persuasion**

Let us take a moment to discuss the term *feedback*. Feedback quality varies in the degree of information conveyed. The biggest mistake I see teachers make is to assume that just because they have voiced something that they have taught something. Students vary in their ability to decode the teacher’s often-inadequate language. The ultimate effectiveness of the teacher’s feedback is dependent upon the student’s aptitude and length of experience in the setting. For discussion purpose let me discuss feedback in terms of a hierarchy of three basic types: (1) knowledge of results, (2) knowledge of the appropriate response, and (3) instructional criticism.

Knowledge of Results provides the student with the least bit of information. This form of feedback only provides indication of whether the response was correct or incorrect - appropriate or inappropriate for the assignment. The simplest form of knowledge of results is the symbolic letter grade. Putting a letter grade on artwork without explication or justification is simply “verdict giving”. Other examples of this type of feedback include statements like: “That’s not what I meant!” or, “We’re not into that kind of work in this class!” or, “Okay, that’s better!”

Knowledge of Appropriate Response is different from knowledge of results because this more developed type of feedback provides additional information regarding what is appropriate. For example:

> Well in this painting you’re doing better. That is you’re starting to make enough changes in the color and you’re using more variety of contrast with the warm and cool tones. But, be careful in this area where you have started to rely too much on the outline. You have a tendency to go after the objects first. It’s important to pay equal attention to the leftover shapes - what we talked about last week as the negative shapes (pointing).”  

(Field Notation 2/28/77)

The form of feedback, which contains the most information, I call, Instructional Criticism. Instructional criticism provides knowledge of the appropriate response but also develops understanding of the criteria or standard for the judgment. Instructional criticism explains the basis for judging why one response is better than another. For example:

> The color in this painting doesn’t hold together. I mean the way individual colors relate to one another is straining. Do you remember the examples I showed of Cezanne? (Student nods) Well, your painting would be more successful if the complimentary colors would work together so that one doesn’t jump out of the picture like it seems to be doing in this part of your painting (pointing). You should not just think about depicting the object but also always evaluate color in relation to adjusting the psychological mood. Here’s another trick to get harmony. Watch me a second (the instructor mixes color areas on the palette).
See how I drag in some of the previous color as I mix a new tone (student nods). I’m working in more blue into this orange shape. Always adding some of the complementary color can softens the shadow areas. See if you can adjust this corner. (The student adjusts the color. The Instructor smiles and exits, saying:) “Much better, you’ve got the idea now!”

In this episode the teacher refers to the criteria of harmonious color and psychological color. Not only does the feedback inform the student of the inappropriateness of prior process but also it clarifies the color criteria for judgment. The actual demonstration of color mixing is non-verbal instruction that fills in the gap where language leaves off.

Perhaps here we might insert a lesson from those who promote discipline-based art education. Art Criticism as a discipline is involved with the selection of appropriate language to promote artists or art works and to persuade others to buy them, or at least accept them as significant (Carrier, 1984). Defining art criticism as an act of positive promotion may first appear to be at odds with how students perceive criticism. Most art teachers adopt patterns of critical behavior that reinforces the negative stereotype of the term “criticism”. My analysis of classroom critiques suggests that university art professors tend to be overly prescriptive and more negative in the content of what they say to students. Since they become the role models for many public school teachers, one might assume that there is a high degree of carry over in the language and style of criticism generally found in the public schools.

**Manding Behavior**

*Mands* (M.A.N.D.S.) are persuasive acts that attempt to monitor or change the behavior of another person. I borrowed this construct from a term originally developed in the 1970’s by Whiting (1970) to describe how one child got another to do what he wanted him to do. Manding has its root in words like reprimand, mandate, command, demand, mandatory, etc. Mands can be thought of as informal rules, wishes or expectations that the studio instructor makes known through direct or indirect communication. Let me illustrate how art teachers engage in manding acts of persuasion and how they utilize critical discourse as a form of persuasive behavior that attempts to point the student toward alternative values or methods for thinking about or producing art.

Let me describe three main types of manding: (1) prescriptive manding, (2) proscriptive manding and (3) hustle manding. Prescriptive mands tell the student what to do. The following classroom episode was recorded early in the term. It is representative of prescriptive manding:

*Keep your hand on the page and your eye on the model, okay--Draw with your fingers right on the page--try to get an understanding where the plane is - Loosen up, a lot of you are real tight on this--All right, stop. You should have all your materials by now. I want to see all the materials by tomorrow.* (Field notation, 6/28/76)

There are many means for prescribing without talking. Holding up examples provide visual mandates for students to follow. For example, when the teacher displays one or two samples of what the assignment is supposed to be, or holds up a student's work and says, "This is the best solution for what I meant."
The second type of mand is the proscriptive mand. This influence behavior tells the student what not to do either directly or indirectly. For example:

"Why can’t you be a little more daring with the way you apply the paint? Don’t screw around with those little picky details. Everything you’ve painted is gray and dull. Go in there and turn these (pointing) dull looking shapes into something more exciting, like red or something.” Mr. Allen crossed the room and Shirley borrows some red from Beth, and then proceeds to paint the central object fire engine red. (Field notation, 2/24/77)

Returning to Shirley, Mr. Allen said, "Yeah, that’s much livelier, just be careful not to overdo it and get carried away with the red paint.” He not only reinforces the mand but also uses this adaptive appraisal as an opportunity to qualify his mandate.

I came across a vivid example of a non-verbal proscriptive mand while reading a newspaper profile in last Saturday’s Arizona Daily Star about the American Centenarian painter, Theresa Bernstein. The article opened as follows: “Some 80 years ago, Theresa Bernstein’s art school instructor stopped at her easel to examine a sketch she had worked on for six weeks. He took one look and drew a big X across the paper. Then he threw it in the wastebasket (Rosenbaum, 1991). The article went on to show how this profound negative judgment and potentially devastating act served as a life-long motivator for Bernstein to prove her instructor wrong and to turn her artistic promise into great talent.

I call the third type of mand the hustle mand. This class of influence behavior attempts to speed up the student’s production tempo. Hustle mands can be both verbal statements and gestural behaviors that intensify the attention to the production tempo. For example, "Let’s get going;" "Only a few more minutes on this one;" "Come on. Come on;" "Move that charcoal around - real fast on these, I don’t want any detail;" "Do a few quick warm ups just to get you going." Hustle mands are often accompanied by nonverbal emphasis, such as a waving of the arms in fast rotation, a mimic of the drawing movement desired and the rhythm or tempo desired, faster circling around the room or increased speech tempo. Evidence for this type of manding is found in this student response: "He keeps me on my toes ’cause he cracks the whip." Or "Okay guys, here comes the 'foreman', we’d better hustle back to the 'salt mine.'

As an instructional strategy, hustle manding accomplishes several outcomes: (1) it controls the use of student time, (2) it forces the student to build a quick perception of essential features, (3) it makes the student attempt another drawing approach, (4) it serves the purpose of making the students be less conscious of detail and more concerned with general large organizational masses, and (5) it activates a certain spontaneity of style. These strategies are particularly useful in moving students away from their preference for realism and toward methods of abstraction.

Manding behavior serves to reinforce the necessary conditions or performance standards that maintain authority in the group. They provide an informal set of rules upon which members will generally base their behavior and performance response. Rule breaking is a danger to the social reality of a group, in that it threatens the fragile conditions that maintain status in the group. Therefore, art teachers patrol individual response with manding behavior. Manding reinforces the conditions for membership in the group. The paradox here is that art teachers don’t want to stifle creativity by being too prescriptive. The result is subtle and more indirect methods for manding to satisfy themselves that they are not stifling creative
interpretation. Such indirectness can promote ambiguity and often challenges the participants to search for other nonverbal behavior from which to infer outcome preference.

Language and Art Learning

Most of you I assume may be familiar with Howard Gardner’s research and theory of multiple intelligences (Gardner, 1987). His theoretical premises grew out of the early experiments I was part of in Project Zero. If so, you may understand that the spatial intelligence that dominates visual arts performance differs significantly from the competencies of musical intelligence or linguistic intelligence that relates to the successful acquisition and utilization of spoken or written language. I am excited about the theory of multiple intelligences and can correlate its attributes with the great variety of style, competence, and facility with which the artist/teachers might be able to cope with the perplexity of providing appropriate language symbols for visual knowledge and experience.

The variety in language skill accounts for the fact that in each arts classroom there are unique vocabulary and standards that will need operational decoding. For example, when a studio instructor says, “Sally, there’s a lot of nice stuff going on in this design,” Sally is uncertain of what “nice stuff” means or which specific aspect of her project has received positive response. Nevertheless, her intuition tells her that whatever she has been doing ought to be continued. For the studio instructor, the phrase “nice stuff” functions as a positive appraisal for a visual quality that is preferred but for which the instructor has difficulty putting into words.

Even though the beginning student does not always comprehend instructional talk about art, talk is preferred over no words for two reasons: first, because students believe that meaning will become clear with the passage of time; social scientists call this glossing behavior. Secondly, they are more suspect of a teacher’s silence. Silence is feared because students interpret it to mean that the teacher is bored with their work, has lost interest in them, or worse yet, is making private negative judgments without affording the student an opportunity to defend action choices or point of view. Many students adhere to the belief that as long as they can keep the teacher talking, they will have a better chance to infer how the instructor is feeling about their achievement. The desire for ongoing feedback causes the inquisitive and assertive student to solicit and cultivate teacher talk, even when silence may be more appropriate. Art instructors are pressured to fill silence and to find words, even when words are not needed and students are forced to assign evaluative meanings, even when judgment is not intended. The usual result is an unfolding of verbal interaction where a teacher isn’t always certain what to say and the student is never certain of what was said.

Laced between this continuum of ambiguity and comprehension lies the essence of what most art instructors teach. Learning in such situations occurs in stages. The student learns the pattern of perceptual arousal that draws the instructor’s attention to specific attributes of the artwork. What is important to note is that initial judgment of student performance has several possible focal points that begin as private thoughts that are not always disclosed fully or honestly expressed at the public level of discourse? After privately responding to a student’s work, an instructor may select from several private judgments or simply describe neutral perceptions. The instructor may focus on aspect that are different from what the student perceives or be selective about which criticisms to share with the student. Because we all hold back private judgment, students generally accept positive criticism with some sense of skepticism or caution.
As teachers we assume to often that we been successful in communicating our standards and justifications to students. I discovered that students generally allow ambiguous talk to pass believing that meaning becomes clearer with the passage of time. As a gloss strategy, students often nod, as if they are in agreement with what is being said. This frequently gives the instructor a false sense of successful communication when in fact the nod just as often functions as a non-verbal tool to shorten painful criticism or to gloss over any unwillingness to admit confusion or one's inability to grasp the feedback.

On the other hand some students may think they understand the meaning of instructional discourse when in fact they have misinterpreted the language selected by the instructor. For example, in the following interview excerpt Mr. Allen (a pseudonym) was reconstructing a portfolio critique with one of his students, Lisa. He was attempting to justify her mid-term grade of B.

Mr. A: Yeah, okay well let's see here (Mr. A. Pauses to look through work again)...okay on this one for example, although I never spoke to her formally about it. I was like impressed by the fact that she selected something that bizarre. In this assignment, I'm like interested in the choices they make for themselves. I am thinking to myself as I saw this one, boy it's curious that she would find this subject interesting at this point in her training. I think that I was much more impressed with her choice of subject than her painting technique. I mean like there's nothing terribly exciting about her style, but it does fill the requirements of the assignment.

"Did you tell her that?" I asked. He responded, "Hmm. I think I may have said something like... that's a really strange painting!"

An analysis of the recorded episode revealed that all that was actually said was "That's strange!" The interview with Lisa about this same episode revealed that Mr. Allen perceived her painting as "weird," rather than "unusual or unique in concept." In this particular example, Lisa assigned a negative interpretation to the term "strange" when in fact Mr. Allen meant to communicate a positive appraisal toward her solution for the assignment. The vocabulary of criticism is particularly problematic for the beginner and especially perplexing in the first few weeks of a new situation. As an art department administrator, I have numerous opportunities to observe studio instruction and to continue to collect samples of perplexing appraisal statements. Consider, if you will, the interpretive problem posed by the following evaluation statements:

- "Your imagery is haunting."
- "This one is nice--real direct!"
- "Lots of interesting stuff going on in this one."
- "The color in this one is a little bit strange."
- "This design works well because it is fairly complex."
- "You’re like totally fried out on this one!"
- "This design is great because it is nice and simple."
- "This design falls apart a little."
- "I think this one’s a dork because it’s a little too predictable."
- "At last you’re starting to use real color!"
- "This painting blows your lunch, it totally tastes and smells bad!"
- "This is the nicest drawing I ever saw from a freshman."
Experienced critics and professors may be able to sense an implied evaluative differential between such criteria as simple to boring, too localized, too balanced, or nicest to worst. On the other hand, one might also empathize with the beginner who will struggle to assign meaning to "too predictable," "strange color," or for understanding why one design solution is "working well because it is nice and simple" and another "working well because it is fairly complex." Interview responses with students indicate that when the labels or criteria are too novel, too abstract, too confusing, or appear to be in contradiction, they create a tension within the learning context that begs for resolution.

Verbal and visual eavesdropping on the critiques of peers enables a student to find visual matches for the verbal labels used most frequently by an art instructor. Eavesdropping sharpens understanding of aesthetic criteria by associating specific visual qualities to specific terms or phrases. Linguists refer to such context-bound language or phrases as "indexicals." Visual knowledge is achieved when indexical expressions trigger appropriate visual generalizations in the student's mind. As one might anticipate, this verbal/visual learning tempo and aptitude vary among students.

To avoid being judged as "clueless," or lacking aesthetic understanding, some students mimic desired effects without the conviction that such effects have merit. For example, in the following interview with a basic drawing student who earned a C for the course, note how she selects value terms to describe her predictable outcomes for Mr. Allen's preferences.

Maxine: Although the ones that came out looking the most real are my favorites, I chose not even to include them in the portfolio I submitted for my final grade. This one over here for example - the one he had us draw with a pencil taped to the end of a yardstick - Ahh ...he just loved that one...because it has the least of me in it. There was no way I could make it look realistic. Now here's a couple I didn't show him (she pulls out two highly rendered figure studies). These took me more than a half hour just to do the outline. I took them home and worked hours and hours on them - putting in the color and shadows. I like them so much better than what he had us do in class. I really thought that this class would improve my knowledge of human anatomy. But when he saw me working realistically he had the nerve to tell me to put those drawings aside and save them for someone who might be interested in medical illustration, where realism might be better appreciated. He actually told me that they didn't have any artistic value...he said that with sarcasm too!

When Maxine was asked to provide advice for someone who might be taking a course from Mr. Allen next term, she responded this way:

Maxine: I would say to them "make them fuzzy, fuzz up everything you draw. If they look real, smear them!" That's the one criterion I picked up pretty fast in here. After my first critique, I went through all my work and sorted those that were 'more fuzzy' than more realistic. I knew he would like the fuzzy ones and he did! And, another thing, he also likes things that are linear and grotesque! Like this drawing here where the woman came out looking more like a frog! Between us, I will toss out all these fuzzy and grotesque ones after the course and keep the real ones. I still have no idea why he prefers the ones that are grotesque and are real curious to see what his own work is like!

In this interview sample we find how one student solved the problem of copying desired effects; however, Maxine's choices of terminology indicate negative affect toward the desired visual qualities. The
same effect she called “fuzzy” Mr. Allen had described as “a sensual manipulation of the surface qualities.” What she called “linear and grotesque” Mr. Allen described as “exciting linear distortion.” Because students can become skilled at mimicking desirable visual effects, studio teachers can be fooled into the belief that their instruction has been effective.

In contrast to Maxine, let us examine the perspective of Brad, a student who earned an A for Mr. Allen’s course. When he was asked what advice he would give another student who was about to take a course with Mr. Allen, he responded with the same independence that made him stand out in the course:

Brad: Basically, I would tell him what I would tell anybody…do what you think is best. Don’t just try to work for Mr. Allen and don’t try to be someone else. A true artist has got to reach inside of himself. Lots of kids in this class are naive and they show that by looking for formulas to succeed. There are no big secrets to hand down if the student isn’t ready to use them.

Unlike Maxine, Brad avoids the sharing of recipes for success. Like other high achievers, Brad exhibited a greater use and understanding of the indexical language and was sufficiently familiar with the instructor’s values to allow him to take greater risks within the conditions of studio assignments. He understood how to maximize the flexibility for response within the context. Those students who can expand upon the instructor’s expectations while demonstrating an understanding of the instructor’s language and motives are those most likely to receive high grades. When asked who his best student was, Mr. Allen confirmed this position by saying that Brad was best because, “first of all, he understands the objectives; secondly, he can apply them to his work; thirdly, he can push the boundaries of my assignments; and finally, he doesn’t act bored - he has a positive attitude and when you talk with him he can respond intelligently to what you’ve been saying.”

Language, Gender, and Power Relationships in Studio Teaching

In the analysis of my research data I began to discover several frequency patterns differentials between the interactions of opposite and same sex pairs. For example, by calculating actual time lapsed during critiques with each student, I noted that male teachers tend to spend two to three times more talk time with their female students than with their male students. This observation begged further exploration about language, gender, and interaction between the sexes.

Do female students talk more than males? Are male teachers more confident about their authority and tempted to argue longer with females? Do females express themselves more clearly by using more detail and descriptive terms? Do males feel more pressure to conquer and persuade? Do males shy from the disclosure of feelings with each other? Questions of gender like these are guaranteed to produce heated debate because everyone has an opinion about just how different men and women really are, or just how much the same they oftentimes can be. In disciplines like art with traditions of male dominance it may be useful to acknowledge how we equate gender with status, power, credibility and authority.

Males are usually perceived to be more comfortable in the role of persuader or conqueror. Some would propose that the art design professions have had a limited history of successful women role models. Men have often traditionally stifled Sociologists refer to this as the muted group theory” which stresses those
women’s authority and opinion. This theory posits that language of our culture does not serve all speakers equally. There is sufficient cultural evidence that in the past, women have not been as free as men to say what they wish, when or where they wish, because the words and norms for their use have been under the control of men (Kramarae, 1981). Historically, women’s public criticism has been restricted. Sophocles coined the phrase "Silence gives the proper grace to women.". Fasteau’s 1974 book, “Male Machine” (1974), presents as normative, the case in which men tell women to "calm down," regardless of whether calmness is appropriate. The "muted group theory" supports that most professional men have difficulty listening or responding to women. From Fasteau’s premise, one might postulate that male critics might be more inclined to ignore the criticism of women.

Is there any relationship for the gender variable to the concept of manding behavior I introduced earlier? A review of the literature on women’s language would support that women and men do indeed differ in their discourse style and approach to persuasion. In general, women tend to develop styles and strategies for communication, which stress greater sensitivity to the particular context and phenomenological variables. They employ more references to visual concepts or metaphor, use more eye contact, and are more concerned with balanced speaker/listener positioning. They also tend to be more empathetic to the situation and setting.

Males tend to conquer the speaker turn, want control of the topic, shift the topic of conversation more frequently, use more frequent cut-offs or interruptions, and establishing support to sanction of their standards. Hacker (1978) found that in female/male conversation there is a tendency for men to hide their weaknesses and for women to conceal their strengths. This would suggest that female students are more receptive to criticism and more willing to seek assistance.

The following traits are observed to be representative of the conquest model for males: demanding voice, deep voice, dominating speech, loud speech, use of swear words, boastful speech, aggressive speech, blunt speech, more humorous speech (Kramarae 1981). General speech traits for women include: warm and expressive speech, clear enunciation, higher pitch and slower intonation, greater use of hand gesture and facial expression, concern for the listener, use of many details, more disclosure of tender feelings, smoother delivery, open and self-revealing content, and use of good grammar.

Lowering or averting the eyes, hesitating or stopping the speech, smiling, or allowing interruptions are submission gestures, often associated with women. According to Henley (1973), such typical female traits put women in a subordinate status and often place them at a professional disadvantage. On the other hand, women lecturers use more “dynamic” intonation patterns than men and are generally thought to be more fluent as public speakers. They are less hesitant in delivery. They use fewer "um’s" and "er’s" and have fewer pauses or silent gaps in delivery (Silverman and Zimmer, 1978).

My purpose focus here is not to side with either the male or female, but rather to make all teachers aware of how they might be denying their authority through their particular use of language. terminals are the character of the voice at the conclusion of an utterance. Falling terminals indicate tentativeness in assertions (McConnell-Ginet, 1978) that invite the dispute of authority. Females use falling terminals more often. Persons who use trailing terminals in their discourse can devalue their critiques with this trait. Female students in disciplines that require strong authority often prefer male teachers.
Weakness is also characterized as language that is indirect. One of the ways of being indirect is manifested in the more typically polite form of responding to authority figures. I have conducted several gender studies to investigate power relationships at professional meetings. The following typical utterances are some that I collected at N.A.E.A. conferences. They are preparatory statements by women art educators that introduce their alternative response to what male speakers were advocating:

- "I would like to ask if you might also think..."
- "Don't you feel that..."
- "I may be confused but..."
- "I wonder if you might please explain..."
- "Maybe I missed what you said but..."
- "I may be wrong but..."
- "It seems to me that it would be safe to also assume that..."
- "Couldn't it also be the case that..."
- "I wonder if it mightn't be possible to think of this in another way..."

Each of these responses can be dismissed with a simple, but emphatic, "No!"

Swaker (1978) noted that women respond to the presentations of others using the word "please" twice as frequently as men. I have noted that nearly a third of the women's response questions solicit detail or further clarification about specific content of the speaker's presentation, while the typical male response can be linked to a marked preference to use the questioning period to gain access to the speaker turn only to discuss an alternative interpretation, or to discount what was said, establish their own expertise, or ask for information outside what was said by the speaker.

Perhaps, this desire for detail added interest in gaining clarification, and willingness to disclose weakness account for the observation that female students receive significantly more interaction time with male studio professors. My observation data confirms that female students solicit more information by asking questions of clarification twice as frequently. One could also qualify this observation with the fact that female students are more skilled at maintaining eye contact and in establishing a face-to-face interaction stance. This allows them to give non-verbal facial cues that also indicate the need for further discussion. I don't have time to explore it here, but we have to acknowledge the significant correlation of classroom interaction at the college level with what sociologists would call courting behavior. Subsequent observation of male female interaction patterns in studio classrooms confirmed that females invite interaction by smiling or frowning more frequently. They also position themselves to establish face-to-face interaction.

With male students, Mr. Allen typically assumed the shoulder-to-shoulder stance with the work placed in front of the pair, which made eye contact difficult at best. In describing his interaction with male students, I most often noted his hand gestures to be’ brisk and angular, with frequent thrusting of a pointed finger. More like a fencing match!” With female students, I observed the work being placed more often between the pair. Mr. Allen’s gestures were described as “more gentile, generalized as curvilinear and flowing, with more frequent action of the wrist and pointing being accomplished in a gentle waving gesture as opposed to the sharpened tip of the finger.” Male-to-male interaction style is generally more direct, more abbreviated, and more business-like. Without face-to-face contact the instructor is not interrupted in the flow.
of conversation by nonverbal expressions, which sidetrack the assessment by cultivating new conversation topics. Male teachers at the secondary level might relate more easily to the following observation of a C-level female student who exhibited an aptitude for cultivating conversation through courting behavior:

She clears her throat with a dainty sound and lowers her eyes frequently. She smiles a lot, often with a giggle. He is soliciting more response from this girl than the last. She is obviously more attractive and “well built”. She is much more open in her stance and offers more information than the last. Mr. Allen just stepped back against the blackboard. She takes a step toward him. He turns toward the work but takes a glance at her breasts in passing. She fusses with her hair a lot and flips it over her shoulders. She is now standing with her back rather stiff and her chest protruding. Her snug fitting jersey draws a second glance from Mr. Allen. She fiddles with a necklace and smiles as she offers a rationale for why she hadn’t completed some of the work. Whenever Mr. Allen opens the distance between them, she narrows it again. The proximity seems flirtatious. The other students appear to be conscious of how this student uses her gender to obtain maximum attention.
(Field notation, 2/11/77)

Additional Observations of High Achievers

To gain understanding of interaction pattern differences between high and low achievers, I developed a coding scheme to systematically code all the verbal interaction patterns between Mr. Allen and his students. My analysis revealed a variety of qualitative differences between groups as sorted by the final grades they received from Mr. Allen. In the time remaining I would like to have your feedback and responses as my work may or not apply to music appraisal behavior.

Observation 1: Students receiving high grades received 2.6 times more verbal interaction time with the instructor and 4 times as much actual information as those receiving low grades.

Observation 2: Verbal responses are solicited from students that receive high grades three times more frequently.

Observation 3: Although students who received high grades received three times as many positive comments about their work as low achieving students, they also received 2.5 times as many negative comments.

Observation 4: The teacher’s structuring of verbal interaction is different for students receiving high grades. With the high achievers, instructors are observed to use more examples of specialized terminology.

Observation 5: Students with high grades are allowed to interrupt the instructor more frequently to steal the speaker turn or switch the topic of criticism.

Observation 6: Students with low grades were more frequently ignored, cut-off, and dominated by teacher talk.
Observation 7: The instructor is more likely to cultivate verbal interaction with high achievers by asking more questions of clarification regarding their performance ideas.

Observation 8: Below average students may have an awareness of language and criteria but have difficulty operationalizing such language into guidelines for performance.

Observation 9: When average students have problems with interpreting indexical terms or aesthetic criteria they visually observe the working process of others perceived as "better" and search for visual cues that they can mimic.

Observation 10: The high achiever more frequently adopts the indexical language of the professor. When teacher talk is ambiguous, the high achiever is likely to seek immediate clarification, whereas the lower achiever is more willing to operate under the assumption that meaning will become clearer with the passage of time.

Summary

In the early 1970's Robert Stake (1975) advocated what he called Responsive Evaluation. Stake promoted the idea that there are different ways to evaluate programs and no one way is right. He preferred to think of evaluation as performing a service that was useful to a specific person. To be responsive suggests that for an evaluation to be useful, the evaluator should know the interests and language of the audiences. During the evaluation process, a substantial amount of time should be spent on learning the information needs of the person for whom the evaluation is being done. In this sense the art teacher is observer and negotiator. What teachers and students need is a responsive plan for observing - deciding what to attend to, what to record, and what to feedback or disclose.

I hope I have drawn your attention to several new features of responsive feedback. In closing, I draw upon the wisdom of Jean Paul Sartre who once said: "We are not lumps of clay, and what is important is not what people make of us, but what we ourselves make of what they make of us." The goal of ethnography is to provide a mirror for listeners to see themselves. In the final analysis, what is more important than Mr. Allen or the isolated episodes reported here is what each of you can make of these ethnographic accounts. I hope my presentation has provided an opportunity for each of you to self-reflect and assess the effectiveness of your own teaching strategies and that as a result of this experience you will pay more attention to the way you employ terms and interact with your students. Apart from these concerns of gender there are some unique observations about the ways studio instructors might treat student differently based upon the teacher’s opinion of their success. I have given you a 2-page handout with my basic premises and several key observation findings from my participant-observation case studies. I would be happy to field questions and reactions that you may have. Thanks for your kind attentiveness.
REFERENCES


An Investigation of Social and Musical Objectives and Experiences
Sought by Instrumental Students Attending a Summer Music Camp

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Jay Juchniewicz, East Carolina University

Abstract
The purpose of this study was to investigate specific social and musical objectives and/or experiences students hope to achieve as a result of attending a summer music camp. Specifically, this study sought to determine: (1) What specific social and musical objectives do students hope to achieve during their summer music camp experience? (2) Is there a difference between the social and musical objectives students hope to achieve in their music camp experience? And (3) Are there differences in social and musical objectives and/or experiences between males and females, grade levels, and previous summer music camp experiences in what students hope to achieve?

Five hundred ninety-one middle and high school instrumental band and string students attending a large comprehensive summer music camp completed a researcher-designed survey regarding potential social and musical objectives they hoped to achieve by participating in the camp. The results indicated that students hoped to achieve objectives that were more musical in nature than social. The overall highest rated objective was to “Develop/improve musical skills.” The lowest rated objective was the “Chance to be away from home.” Statistical analysis found no significant differences between the variables of gender, grade level, and the number of years students had attended a camp and the musical and social factors. Implications of the study for music camps, music teachers, students, and parents are discussed.

Each year thousands of school-age students attend summer camps across America. One publication estimated seven million students ages six to sixteen were enrolled in more than 12,000 summer camps in the United States (Williams & Whitehouse, 2008). These camps include traditional experiences, involving recreational or church-related activities, to more specialized camps including camps for students with special needs, academics, sports, and music. In fact, a perusal of Google listings in 2008 indicated there are hundreds of music camps in the United States, many organized and offered by universities and private organizations. The large numbers of camps and high enrollment suggests that attending a summer music camp is a popular summer activity and valued in some manner.

Many articles related to summer music camps have appeared in magazines such as The Instrumentalist and the Music Educators Journal. However, research-based writings are limited and largely confined to non-music camp experiences. Much of this research focuses on why students choose to attend camps indicating that reasons such as the (a) type or specialization of the camp, (b) camp’s affiliation, (c) location, (d) availability of financial assistance, (e) whether the experience is a day or residential camp, (f) characteristics of students attending the camp, and (g) specialized activities offered are all influential (Bialeschki & Malinowski, 2007). Whereas reason for attending camps can be broad, the results or outcomes that students hope to gain by attending a camp can be more specific.
Academic related reasons involving learning new skills appear to be a goal of many camps. Marsh (1999) and Garst and Bruce (2003) reported that summer camps provide students opportunities to acquire and develop academic and social skills. Furthermore, one Internet publication maintains that students attending a summer camp better retain academic material learned during the traditional school year and develop increased physical conditioning over students that do not attend a camp (American Camp Association, 2008).

While reasons to attend a camp may be academic in nature, many reasons frequently reflect social objectives. Related research suggests camps teach a variety of skills including problem solving and teamwork (Krambeck, 2004), self-esteem (Elkind, 2007), interrelationship skills (Bialeschki, Younger, Henderson, Ewing, & Casey, 2002), and skills unique to a specialized camp such as math skills or music technique (Ekland, 2007, Marsh, 1999). One investigation (Thurber, Scanlin, Scheuler, & Henderson, 2007) indicated that attending camps can improve students’ social skills and positively influence personal identity. Similarly, parents look for camp experiences that teach self-esteem, respect, fun/enjoyment, positive role models, and increased independence (Jacobs, 2005, Powell, 2006).

Research specifically focusing on summer music camps is very limited. Perhaps the first American music camp was the National High School Orchestra Camp in Traverse City, Michigan organized in 1928 by Joseph Maddy. This camp, which later became the Interlochen Arts Academy, was an eight-week camp that provided intensive instruction from twenty artist teachers as well as weekly concerts (Birge, 1966). Interlochen and other music camps frequently state the activities and experiences they offer. However, ascertaining the outcomes or effects of these activities has rarely been examined. One study (Dilley, 1982) did seek to determine the effect of experiences offered by a one-week summer music camp on participants’ performance skills, self-esteem, and ability to discern expressive playing. The resulting data led the researcher to conclude that participating in a one-week camp may not result in a measurable increase in the ability to sight-read or improve expressive musical performance. However, participants did report improved confidence in individual musical ability, rhythmic understanding, an awareness in individual music strengths and weaknesses, greater musical satisfaction, and development of a more positive attitude toward music and music making.

Research on factors that affect student participation in musical activities suggests both social and musical aspects are influential. Since students’ desire to participate in music appears to be the result of parental encouragement (Hurley, 1992; Lentsch, 2000), social experiences (Hurley, 1992; Hylton, 1981; MacKenzie, 1991; Werpy, 1995), teacher encouragement (MacKenzie, 1991), and the overall enjoyment or fun nature of the experience (Hurley, 1992, Koutz, 1987), perhaps students attend summer music camps for similar reasons. However, determining specific objectives that students want to achieve when attending a summer music camp are still unknown. It appears that many reasons for attending a camp are often social in nature. But does the specialized nature of a music camp provide more direct musical incentives to achieve? Many music teachers and parents encourage students to attend summer music camps. Do these individuals have any specific reasons or objectives, other than social, which may contribute to the musical growth of the student? Since the popularity of summer music camps appears to be growing along with potential to influence musical experiences, investigating answers to what outcomes are desired could enhance the camp experience and contribute to the overall music education growth of individuals and school ensembles as a whole.
The purpose of this study was to investigate social and musical objectives and/or experiences students hope to achieve as a result of attending a summer music camp. Specifically, this study sought to determine: (1) What specific social and musical objectives students hope to achieve during their summer music camp experience?, (2) Is there a difference between social and musical objectives students hope to achieve in their music camp experience?, and (3) Are there differences in social and musical objectives and/or experiences between males and females, grade level, and previous summer music camp experiences in what students hope to achieve?

Method

Participants

Participants were middle and high school instrumental band and string students attending a large university-based summer music camp in the southeast United States. The camp has operated for over sixty years and annually attracts students from across the U.S. as well as internationally. Consequently, students attending the camp come from multiple geographic locations, represent diverse cultural and musical backgrounds, and have varying musical abilities. The camp is comprehensive in nature offering a variety of musical experiences from traditional large performing ensembles to electives (e.g., conducting, composition, steel drums) and private lessons. The camp duration for middle school students is one to two weeks, for high school students the duration is two weeks. While the vast majority of the students are overnight campers, both age groups have the option to participate as day students and not reside in the camp dormitory. There is no audition requirement for admission to the camp, only a single audition for ensemble placement occurs. Finally, a wide array of daily recreational and social activities is also provided.

Survey Construction and Administration

Based on previous related investigations (Hylton, 1981; Hurley, 1992; Koutz, 1981; Lentsch, 2000; MacKenzie, 1991), a survey was constructed by the researchers consisting of seven items related to social objectives or experiences and seven items related to musical objectives or experiences. Using a Likert-type scale, respondents were asked to rate each item from 1 = not important to 5 = very important regarding the extent they hoped to achieve the items during their music camp experience. Space was also provided for respondents to list additional items or comments. Demographic information related to gender, grade level, and years attending any summer music camps was also requested on the survey (see Appendix A).

Following its initial construction, the survey was piloted using middle and high school music students (N = 22) participating in a similar summer music camp, but not used in the later full administration of the survey. The purpose of the pilot was to determine (a) if the survey’s directions and items could be clearly understood, (b) if there were any problems in completing the survey, and (c) how long it would take to complete the survey. Results of the pilot were that (a) the participants expressed no problems understanding the survey’s directions, (b) three items were adjusted for clarity, and (c) the survey could be successfully completed in less than five minutes.

Copies of the final survey were given to all students attending the camp during the registration process. There were no specific instructions other than students being asked to complete the survey pertaining
to objectives of the camp they hope to achieve. Students were not required to participate and parents were usually present when the survey was administered. Completed surveys were then collected for data analysis.

Results

Of the 689 Instrumental Summer Music Camp participants, 630 voluntarily agreed to participate in the survey. This resulted in a 91.44% response rate. Thirty-nine questionnaires were not fully completed, resulting in a total of 591 surveys used for this study (93.80% completion rate). From the total number of students that completed the survey (N = 591), 300 were female (n = 300) and 291 were male (n = 291). Additionally, 177 participants were enrolled in middle school, 210 participants were 9th and 10th grade students, and 204 participants were in 11th and 12th grade. Further, 289 students indicated that this was their first summer music camp, while 302 reported that they had participated in a music camp previously.

A mean score was obtained for each of the seven social and musical objectives (see Table 1). Additionally, the seven social objectives and seven musical objectives were summed together to create a total social and musical objectives score for statistical comparisons. Overall, students rated musical objectives (M = 4.40, SD = .51) higher than social objectives (M = 3.91, SD = .69). Specifically, the top three rated objectives included: “Develop/improve musical skills,” “To have a fun/enjoyable experience,” and “To experience a higher quality level of music experience.” The bottom three rated objectives were: “Spend time with your friends,” “Be on a college campus,” and “Chance to be away from home.” Additionally, with the exception of two social objectives, “Opportunity to meet others with similar interests and backgrounds” and “To have a fun/enjoyable experience,” all musical objectives were rated consistently higher than social objectives. Further, several participants provided additional open-ended comments not listed as predetermined choices that included a variety of social and musical objectives (see Table 2).
Table 1: Social and Musical Objectives Means, Standard Deviation, and Rankings

<table>
<thead>
<tr>
<th>Social Objectives</th>
<th>M</th>
<th>SD</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunity to meet new friends</td>
<td>3.93</td>
<td>.97</td>
<td>10</td>
</tr>
<tr>
<td>Chance to be away from home</td>
<td>3.26</td>
<td>1.35</td>
<td>14</td>
</tr>
<tr>
<td>Spend time with your friends</td>
<td>3.77</td>
<td>1.17</td>
<td>12</td>
</tr>
<tr>
<td>Be on a college campus</td>
<td>3.54</td>
<td>1.22</td>
<td>13</td>
</tr>
<tr>
<td>Learn independence/Get ready socially for college</td>
<td>3.84</td>
<td>1.09</td>
<td>11</td>
</tr>
<tr>
<td>Opportunity to meet others with similar musical interests/backgrounds</td>
<td>4.23</td>
<td>.88</td>
<td>6</td>
</tr>
<tr>
<td>To have fun/an enjoyable experience</td>
<td>4.78</td>
<td>.54</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Musical Objectives</th>
<th>M</th>
<th>SD</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meet/work with college faculty or staff</td>
<td>4.01</td>
<td>.95</td>
<td>9</td>
</tr>
<tr>
<td>Develop/improve musical skills</td>
<td>4.85</td>
<td>.47</td>
<td>1</td>
</tr>
<tr>
<td>Performance opportunities (solo and/or ensemble)</td>
<td>4.08</td>
<td>.95</td>
<td>8</td>
</tr>
<tr>
<td>Learn new music</td>
<td>4.60</td>
<td>.66</td>
<td>4</td>
</tr>
<tr>
<td>Investigate music as a possible college major or career</td>
<td>4.18</td>
<td>.99</td>
<td>7</td>
</tr>
<tr>
<td>Experience a diversity of musical opportunities</td>
<td>4.33</td>
<td>.76</td>
<td>5</td>
</tr>
<tr>
<td>To experience a higher quality level of musical experience</td>
<td>4.73</td>
<td>.55</td>
<td>3</td>
</tr>
</tbody>
</table>
Table 2: Additional Social and Musical Comments listed by participants

<table>
<thead>
<tr>
<th>Social Responses</th>
<th>Musical Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Palmer told me to come</td>
<td>Play with violin</td>
</tr>
<tr>
<td>Awesome adventures/interaction with college students</td>
<td>To get better at symphony</td>
</tr>
<tr>
<td>Learn of FSU, Learn info for College prep</td>
<td>Be better at music theory</td>
</tr>
<tr>
<td>To prep for being away from home in college</td>
<td>Study music heavily</td>
</tr>
<tr>
<td>Connection with college professors/administrators</td>
<td>Love music</td>
</tr>
<tr>
<td>Get experienced</td>
<td>Enjoy playing music; Be the best that I can be</td>
</tr>
<tr>
<td></td>
<td>To learn more about theory and Florida State</td>
</tr>
<tr>
<td></td>
<td>Marching Chiefs</td>
</tr>
<tr>
<td></td>
<td>Learn different styles of music</td>
</tr>
<tr>
<td></td>
<td>It's all about the music</td>
</tr>
<tr>
<td></td>
<td>Become a better musician!</td>
</tr>
<tr>
<td></td>
<td>Band rules! (mostly trumpets)</td>
</tr>
<tr>
<td></td>
<td>Play great music</td>
</tr>
<tr>
<td></td>
<td>Get ready for my first year at Interlochen Arts Academy</td>
</tr>
<tr>
<td></td>
<td>Learn as much music things as possible!</td>
</tr>
<tr>
<td></td>
<td>To expand repertoire and gain performance experience</td>
</tr>
<tr>
<td></td>
<td>To learn new music</td>
</tr>
<tr>
<td></td>
<td>To improve musically</td>
</tr>
<tr>
<td></td>
<td>To improve talents and play with a larger/experienced band</td>
</tr>
<tr>
<td></td>
<td>Tenor sax = love</td>
</tr>
<tr>
<td></td>
<td>Learn music</td>
</tr>
<tr>
<td></td>
<td>Theory and composition practice</td>
</tr>
<tr>
<td></td>
<td>Develop my musical skills; improve Challenge</td>
</tr>
<tr>
<td></td>
<td>To widen my knowledge of music</td>
</tr>
<tr>
<td></td>
<td>To play my flute</td>
</tr>
<tr>
<td></td>
<td>Get better</td>
</tr>
<tr>
<td></td>
<td>To become a Marching Seminole</td>
</tr>
<tr>
<td></td>
<td>Learn new things about oboe</td>
</tr>
</tbody>
</table>

Proceedings of the 2009 Desert Skies Symposium on Research in Music Education
Analyzing the objectives by gender showed that females rated both the social objectives \((M = 3.95, SD = .69)\) higher than males \((M = 3.86, SD = .69)\), and the musical objectives \((M = 4.41, SD = .51)\) higher than males \((M = 4.38, SD = .52)\). For social objectives, 11\(^{th}\) and 12\(^{th}\) graders gave the highest ratings \((M = 3.95, SD = .72)\), followed by 9\(^{th}\) and 10\(^{th}\) graders \((M = 3.89, SD = .73)\), and 6\(^{th}\), 7\(^{th}\), and 8\(^{th}\) graders \((M = 3.87, SD = .61)\). Likewise, musical objectives were rated the highest by 11\(^{th}\) and 12\(^{th}\) graders \((M = 4.46, SD = .54)\), followed by 9\(^{th}\) and 10\(^{th}\) graders \((M = 4.37, SD = .52)\), and 6\(^{th}\), 7\(^{th}\), and 8\(^{th}\) graders \((M = 4.25, SD = .53)\). Additionally, students who had previously attended a summer music camp gave higher ratings for social objectives \((M = 3.93, SD = .73)\) than those who were participating for the first time \((M = 3.88, SD = .65)\), and higher ratings for musical objectives \((M = 4.43, SD = .50)\) over first time camp attendees \((M = 4.36, SD = .52)\).

To determine whether differences between social and musical objectives were significant, and to analyze for possible interactions between gender, grade level, and years of camp experience, a two-way analysis of variance (ANOVA) with repeated measures on one factor was calculated. Results indicated significant differences between the participants’ ratings of all objectives, \(F(15, 591) = 194.02, p < .01\), partial \(\eta^2 = .25\). Pairwise comparisons with Bonferroni corrections for multiple comparisons revealed significant differences between social and musical objectives \((p < .01)\). However, no significant differences were found between social and musical objectives for gender, grade level, and years of camp experience \((p > .05)\). Additionally, no other significant interactions were found \((p > .05)\).

Discussion

The results of this study indicated that musical objectives were more desired than social objectives by the participating students when they attend a summer music camp. Students particularly wanted to develop and improve their musical skills and to participate in high quality level musical experiences. The amount of previous summer music camp experience, gender, and students’ grade levels had no effect on what students wanted to achieve. Additionally, analysis of participants’ written comments showed far more musical-related responses than social-related comments. Furthermore, many responses specifically stated musical outcomes students hoped to achieve. The qualitative nature of these comments further supports musical objectives as more desirable than social goals. While the present study’s findings did concur with previous research that found students want to achieve specific social objectives during their summer camp experience (Bialeschki et al., 2002; Krambeck, 2004; Thurber et al., 2007), the preference for musical objectives suggests that students attend music camps for musical goals.

These results may reflect the specialized nature of music camps. Whereas students may elect to attend camps that are more general in scope, the specific nature of a music camp could attract students who are more focused on achieving certain musical objectives. This possibility may persist despite the wide array of social and recreational activities offered and frequently promoted by camps. Furthermore, the findings are especially interesting considering the potential cultural and musical diversity of the participating students, as well as variants among their ages. The findings demonstrated that students from all age levels and backgrounds sought to achieve musical objectives during their camp experience.
Implications from the study go beyond the participating students. Though one previous study (American Camp Association, 2008) indicated that students attending camps retain more information and skills, another investigation (Dilley, 1982) suggested students did not necessarily improve their musical skills when attending a one-week camp. While the present study did not assess the extent that goals or objectives were achieved, participating students did attend both one-week and two-week camps, and wanted to achieve musical goals more so than social goals. Consequently, results of the study could assist teachers in determining if encouraging students to attend a music camp would be beneficial. The data suggest that music teachers, perhaps being more aware of the musical focus of their students, should consider encouraging students to attend a music camp in an attempt to improve not only individual musical skills, but also the overall performance level of their entire ensemble. Parents may also feel more comfortable sending their children to camps realizing more specific knowledge and skills may be gained, thus perhaps providing a better financial value as well as musical value.

The study’s data are helpful to the large number of organizations and institutions offering summer music camps. The wide variety of camps may use the information to develop experiences that best meet the musical goals of their students, especially students of different ages and ability levels. Though students appear to want an enjoyable social experience, the primary focus of the camp experience should be musical. Opportunities to develop/improve musical skills through a variety of musical experiences and interactions seem warranted.

Additional research appears reasonable due to the large number of existing music camps, the numbers of students attending these camps, and the overall minimal number of research-based investigations involving music camps. In light of Dilley’s (1982) findings, how might camps be more effective in developing musical skills in different settings including length of the camp (e.g., one or two weeks) and the types of experiences offered (e.g., individual instruction, large ensembles)? Do overnight camps offer a greater concentration than day camps? Are more smaller, more specialized camps (e.g., piano camps, double reed camps) more effective in developing skills than larger more general camps (e.g., band camps)? Why or why not might teachers recommend music camps to their students and do they have any specific goals for their students to achieve? Finally, what are parents’ goals for sending their children to camps? Resolving these questions could lead to a more enjoyable and effective summer music camp experience.
References


Please answer the following:

Your gender:  _____ Male  _____ Female

What grade will you be entering in the fall semester?  

INCLUDING THIS CAMP, how many years have you attended a summer music camp?  

Please rate each item below by circling the appropriate number from 1 (not important at all) to 5 (very important) in what you hope to achieve during your summer music camp experience.

<table>
<thead>
<tr>
<th>Social</th>
<th>Not Important</th>
<th>Very Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Opportunity to meet new friends</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2. Chance to be away from home</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3. Spend time with your friends</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4. Be on a college campus</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5. Learn independence/Get ready socially for college</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6. Opportunity to meet others with similar musical interests/backgrounds</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7. To have fun/an enjoyable experience</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Other:  

______________________________________________________________________________________________
<table>
<thead>
<tr>
<th>Musical</th>
<th>Not Important</th>
<th>Very Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Meet/work with college faculty or staff</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>2. Develop/improve musical skills</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>3. Performance opportunities (solo and/or ensemble)</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>4. Learn new music</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>5. Investigate music as a possible college major or career</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>6. Experience a diversity of musical opportunities</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>7. To experience a higher quality level of musical experience</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

Other: __________________________________________________________________________________
Developmentally Appropriate Assessment in Early Childhood Music

Diane Persellin, Trinity University
Rachel Nardo, University of Utah

Abstract
The purposes of this two-part study were to evaluate: 1) early childhood music assessment tools 2) ease of use of these instruments by caregivers and music educators, and 3) music skills of young children using these assessment instruments. Four assessment instruments, Singing Activity Assessment (Krechovsky, 1998), Preschool Perception Inventory (Burnett, 1988), Audie (Gordon, 1989) and the Echo-Song Game (Persellin, 2007) were selected to test four-year-olds (n = 20) in an urban Head Start Center in South Texas and five-year olds (n = 20) in a kindergarten class in a suburban school in Utah. Feedback about the efficacy of testing instruments was also sought from caregivers, classroom teachers, music specialists, and college elementary methods students. Results indicated that all four instruments proved to be appropriate for use in this age group. Children were highly motivated to take part in these assessment activities. Caregivers preferred assessment instruments that could be administered easily as a classroom activity. Some of the concerns included: time required to administer tests, pacing of a pre-recorded test, and complexity and objectives of tests. It is hoped that this information will be helpful to caregivers, early childhood educators, and music educators working with young children.

While most teachers and caregivers of young children are aware of the musical challenges, systematic assessment of children’s musical abilities is often neglected (Nardo, Custodero, Persellin, & Fox, 2006). To address this gap in practice, our preliminary investigation explored selected measures, methods, and techniques for evaluating the vocal abilities and development of singing in preschool-aged children. The purposes of this initial phase were to: 1) identify measurable aspects of singing and vocal development in 4- to 5-year olds; 2) compare naturalistic (in-group) versus individualized assessment techniques; 3) evaluate four early childhood music assessment tools, and 4) determine the ease of use of these instruments by early childhood professionals and music educators. These are necessary first steps to inform our approach to understanding larger relationships.

Background

Vocal and Singing Development in Preschoolers – What to Assess?

Research purports that humans are born to sing; For most infants, musical babble begins as early as 6-months of age (Greenberg, 1979). Next, from the onset of language, toddlers are spontaneous singers, and by ages 3 to 4 the child also becomes more rhythmically and melodically accurate. However, singing in-tune from phrase to phrase remains inconsistent, as children often “modulate to new tonal centers between phrases” (Scott-Kassner, 1993). Nevertheless, accuracy continues to increase and modulation to new keys decreases by age 5 or 6. These changes are due, in part, to the growth in vocal tissue and an increase in vocal fold length. During this period the child gains control of his or her voice to use it expressively and in-tune (Jordan-DeCarbo & Nelson, 2002).
In this developmental period, the most comfortable vocal ranges for preschool children are the pitches middle C or D up five notes to G or A. Some children will sing in a lower, chest voice, or within the two or three notes of their speaking range, but with encouragement, the range can and should expand upward through imitative vocal play (Flowers & Dunne-Sousa, 1990).

**Song Acquisition**

The type and variety of songs chosen to teach young children to sing accurately is also very important. Although we hear children singing all sorts of rangy songs—from “Somewhere Over to Rainbow” to “The Star-Spangled Banner”—songs with simple, short melodies and repeating melodic and rhythmic patterns are most appropriate for preschoolers (Jarjisian, 1983).

**Purposes for assessment**

Teachers of young children typically assess learning for four reasons: 1) to plan and monitor the child’s progress, 2) to communicate the child’s progress to parents, 3) to identify children who may need special interventions or services, and 4) to evaluate how well the instructional program is meeting its goals (Bredekamp & Rosegrant, 1992, p. 22). Accordingly, assessment should be on-going throughout the year and can be embedded into instruction. Teacher’s methods can be informal, such as taking short, anecdotal notes and observations of the child, or more highly structured and standardized, such as peer-comparison tests, criterion-comparison tests, curriculum-based measurements, portfolio work samples, one-to-one interviews, observation checklists, rating scales, parent questionnaires, and inventories (Bigge & Stump, 1998; Bredekamp & Rosegrant, 1992; California Department of Education, 1993; Carr, 2001; Chen & McNamme, 2007; Cohen & Stern, 1978; High Scope, 2006; Krechevsky, 1998; Lazear, 1999). Most importantly, assessments should be developmentally appropriate, valid, reliable, and serve as a catalyst for planning and improvement of instruction (Miranda, 2004).

**Assessment practices in music**

Young children, however, can be challenging to test in music even with an increased understanding of appropriate assessment practices. They often lack the verbal or written skills to respond reliably, and several of the existing standardized music tests were designed for populations aged 8- or 9-years to adulthood. These standardized assessment instruments, such as Gordon’s *Primary Measures of Musical Audiation* (ages 5-8) (Gordon, 1979), the Bentley *Measures of Musical Abilities* (ages 8-14) (Bentley, 1966), and the Wing *Standardized Tests of Musical Intelligence* (ages 14 and above) (Wing, 1961) focus on the child’s ability to perceive differences in rhythm and pitch (Deutsch, 1983; Dowling & Harwood, 1986).

Other music assessment instruments have been developed to examine singing range, voice quality, inflection, enunciation, pitch matching accuracy, pitch memory, rhythm conservation, motorific sense (fast, slow, changing), singing and rhythmic accuracy, eye-hand coordination, timbre recognition, and consonance-dissonance recognition (Boardman & Andress, 1981; Brophy, 2000; Burnett, 1988; Flohr, 2007; Gordon, 1989; Leonhardt, 2005; Persellin, 1993, 1994, 2006; Rutkowski, 1986).

**Developmentally appropriate assessment in music**

In our two-part study, we selected four early childhood musical assessment instruments based on the guidelines for developmentally appropriate assessment practice, (i.e., performance-based, standardized, observational, and informal). Given the expectancies in development, the measures used in this study focused on melodic and rhythmic accuracy, modulation variance, expression, range, and the child’s personal choices of songs. Evaluation techniques included natural, in-group singing activities, and one-on-one assessments. We
evaluated each instrument for ease of use, age-appropriateness, and musicality. The instruments used were 1) the four-part early childhood Singing Activity Assessment (Project Spectrum: Preschool Assessment Handbook by Mara Krechevsky, (1998); 2) Audie by Edwin Gordon, (1989), 3) I Like to Sing About Me Perception Inventory by Millie Burnett (1988), and 4) one informal author-created assessment, The Echo Song Game (Persellin 2007).

The research questions in this study were: Given this 4- to 6-year old age group, what are the stated purposes for assessment of music learning? What are the appropriate methods for assessment of music learning? To what extent can music learning or musical development be assessed and reported with existing tools? Given two populations of teachers, what is the reported ease of use and practicality of each instrument?

Methods

Subjects in this study included teachers, caregivers, and young children. Case studies of two public preschool caregivers, two public kindergarten classroom teachers, two music specialists, and the two university authors included personal interviews, and review of student videos and the assessment instruments. Child subjects were two populations of young children: 20 four-year olds in a Head Start center in South Texas and twenty Kindergarten children in a suburban school in Utah. Music was shared informally in the Texas class by a caregiver who sings in a very low alto voice while the Utah class has had weekly music classes with the second author. The first assessment instrument for the Texas subjects was Audie: A Game for Understanding and Analyzing Your Child’s Music Potential, one of four tests of developmental musical aptitude tests developed and published by Edwin Gordon (1989). This instrument consists of tonal and rhythm subtests in which children are introduced to a prerecorded script and asked to respond initially as a class, then individually to the question “Is this my song?” The task requires them to determine if the three-tone examples match the model. Children in this bilingual Head Start center were also asked the question in Spanish, “Esta mi canto?” to assure that all children understood the directions. All children appeared eager to participate.

The second assessment for the Texas population was an author-created Echo Song Game (Persellin, 2007). Following vocal exploration activities, children responded to short, three-tone phrases within a descending minor third call-and-response folksong, “Oh, My, No More Pie”, (Feierabend, 1997) With this assessment, children responded first as a class, to learn the process of echoing, but then took turns responding individually in class. A puppet was used to encourage children to sing the short responses. Children’s singing skills were assessed on a three-point assessment instrument: Pre-singer (Rutkowski, 1986) (the child responded in a speaking voice), Developing singer (the child sang without matching pitches), and Singer (the child matched at least two of the three pitches).

Children in the Utah sample were asked to participate in three parts of the four-part early childhood “Singing Activity Assessment” selected from Project Zero materials (Krechevsky,1998). This assessment focused on measurements of tonal, rhythmic, and melodic memory. Individual children were asked to sing their favorite song as a solo, then “Happy Birthday” while alternating phrases with the teacher, and finally, a song learned earlier in the semester as a solo. All assessments were video-taped, scored by a panel of experts, then averaged. The point system for scoring followed the printed directions in the manual. Utah teachers also assessed a sample of children using the Preschool Perception Inventory by Millie Burnett (1988).

Results

Texas Audie

In the Texas class, two classroom caregivers, two pre-service classroom teachers, and a university investigator appreciated the ease of use of the prerecorded Audie tape (Gordon, 1989). Children found the task easy to perform when demonstrated in their music circle time. Teachers agreed that the rhythm and tonal
subtests should be administered on separate days in order to keep the children engaged. Teachers also stated, however, that the pace was too slow on the tape to hold children’s attention.

While children were engaged for the first few of the ten examples in each subtest, the silence on the tape between examples was too long to keep children engaged and to remember the criterion test pattern. When the test was repeated with the university investigator administering the instructions and examples with tone bells without the cassette tape, and with shorter periods of silence, most children stayed on task throughout all 10 examples. Teachers suggested that the tape be re-recorded by the university investigator for uniformity, but with only three seconds of silence between examples. While the number of subjects for these subtests was small, the scores of children in this class were slightly better on the rhythm subtest ($m = 6.7$) than on the tonal subtest ($m = 6.0$) (see Figure 1). Caregivers were interested in this assessment instrument and felt that parents of children with high scores would be interested in the test results. They were concerned that it needed to be administered one-on-one even though it only required about five minutes per child per subtest.

Figure 1 below displays the discrete range of correct responses on the vertical $y$ axis (zero to ten) as the number of subjects who received correct responses is indicated on the horizontal $x$ axis. The area in red represents trends of correct rhythmic responses; the area in gray represents trends of correct tonal responses.

![Rhythm and Tonal Subtest Trends](image)

Figure 1: Results of Audie (Gordon, 1989) indicated that children ($n = 17$) were more accurate on rhythm tasks ($m = 6.7$) than tonal tasks ($m = 6.0$) of a possible 10 point total in each subtest.
Texas *Echo Song*

Caregivers stated that the procedures of the *Echo Song Game* (Persellin, 2007) were easy to understand and could be administered to the class as a whole. These busy caregivers also appreciated that all twenty children could be assessed in less than five minutes during circle time. All teachers found it easy to determine whether children were “Singers”, “Developing Singers”, or “Pre-singers.” They also appreciated that this assessment could be administered to children in a group setting with one teacher inviting children to sing with the puppet and the other scoring the children’s singing responses. Caregivers stated that they were surprised at how few children were actually matching pitch. They also expressed discomfort with providing an in-tune vocal model in the higher singing range of “D to A” for children to echo. They suggested that the guitar chord accompaniment was important to support children’s singing, but expressed concern that they could not play a simple guitar accompaniment. Both caregivers and pre-service teachers recommended that the university investigator provide a recording of the *Echo Song Game* in order to administer it to children more effectively. If a compact disc or cassette tape could be provided, they indicated that they would be willing use this assessment throughout the year to evaluate developing pitch-matching skills.

Half of the children (*n* = 10) were analyzed to be pre-singers as they all responded to the three-tone phrases in the call and response echo song, “Oh My, No More My” using their speaking voices. Only four children (*n* = 4) responded in their singing voices and matched pitch in two of the three pitches. Six children (*n* = 6) were assessed as Developing Singers who responded by singing, but were not able to match pitch in this echo song.

_Utah Teachers_

In Utah, it was found that classroom teachers and music specialists had different needs and purposes in their assessment activities. Classroom teachers stated that they had inadequate time and need for tracking and reporting the musical development of their students. This is due, in part, to the district’s standardized report card, which only requires them to report on the child’s work habits, citizenship, and specific achievement in the areas of reading, writing, and mathematics. For this reason, they stated that both Burnett’s Inventory and the *Project Spectrum* assessment would be most appropriate to the tracking information needed by music specialists because music specialists focus on child’s perceptual, affective, and social development in relation to music activities.

Although these teachers were observed integrating music into their daily lessons and activities and wanted to see the children’s assessment videos, as they viewed the tapes they tended to focus and remark on the child’s non-musical behaviors. Comments were made about the child’s physical habits and use of language, rather than on the child’s level of musical development. They stated that the *Project Spectrum* assessment took too long to administer, was too complex as it provided too much information, and did not align with district report card requirements. Conversely, as the music specialists viewed the videos, they stated that *Project Spectrum* was useful for assessing child’s musical development and redesigning instruction. Both classroom teachers and music specialists suggested that “Happy Birthday” be replaced by a more familiar song, such as “Twinkle, Twinkle”.

_Utah Children_

In this first of three samples, one subject was un-testable and proved to be an outlier. As such, data for that subject was removed before calculations were done. For the rhythm component of this assessment, 24 points were possible. The range of scores was 10-24, with an average of 16.3 (See figure 2). Overall, children performed rhythms accurately 68% of the time. For the pitch component of this assessment, 13 points were possible. The range of scores was 4-11, with an average of 6.3. The children performed pitches accurately 49%
of the time. However limited this sample, these results indicate that this group of children are more accurate in performing rhythms than performing pitch. This result was observed in performances of their favorite song, as well.

![Project Spectrum Birthday Song Activities Subscores Combined for Group 1 (n=7)](image)

**Figure 2:** Kindergarten children scored higher in rhythm \((m = 16.3)\) than in pitch \((m = 6.3)\) when singing “Happy Birthday”.

**Conclusions**

_The purposes of this pilot study were achieved. We were able to review and test a variety of performance and non-performance-based music assessment instruments and profiles. Although classroom teachers and caregivers expressed interest in the musical achievement of their students, they did not have the same assessment purposes as the music specialists._

All four of the assessment instruments proved to be appropriate for use in this age group: Children were highly motivated to take part in these assessment activities. In two of the assessment activities they also enjoyed the one-on-one testing environment. One limitation of both the Audie and Project Spectrum assessments, however, was the amount of time required to administer the assessment—about 5 minutes per child for the Audie per subtest and 12-14 minutes per child for the Project Spectrum. Instructions and music examples reflecting our findings will be recorded to a compact disc for both the Audie and Echo Song Game to assist caregivers in the assessment process.
Other modifications of this pilot study will be to: expand the samples and eliminate non-performance assessments, increase number of raters, modify the Project Spectrum Song Activities to be more culturally relevant, eliminate songs with distracting accompaniments, and explore possible correlations between cognitive and language skills test results to tasks on music assessment. Future plans are also include assessing children using the Rhythm Performance Test-Revised (Flohr, 2007). In addition, parents will be interviewed to determine their interest provided in these assessment instruments regarding their child’s musical development.

While young children are difficult to assess, progress is being made in developing and refining age-appropriate assessment instruments that are meaningful and easy to implement for busy teachers and caregivers. It is hoped that this information about early childhood music assessment instruments will be helpful to caregivers, early childhood educators, and music educators working with young children.

References


A Study of the Effects Of Perceptual Modality and Interrelated Arts Instruction
On Student Achievement in the High School Choral Classroom

Jeffrey Ward, East Carolina University

Abstract

The purpose of this research was to investigate interrelated arts instruction in addressing the needs of visual and mixed modality strength learners. Using the Swassing-Barbe Modality Index, the researcher identified the perceptual modality strength of choral students from three selected high schools. Choral directors from these high schools taught a researcher-created interrelated arts unit. Using a pretest-posttest design, the researcher concluded that perceptual modality strength was not a factor in achievement in an interrelated arts unit. This researcher recommends that this study be expanded to learn more about the use of interrelated arts instruction in the choral music classroom. This researcher also recommends further study of the role of perceptual modality strength in the teaching and learning process.

Music teachers guide students with instruction designed to address learning styles, teaching styles, and perceptual modalities in an effort to enhance student achievement (Barbe, Swassing, & Milone, 1979; Dunn & Dunn, 1978). Moreover, music teachers design instruction to develop music concepts and knowledge of related art forms. Dunn and Dunn (1978) assert that instruction designed to match student learning styles is effective. Dunn (1994) suggests that matching perceptual modality strengths and teaching approaches may be more suitable for some students than a multisensory approach.

Perceptual Modality

Although learning style researchers focused many of their early work on identifying correlations between learning style and student achievement in reading (Carbo, 1980; Carbo, 1983; Carbo, Dunn, & Dunn, 1986), researchers have also examined learning style and its influence on student achievement in music. These researchers agree that children whose perceptual modality matched the corresponding treatment scored higher than those whose treatment did not match their perceptual modality; however, researchers differ in regards to multisensory instruction and its effect on student achievement in music.

Apfelstadt (1986) played major, minor, and pentatonic pitches for second grade students. Using the Swassing-Barbe Modality Index (SBMI), she found that second grade students of visual modality strength sang with better pitch accuracy than second grade students of auditory modality strength. Apfelstadt (1986) attributed these findings to the abstraction of auditory perception. She proposes that students should be encouraged to develop more than one modality strength and that visual reinforcement be used for the auditory learner, rather thanrote-singing.

Using the Swassing-Barbe Modality Index (SBMI) and the Colwell Music Achievement Tests 1 and 2 (MAT 1 and MAT 2), Sanders (1991) investigated the relationship between modality strength and music achievement in fifth grade choral students. Sanders (1991) found 32 statistically significant correlations between modality raw scores and music achievement raw scores in his sample groups. He found that visual learners scored significantly higher than learners of auditory and mixed modalities.
Falkner (1994) investigated the relationship among modality preferences, music aptitude, and attitude toward music of 185 third grade students. Using the Learning Style Inventory (LSI) by Dunn, Dunn, and Price, she found no statistically significant difference among the levels of music attitude and perceptual modality; however, she did find that auditory and visual students scored higher on the Primary Measures of Music Audiation (PMMA) by Edwin Gordon than tactual and kinesthetic students. Falkner (1994), suggesting a multisensory approach, recommended that instruction meet the perceptual needs of all students.

Persellin (1994) assessed whether melodic and rhythmic retention and pitch-matching ability could be improved through instruction based on perceptual modalities. Sixty-one children, ages 4-5, were taught using one of four treatments: visual (visual aids); auditory (singing and listening); kinesthetic (moving to music); or multimodal. Using a pretest-posttest design, Persellin (1994) found that children taught using auditory and multimodal presentations had a more statistically significant increase in achievement than children in the other two groups in melodic and rhythmic retention and in pitch-matching ability. The kinesthetic group showed the lowest achievement on both melodic and rhythmic retention.

Persellin (1992) randomly assigned 70 first grade students, 70 third grade students, and 70 fifth grade students into one of seven groups: 1. visual; 2. auditory; 3. kinesthetic; 4. visual and auditory; 5. visual and kinesthetic; 6. auditory and kinesthetic; and 7. visual, auditory, and kinesthetic. Each group was presented six rhythm patterns of increasing difficulty in their respective modality or modalities: visual (icons); auditory (played on resonator bells); or kinesthetic (patting the hand of the child). All groups within each grade level had statistically significant differences, with the exception of the visual-only first grade students who scored lower. Persellin (1992) concluded that incorporation of multiple learning modalities in instruction could result in more efficient learning of rhythmic patterns and that students were not confused by multisensory input.

Dunn (1994) presented 16 third grade students with three types of repeated-listening experiences: 1. auditory only; 2. auditory reinforced with visual stimuli; and 3. auditory reinforced with kinesthetic stimuli. During and after each listening experience, the students offered verbal comments. He then administered the Swassing-Barbe Modality Index (SBMI) to the students and asked the students, teacher, and parents of the students to identify their perceptual modality preference in writing. Dunn (1994) found that students more effectively “perceive, process, and recall musical events in one modality presentation than others” (p. 373).

Interrelated Arts Instruction

Researchers and practitioners (Anderson & Lawrence, 1982; Bresler, 1995; Irwin & Reynolds, 1995) have stressed the importance of interrelated arts instruction as a means to allow students to make connections among the arts. Anderson and Lawrence (1982) recommend that music educators use the analogous concepts of different art forms to reinforce musical concepts.

Haack (1970) investigated the use of visual arts as an aid to the development of broad musical stylistic concepts in junior high school music students. He based his study on the idea that music has an “abstract and temporal nature, [it] is difficult to study aurally, while the visual and plastic arts possess a more stationary existence, and therefore more readily lend themselves to analysis and intensive investigation” (Haack, 1970, p. 392). The control group received stylistic instruction using musical examples only; the experimental group received stylistic instruction using musical examples and visual art examples of the same style. Both groups were given a pretest and a posttest to assess the mean increase of scores between the two groups in identifying the styles of music and visual art. Haack (1970) found that students who received instruction in both music and visual art showed a statistically significant greater mean increase in scores than students who received instruction with only musical examples. He concluded that a multisensory approach was more effective in the development of aural concepts and skills.
A study is needed to investigate interrelated arts instruction in addressing the needs of visual and mixed modality strength learners. In addition, a study is needed to investigate interrelated arts instruction in addressing the criteria of National Standard #8 (“understanding relationships between music, the other arts, and disciplines outside the arts”) (MENC, 1996, p. iv).

With the intent of improving music pedagogy, the purpose of this research is to investigate interrelated arts instruction in addressing the needs of visual and mixed modality strength learners. The specific problems of the study are as follows:

1. To identify the relationship between the perceptual modality strengths of high school choral students and their achievement in a unit relating the specific musical concepts of specific exemplars of choral literature with specific exemplars of visual art;
2. To identify the relationship between the perceptual modality strength of the choral director and high school choral student achievement in a unit relating the specific musical concepts of specific exemplars of choral literature with specific exemplars of visual art;
3. To identify high school choral student perceptions of a unit relating specific musical concepts of specific exemplars of choral literature with specific exemplars of visual art;
4. To identify high school choral director perceptions of a unit relating specific musical concepts of specific exemplars of choral literature with specific exemplars of visual art; and
5. To identify the relationship between student achievement and high school chorus student and choral director perceptions of a unit relating specific musical concepts of specific exemplars of choral literature with specific exemplars of visual art.

METHOD

Design and Procedures

A pilot study was conducted by this researcher in 2005 to identify choral music and visual art exemplars. Investigative data were obtained to provide a foundation for the present study. In the pilot study, this researcher surveyed high school choral directors to identify: ten pieces of choral literature that should be taught to all high school choral students; musical concepts present in those ten pieces of choral literature; and strategies choral directors employed to address the visual art component of National Standard #8. This researcher also surveyed high school art teachers to identify: ten works of visual art that should be taught to all high school students; art fundamentals and elements present in those ten works of visual art; and if and how art teachers related visual art to music. The results of the pilot study are listed in Appendices A-B.

Based on their experience and expertise, this researcher selected three high school choral directors and their school chorus programs from a suburban town in the Mid-Atlantic region of the United States to participate in the present, pretest-posttest design, study. The researcher-selected choral directors identified a specific chorus class to participate in the study and implemented the researcher-designed units. In addition, the choral directors selected two pieces of choral literature, one with the intention to perform and another to study through guided listening. This choral literature was selected from choral music exemplars identified in the pilot study to this research. This researcher wrote two units of instruction (a performance unit and a guided listening unit) based on choral music exemplars selected by each choral director (a total of six units). These units matched choral music exemplars and visual art exemplars based on conceptual content of those exemplars, as delineated by the choral directors and visual art teachers from the pilot study survey, as a means to use visual art to reinforce musical concepts present in the choral music. The musical and visual art concepts and the choral music and visual art exemplars used in each lesson are listed in Tables 1-2.
The researcher-designed pretest-posttest (Appendix C) was created to assess the choral music student’s knowledge of musical concepts, visual art concepts, choral music exemplars, and visual art exemplars that were taught in the integrated arts units of study. During the scheduled class time, the choral director administered the researcher-designed pretest. The choral director then taught the units of study over the course of one week. After the choral director completed both units, he administered the posttest. This researcher scored all tests.

This researcher used the Swassing-Barbe Modality Index (SBMI) by Barbe, Swassing, and Milone (1979) to assess the modality strength of each student to identify a correlation between modality strength and improvement in score from the pretest to the posttest. Moreover, SBMI was administered to identify the perceptual modality strength of the choral directors to investigate the influence of teacher modality strength on the music achievement of the students.

Modality strengths are assessed by SBMI through a presentation of shapes (circle, square, triangle, and heart) in each modality, arranged in sequences of increasing length (Barbe, Swassing, & Milone, 1979). Subjects are asked to duplicate the sequence of those shapes. All shapes are of the same color, texture, and size.

According to Barbe, Swassing, & Milone, (1979), the test requires little instruction for the test administrator. It is administered individually and requires approximately 20 minutes. The SBMI administrator assesses the relative modality strength of subjects in the visual, auditory, and kinesthetic modalities. SBMI is not an assessment of perceptual modality weakness.

The points of each subject for each modality are divided by the total number of points for all modalities to determine the percentage of modality strength. According to Barbe, Swassing, and Milone (1979), a five percent difference in modality strength percentages is considered “educationally significant” (p. 5), indicating strength in that modality. They offer the following example to illustrate this calculation: if the scores of an SBMI subject are: Visual = 19;  Auditory = 13; and Kinesthetic = 9, the modality scores when converted to a percentage yield Visual: 19/41 = 46.3%; Auditory: 13/41 = 31%; and Kinesthetic: 9/41 = 22%. Therefore this subject has primarily visual modality strength and secondarily auditory modality strength. According to Barbe, Swassing, and Milone (1979), if modality percent scores are within five percent of each other, the subject is considered to have mixed modality strength between the two modalities.
Table 1: Musical and Visual Art Concepts Taught in Performance Units

Choral Music: *Sing Me to Heaven* by Daniel Gawthrop

<table>
<thead>
<tr>
<th>School 111 Unit</th>
<th>Musical/Visual Art Concepts</th>
<th>Visual Art Exemplars</th>
</tr>
</thead>
</table>
| Lesson 1       | **Music:** Diction and Articulation  
                 **Visual Art:** Texture (Impasto Technique) | 1. *Starry Night* by Vincent van Gogh  
                                                    2. *A Sunday Afternoon on the Island of La Grande Jatte* by Georges Seurat  
                                                    3. *Broadway Boogie Woogie* by Piet Mondrian |
| Lesson 2       | **Music:** Harmonic Dissonance and Consonance  
                 **Visual Art:** Color (Color Wheel) | *Impression: Sunrise* by Claude Monet |
| Lesson 3       | **Music:** Melodic Contour and Climax Points  
                 **Visual Art:** Rhythm (Progressive Rhythm) | 1. *Metamorphosis I* by M.C. Escher  
                                                    2. Giza Pyramids |

Choral Music: “Hallelujah” from *Messiah* by G.F. Handel

<table>
<thead>
<tr>
<th>School 222 Unit</th>
<th>Musical/Visual Art Concepts</th>
<th>Visual Art Exemplars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson 1</td>
<td><strong>Music:</strong> Texture (Polyphony and Homophony)</td>
<td><em>Sistine Chapel</em> by Michelangelo</td>
</tr>
</tbody>
</table>
| Lesson 2       | **Music:** Balance (Emphasizing Important Themes) | 1. *Mona Lisa* by Leonardo da Vinci  
                                                    2. *Guernica* by Pablo Picasso |
| Lesson 3       | **Music:** Diction and Articulation  
                 **Visual Art:** Texture (Impasto Technique) | 1. *Starry Night* by Vincent van Gogh  
                                                    2. *A Sunday Afternoon on the Island of La Grande Jatte* by Georges Seurat  
                                                    3. *Broadway Boogie Woogie* by Piet Mondrian |
| Lesson 4       | **Music:** Harmony (Tonic and Dominant Relationships) | *Electric Chairs* by Andy Warhol |

Choral Music: *Sing We and Chant It* by Thomas Morley

<table>
<thead>
<tr>
<th>School 333 Unit</th>
<th>Musical/Visual Art Concepts</th>
<th>Visual Art Exemplars</th>
</tr>
</thead>
</table>
| Lesson 1       | **Music:** Tone Quality | 1. *Nightwatch* by Rembrandt  
                                                    2. *Fishing in Spring* by Vincent van Gogh |
| Lesson 2       | **Music:** Texture (Polyphony and Homophony) | *Sistine Chapel* by Michelangelo |
| Lesson 3       | **Music:** Dynamics (Contrast) | 1. *Electric Chairs* by Andy Warhol  
                                                    2. *Falling Water House, Bear Run, PA,* by Frank Lloyd Wright |
Table 2: Musical and Visual Art Concepts Taught in Guided Listening Units

Choral Music: *Requiem* by W.A. Mozart

<table>
<thead>
<tr>
<th>School 111 Unit</th>
<th>Musical/Visual Art Concepts</th>
<th>Visual Art Exemplars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson 1</td>
<td><strong>Music</strong>: Texture (Polyphony and Homophony)</td>
<td><em>Sistine Chapel</em> by Michelangelo</td>
</tr>
</tbody>
</table>
| Lesson 2        | **Music**: Balance (Emphasizing Important Themes) | 1. *Mona Lisa* by Leonardo da Vinci  
                        2. *Guernica* by Pablo Picasso |
| Lesson 3        | **Music**: Form (ABA) | *U.S. Capitol* |
| Lesson 4        | **Music**: Harmony (Tonic and Dominant Relationships) | *Electric Chairs* by Andy Warhol |

Choral Music: *Cantique de Jean Racine* by Gabriel Fauré

<table>
<thead>
<tr>
<th>School 222 Unit</th>
<th>Musical/Visual Art Concepts</th>
<th>Visual Art Exemplars</th>
</tr>
</thead>
</table>
| Lesson 1        | **Music**: Harmonic Dissonance and Consonance  
                        **Visual Art**: Color (Color Wheel) | *Impression: Sunrise* by Claude Monet |
| Lesson 2        | **Music**: Form (ABA) | *U.S. Capitol* |
| Lesson 3        | **Music**: Melodic Contour and Climax Points  
                        **Visual Art**: Rhythm (Progressive Rhythm) | 1. *Metamorphosis I* by M.C. Escher  
                        2. Giza Pyramids |

Choral Music: *Gloria* by Antonio Vivaldi

<table>
<thead>
<tr>
<th>School 333 Unit</th>
<th>Musical/Visual Art Concepts</th>
<th>Visual Art Exemplars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson 1</td>
<td><strong>Music</strong>: Texture (Polyphony and Homophony)</td>
<td><em>Sistine Chapel</em> by Michelangelo</td>
</tr>
<tr>
<td>Lesson 2</td>
<td><strong>Music</strong>: Harmony (Tonic and Dominant Relationships)</td>
<td><em>Electric Chairs</em> by Andy Warhol</td>
</tr>
</tbody>
</table>
| Lesson 3        | **Music**: Articulation  
                        **Visual Art**: Texture (Impasto Technique) | 1. *Starry Night* by Vincent van Gogh  
                        2. *A Sunday Afternoon on the Island of La Grand Jatte* by Georges Seurat  
                        3. *Broadway Boogie Woogie* by Piet Mondrian |

All of the students and the choral director in the selected chorus class met once outside of their scheduled class time for the administration of the *Swassing-Barbe Modality Index* (SBMI). This researcher administered SBMI individually to each participant. Test administrations occurred in practice rooms adjacent to the choral classroom; thus, in a familiar setting to the students.
All students (n=59) from the selected classes were allowed to participate in the study, following the return of a parental consent form. This permission form included an overview of the research and a description of involvement expectations of the student. All students participating in the study were assigned a random code number representing school and the individual participant (e.g., school 111, student 3 equaled 111-3). These codes were used solely for identification purposes and were not published or known to anyone besides this researcher.

Following the instruction and posttest, a research-designed exit survey was administered to students and their choral director (Appendices D and E). This survey was designed to elicit opinions regarding the effectiveness of the units of study in understanding musical and visual art concepts and exemplars of choral music and visual art.

Analysis

After students were assessed using the Swassing-Barbe Modality Index (SBMI), they were divided into four groups: visual, auditory, kinesthetic, and mixed. This researcher compared the mean increase of scores from the pretest to the posttest of each group using a one-way Analysis of Variance (ANOVA) to determine if visual and/or mixed modality learners showed greater improvement than auditory or kinesthetic learners in the following categories:

1. Overall (maximum score: 36)
2. Musical Concepts (maximum score: 18)
   - Texture (maximum score: 6)
   - Articulation (maximum score: 3)
   - Diction (maximum score: 1)
   - Harmony (maximum score: 4)
   - Form (maximum score: 1)
   - Contour (maximum score: 1)
   - Dynamics (maximum score: 2)
3. Visual Art Concepts (maximum score: 13)
   - Identification (maximum score: 8)
   - Texture (maximum score: 1)
   - Rhythm (maximum score: 2)
   - Color (maximum score: 2)
4. Music and Visual Art (Combined) (maximum score: 5)
   - Interval/Color (maximum score: 2)
   - Contour/Rhythm (maximum score: 1)
   - Articulation/Texture (maximum score: 1)
   - Form/Architecture (maximum score: 1)

Significance of increase was calculated using $\alpha = .05$ as a level of confidence.

This researcher also identified the relationship between the modality strength of the choral director and student achievement in the units of study. He compared the mean increase of scores from the pretest to the posttest of students who demonstrated the same modality strength as their choral director to those students who demonstrated varying modality strength by using a 2-way t-test. Significance of increase was calculated using $\alpha = .05$ as a level of confidence.
After students completed the posttest, they and their choral director completed an exit survey. The first section of the survey is a Likert-scale section that was totaled according to the following point system:
SA: Strongly Agree (2 points); A: Agree (1 point); N: No Opinion (0 points); D: Disagree (-1 point); and SD: Strongly Disagree (-2 points)

The total number of points was calculated in the following survey categories:
1. Overall score (maximum score: 16; minimum score: -16)
2. Musical Concepts (maximum score: 4; minimum score: -4)
3. Visual Art Concepts (maximum score: 6; minimum score: -6)
4. Music and Visual Art (Combined) (maximum score: 4; minimum score: -4)

These points were compared to the mean increase of scores from the pretest to the posttest for each student using a Pearson Product Moment Coefficient (r) for the categories: 1. overall score; 2. score in musical concepts; 3. score in visual art concepts; and 4. music and visual art (combined). Significance of correlation was calculated using α = .05 as a level of confidence.

RESULTS

The purpose of this research was to investigate interrelated arts instruction in addressing the needs of visual and mixed modality strength learners. Using the Swassing-Barbe Modality Index (SBMI) to identify student modality strength, this researcher divided the sample into modality strength groups as shown in Table 3. Statistically significant findings of this study in regards to the first research problem (to identify the relationship between the perceptual modality strengths of high school choral students and their achievement in a unit relating the specific musical concepts of specific exemplars of choral literature with specific exemplars of visual art) are found in Table 4.

<table>
<thead>
<tr>
<th>Table 3: Perceptual Modality Strengths of All Participating Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
</tr>
<tr>
<td>28 (47.5%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 4: Summary of Statistically Significant Findings for the First Research Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harmony</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>Visual Greater Than Auditory</td>
</tr>
<tr>
<td>Mixed Modality Greater Than Auditory</td>
</tr>
<tr>
<td>Kinesthetic Greater Than Auditory</td>
</tr>
</tbody>
</table>

Although visual (n=28) and mixed modality (n=16) learners showed a greater statistically significant increase in three test subcategories than auditory (n=4) and kinesthetic (n=11) learners, visual and mixed modality learners overall did not show greater achievement in an interrelated arts unit. Visual learners showed a statistically significant greater increase in the musical concept harmony subcategory than auditory learners, but visual learners showed a statistically significant lesser increase in the musical concept form subcategory than auditory
learners. Mixed modality learners showed a statistically significant greater increase in the musical concept harmony subcategory than auditory learners and a statistically significant greater increase in the musical concept form subcategory than kinesthetic learners. Kinesthetic learners showed a statistically significant greater increase in the musical concept harmony subcategory than auditory learners, but kinesthetic learners showed a statistically significant lesser increase in the musical concept form subcategory than auditory learners.

The second research problem was: to identify the relationship between the perceptual modality strength of the choral director and high school choral student achievement in a unit relating the specific musical concepts of specific exemplars of choral literature with specific exemplars of visual art. No statistically significant results in regards to students who shared the same modality strength as their choral director were found.

The third and fourth research problem was: to identify high school choral student perceptions and high school choral director perceptions (respectively) of a unit relating specific musical concepts of specific exemplars of choral literature with specific exemplars of visual art. These perceptions were identified through a Likert-scale and open-ended response survey. The mean scores for the Likert-scale section of the student survey (n=56) are shown in Table 5. The mean scores for the Likert-scale section of the choral director survey (n=3) are shown in Table 6.

<table>
<thead>
<tr>
<th>Overall</th>
<th>Music</th>
<th>Visual Art</th>
<th>Music and Visual Art (Combined)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.3</td>
<td>1.6</td>
<td>3.1</td>
<td>2.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall</th>
<th>Music</th>
<th>Visual Art</th>
<th>Music and Visual Art (Combined)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.7</td>
<td>3.0</td>
<td>2.0</td>
<td>2.7</td>
</tr>
</tbody>
</table>

The fifth research problem was: to identify the relationship between student achievement and high school chorus student and choral director perceptions of a unit relating specific musical concepts of specific exemplars of choral literature with specific exemplars of visual art. No statistically significant results in regards to student achievement and student and choral director perceptions were found.

**DISCUSSION**

There are several factors that influence research findings. This study was influenced by the use of the *Swassing-Barbe Modality Index* (SBMI) as the instrument employed to identify perceptual modality strength, the researcher-designed music achievement pretest/posttest, and the researcher-designed interrelated arts unit.

The data obtained from SBMI consisted of sample percentages of perceptual modality strengths in the kinesthetic and mixed categories that were similar to the estimates published by the test authors. The visual and auditory perceptual modality strengths, however, were above or below the estimates (respectively) provided by Barbe and Milone (1981). Both the findings obtained in this research and the estimates provided by Barbe and Milone (1981) show visual and mixed perceptual modality strengths as the largest percentages of a population.
The difference between the data obtained in the present study and the Barbe and Milone (1981) estimates is greatest in the auditory perceptual modality strength. The low percentage of auditory learners identified in the present study may have influenced the statistical significance obtained in the modality test and music achievement test comparisons.

The age of the sample in the present research may have influenced the data obtained and explained the difference in sample percentages as compared to the estimates provided by Barbe and Milone. The sample in the present research consisted of high school students (ages 14 to 18). Barbe, Swassing, and Milone (1979) report that SBMI is appropriate for all populations/age levels, but the majority of previous research employing this test has been conducted with populations younger than age eleven (grade six). Accordingly, data obtained in this research (student perceptual modality strengths) may be inaccurate if SBMI is not appropriate for populations older than age eleven.

The test administration in the present research may have influenced the data obtained. As part of the administration of the visual and kinesthetic components of SBMI, students had the opportunity to review patterns by repeating them out loud or internally. During the auditory component of the test, students often did not review patterns as they had in the visual and kinesthetic tasks of SBMI. This lack of review may have resulted in inaccurate data for the auditory component of SBMI.

IMPLICATIONS

The findings obtained in this research may be used to guide researchers and music educators as they design and implement instruction for students. The identification of perceptual modality strength may allow choral directors to better understand the needs of their students. Choral directors should also be mindful of their own perceptual modality strengths and how that strength may effect their teaching. Accordingly, they may be able to meet the specific needs of students whose perceptual modality strengths may differ from their own by designing and offering differentiated instruction.

Visual reinforcement of information occurs regularly in a classroom setting. In the elementary music classroom, music educators use a variety of visual aids to reinforce musical concepts. As students age, their modality strength may become more mixed; however, the manner in which music students are instructed often includes a reduced amount of visual reinforcement of musical concepts. At the high school level, the musical score is the primary visual aid employed by music teachers. Emerging music readers, particularly visual and mixed modality students, may benefit from the use of a visual aid in addition to the musical score.

A choral director who employs a combination of visual art and music can meet the specific needs of visual and mixed modality learners, while addressing National Standard #8 (understanding relationships between music, the other arts, and disciplines outside the arts). By addressing National Standard #8 in this manner, choral directors have the opportunity to introduce music and visual art exemplars to students, to show conceptual connections between music and visual art through these exemplars, and to illustrate to students means of creative expression employed by musical and visual artists.

CONCLUSIONS

Based on the data obtained in this research, it may be concluded that perceptual modality strength was not a factor in achievement in the interrelated arts unit. This conclusion reflects the findings that all students, regardless of perceptual modality strength, showed similar improvement from pretest to posttest. The present researcher, therefore, asserts that a multisensory approach to instruction is more appropriate than matching perceptual modality strength to instruction in the high school choral classroom.

This researcher concurs with researchers of perceptual modality (Falkner, 1994; Persellin, 1992) in recommending that multisensory instruction may be used to increase student achievement. Dunn (1994) found
that matching perceptual modality strength with instruction is more suitable than multisensory instruction with third grade students. This researcher suggests that multisensory instruction may become more effective as the child matures into the high school years.

RECOMMENDATIONS

This researcher recommends that this study be expanded and adapted in a variety of ways to learn more about the use of interrelated arts instruction in the choral music classroom. This researcher also recommends further study of the role of perceptual modality strength in the teaching and learning process. The following is a list of specific recommendations offered to guide other researchers.

The accurate identification of perceptual modality strength is essential; therefore, researchers need to further investigate the use of published assessment instruments designed to measure perceptual modality strengths. This researcher recommends the Learning Style Inventory (LSI), a self-reporting instrument of learning style, be used to determine perceptual modality and compare the results to that of the Swassing-Barbe Modality Index (SBMI). Although LSI is self-reporting, comparing the accuracy of these assessments of perceptual modality may provide insight when creating instructional material for high school learners of a specific perceptual modality.

Additional research is needed to investigate the development of a test of modality strength (as distinguished from modality preference) that is not self-reporting. This change in test format may result in a more accurate identification of perceptual modality strengths.

The present study should be replicated with a larger sample and include a more thorough analysis of the data obtained via survey. Increasing the number of students will increase the sample size of all perceptual modality categories and may provide more insight regarding perceptual modality and student achievement in an interrelated arts unit. The open-ended questions contained in the survey provided many insights from students and choral directors; however, coding surveyed data would allow the researcher to identify trends within the responses.

The interrelated arts unit should be used as a model or replicated to investigate its effectiveness with other populations. In addition, this interrelated arts unit should be reexamined in regards to the presentation of common terminology used in both music and visual art. Although a concept such as line (contour) has a similar meaning in both music and visual art, terms such as rhythm and texture have different meanings in music and visual art. This difference may have resulted in confusion among the students. These visual art concepts should continue to be used to illustrate the musical concepts, but the visual art terminology may need to be de-emphasized to ensure that the definition of the musical concept terminology is clear to students.

This researcher recommends that choral directors consider perceptual modalities when developing interrelated arts instruction for their students. National Standard #8 provides a guideline to ensure that American students receive rich educational experiences that includes the study of music and its relationship to the other arts. Additional research regarding the design and implementation of this interrelated arts instruction will strengthen the quality of music teaching and learning.
REFERENCES


### Appendix A: Choral Music Exemplars Identified by Choral Directors in the Pilot Study

<table>
<thead>
<tr>
<th><strong>Title (Composer)</strong></th>
<th><strong>Publisher</strong></th>
<th><strong>Voicing</strong></th>
<th><strong>#</strong></th>
<th><strong>%</strong></th>
<th><strong>Musical Concepts</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gloria (entire work) (Antonio Vivaldi)</td>
<td>Walton</td>
<td>SATB</td>
<td>7*</td>
<td>41.18</td>
<td>All</td>
</tr>
<tr>
<td>Hallelujah (from Messiah) (G.F. Handel)</td>
<td>Alfred/</td>
<td>SATB</td>
<td>7</td>
<td>41.18</td>
<td>All</td>
</tr>
<tr>
<td>Alleluia (Randall Thompson)</td>
<td>Schirmer</td>
<td>SATB</td>
<td>5</td>
<td>29.41</td>
<td>M, H, T, F, D, P, Dy, Bl, B</td>
</tr>
<tr>
<td>Star Spangled Banner</td>
<td></td>
<td>SATB</td>
<td>5</td>
<td>29.41</td>
<td>M, H, T, F, D, P, A, Dy, Bl, B</td>
</tr>
<tr>
<td>Ave Verum Corpus (W.A. Mozart)</td>
<td></td>
<td>SATB</td>
<td>4</td>
<td>23.53</td>
<td>M, H, T, F, D, P, A, Dy, Bl, B</td>
</tr>
<tr>
<td>Battle Hymn of the Republic (arr. Wilhousky)</td>
<td>Carl Fischer</td>
<td>SATB</td>
<td>3</td>
<td>17.65</td>
<td>All</td>
</tr>
<tr>
<td>Elijah Rock (Moses Hogan)</td>
<td>Hal Leonard</td>
<td>SATB</td>
<td>3</td>
<td>17.65</td>
<td>All</td>
</tr>
<tr>
<td>He Watching Over Israel (from Elijah) (Felix Mendelssohn)</td>
<td></td>
<td>SATB</td>
<td>3</td>
<td>17.65</td>
<td>M, R, H, T, F, D, P, Bl, B</td>
</tr>
<tr>
<td>A Red, Red Rose (James Mulholland)</td>
<td>European</td>
<td>SATB</td>
<td>2</td>
<td>11.76</td>
<td>M, H, T, D, P, A, Dy, Bl, B</td>
</tr>
<tr>
<td>Cantate Domino (Giuseppe Pitoni)</td>
<td>Bourne</td>
<td>SATB</td>
<td>2</td>
<td>11.76</td>
<td>H, T, D, P, A, Bl, B</td>
</tr>
<tr>
<td>Cantique de Jean Racine (Gabriel Fauré)</td>
<td>Hinshaw</td>
<td>SATB</td>
<td>2</td>
<td>11.76</td>
<td>M, R, H, T, D, P, A, Bl, B</td>
</tr>
<tr>
<td>Carol of the Bells (Leontovich/Wilhousky)</td>
<td>Carl Fischer</td>
<td>SATB</td>
<td>2</td>
<td>11.76</td>
<td>M, R, H, D, A, Dy, Bl, B</td>
</tr>
<tr>
<td>Cum Sancto Spiritu (from Gloria) (Antonio Vivaldi)</td>
<td>Walton</td>
<td>SATB</td>
<td>2*</td>
<td>11.76</td>
<td>All</td>
</tr>
<tr>
<td>Hallelujah, Amen (from Judas Maccaebae) (G.F. Handel)</td>
<td>G. Schirmer</td>
<td>SATB</td>
<td>2</td>
<td>11.76</td>
<td>R, T, F, D, A, Bl, B</td>
</tr>
<tr>
<td>How Lovely is Thy Dwelling Place (from Requiem) (Johannes Brahms)</td>
<td>Ditson</td>
<td>SATB</td>
<td>2</td>
<td>11.76</td>
<td>All</td>
</tr>
<tr>
<td>O Magnum Mysterium (Morton Lauridsen)</td>
<td>peer music</td>
<td>SATB</td>
<td>2</td>
<td>11.76</td>
<td>M, H, T, F, D, P, Dy, Bl, B</td>
</tr>
<tr>
<td>O Sifuni Mungu (David Maddux)</td>
<td>Hal Leonard</td>
<td>SATB</td>
<td>2</td>
<td>11.76</td>
<td>M, R, H</td>
</tr>
<tr>
<td>Requiem (W.A. Mozart)</td>
<td>Bärenreiter</td>
<td>SATB</td>
<td>2</td>
<td>11.76</td>
<td>M, R, H, T, F, D, P, A, Dy, Bl,B</td>
</tr>
<tr>
<td>Salmo 150 (Ernani Aguiar)</td>
<td>Earthsongs</td>
<td>SATB</td>
<td>2</td>
<td>11.76</td>
<td>M, R, H, T, F, D, P, A, Dy, Bl,B</td>
</tr>
<tr>
<td>Set Me as a Seal (René Clausen)</td>
<td>Shawnee</td>
<td>SATB</td>
<td>2</td>
<td>11.76</td>
<td>M, H, T, P, Dy, Bl, B</td>
</tr>
<tr>
<td>Sing Me to Heaven (Daniel Gawthrop)</td>
<td>Dunstan</td>
<td>SATB</td>
<td>2</td>
<td>11.76</td>
<td>All</td>
</tr>
<tr>
<td>Sing We And Chant It (Thomas Morley)</td>
<td>SSATB</td>
<td></td>
<td>2</td>
<td>11.76</td>
<td>R, H, T, F, D, P, A, Dy, Bl, B</td>
</tr>
</tbody>
</table>

* (Number of respondents); % (Percentage of Respondents)

* Note that two responses only indicated the “Cum Sancto Spiritu” movement in Antonio Vivaldi’s Gloria.

**Musical Elements:** M (Melody); H (Harmony); R (Rhythm); Tx (Texture); T (Timbre); F (Form); D (Diction); P (Phrasing); A (Articulation); Dy (Dynamics); Bl (Blend); B (Balance); All (All of the above)
### Appendix B: Visual Art Exemplars Identified by Art Teachers in the Pilot Study

<table>
<thead>
<tr>
<th>Title</th>
<th>Artist</th>
<th>#</th>
<th>%</th>
<th>Art Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mona Lisa</td>
<td>Leonardo da Vinci</td>
<td>11</td>
<td>45.83</td>
<td>All</td>
</tr>
<tr>
<td>Sistine Chapel Ceiling (Genesis)</td>
<td>Michelangelo</td>
<td>11</td>
<td>45.83</td>
<td>All</td>
</tr>
<tr>
<td>Guernica</td>
<td>Pablo Picasso</td>
<td>10</td>
<td>41.67</td>
<td>All</td>
</tr>
<tr>
<td>Starry Night</td>
<td>Vincent van Gogh</td>
<td>10</td>
<td>41.67</td>
<td>All</td>
</tr>
<tr>
<td>David</td>
<td>Michelangelo</td>
<td>7</td>
<td>29.17</td>
<td>All</td>
</tr>
<tr>
<td>American Gothic</td>
<td>Grant Wood</td>
<td>4</td>
<td>16.97</td>
<td>All</td>
</tr>
<tr>
<td>Lascaux Cave Paintings</td>
<td>Leonardo da Vinci</td>
<td>4</td>
<td>16.97</td>
<td>L, Sh, Sp, C, Tx, R, T, V</td>
</tr>
<tr>
<td>Last Supper</td>
<td></td>
<td>4</td>
<td>16.97</td>
<td>All</td>
</tr>
<tr>
<td>Composition with Red, Yellow, and Blue</td>
<td>Piet Mondrian</td>
<td>3</td>
<td>12.50</td>
<td>L, Sh, Sp, C, R, B, P, V</td>
</tr>
<tr>
<td>Falling Water</td>
<td>Frank Lloyd Wright</td>
<td>3</td>
<td>12.50</td>
<td>All</td>
</tr>
<tr>
<td>Impression: Sunrise</td>
<td>Monet</td>
<td>3</td>
<td>12.50</td>
<td>Sh, F, Sp, C, Tx, R, B, V</td>
</tr>
<tr>
<td>Persistence of Memory</td>
<td>Salvador Dali</td>
<td>3</td>
<td>12.50</td>
<td>All</td>
</tr>
<tr>
<td>Pyramids at Giza</td>
<td></td>
<td>3</td>
<td>12.50</td>
<td>Sh, F, Sp, C, Tx, R, B, P, V</td>
</tr>
<tr>
<td>Roman Coliseum</td>
<td></td>
<td>3</td>
<td>12.50</td>
<td>Sh, F, Sp, T, R, B, P, V, E, H</td>
</tr>
<tr>
<td>The Scream</td>
<td>Edvard Munch</td>
<td>3</td>
<td>12.50</td>
<td>All</td>
</tr>
<tr>
<td>Broadway Boogie Woogie</td>
<td>Piet Mondrian</td>
<td>2</td>
<td>8.33</td>
<td>Sh, F, Sp, C, R, B, V</td>
</tr>
<tr>
<td>Christina’s World</td>
<td>Andrew Wyeth</td>
<td>2</td>
<td>8.33</td>
<td>L, Sh, C, B, P, V</td>
</tr>
<tr>
<td>Executions of the 3rd of May</td>
<td>Francisco de Goya</td>
<td>2</td>
<td>8.33</td>
<td>All</td>
</tr>
<tr>
<td>Les Demoiselles d’Avignon</td>
<td>Picasso</td>
<td>2</td>
<td>8.33</td>
<td>All</td>
</tr>
<tr>
<td>Marilyn</td>
<td>Andy Warhol</td>
<td>2</td>
<td>8.33</td>
<td>Sh, F, Sp, C, R, B, V, E</td>
</tr>
<tr>
<td>Metamorphosis</td>
<td>M.C. Escher</td>
<td>2</td>
<td>8.33</td>
<td>Sh, F, Sp, R, V</td>
</tr>
<tr>
<td>Night Watch</td>
<td>Rembrandt</td>
<td>2</td>
<td>8.33</td>
<td>All</td>
</tr>
<tr>
<td>Parthenon</td>
<td>Ictinus</td>
<td>2</td>
<td>8.33</td>
<td>L, Sh, F, Sp, Tx, R, B, P, V</td>
</tr>
<tr>
<td>Pieta</td>
<td>Michelangelo</td>
<td>2</td>
<td>8.33</td>
<td>L, Sh, F, Sp, Tx, R, B, P, V</td>
</tr>
<tr>
<td>Sunday Afternoon</td>
<td>Georges Seurat</td>
<td>2</td>
<td>8.33</td>
<td>L, Sh, C, R, B, P, V</td>
</tr>
<tr>
<td>Sunflowers</td>
<td>Vincent van Gogh</td>
<td>2</td>
<td>8.33</td>
<td>All</td>
</tr>
<tr>
<td>Vietnam Veterans Memorial</td>
<td>Maya Ying Lin</td>
<td>2</td>
<td>8.33</td>
<td>L, Sh, F, Sp, C, Tx, R, B, P, V</td>
</tr>
<tr>
<td>Women Series</td>
<td>De Kooning</td>
<td>2</td>
<td>8.33</td>
<td>Sh, F, Sp, C, Tx, R, B, P, V</td>
</tr>
</tbody>
</table>

# (Number of respondents); % (Percentage of Respondents)

**Art Elements:**  L (Line); Sh (Shape); F (Form); Sp (Space); C (Color); Tx (Texture); R (Rhythm); B (Balance); P (Proportion); V (Variety); E (Emphasis); H (Harmony)
Appendix C: Pretest and Posttest Given to Students

Directions: Please choose the best answer for each question and mark your answer on the answer sheet. Again thank you for your participation in this study.

1. Texture in music can best be described as ____________.
   a. the clarity of consonants in a sung piece
   b. the interweaving of melody, harmony, and rhythm
   c. the way in which an audience feels a piece of music
   d. word painting

2. Homophony can best be described as ____________.
   a. the simplest texture, consisting of a single melodic line
   b. a texture, consisting of more than one independent or imitative lines
   c. a texture, consisting of a melody and a rhythmic and harmonic supportive accompaniment
   d. a texture where all voices have similar rhythmic material

3. Polyphony can best be described as ____________.
   a. the simplest texture, consisting of a single melodic line
   b. a texture, consisting of more than one independent or imitative lines
   c. a texture, consisting of a melody and a rhythmic and harmonic supportive accompaniment
   d. a texture where all voices have similar rhythmic material

4. Which of the following statements are true: a characteristic of polyphony is that ____________.
   I. all themes are of equal importance
   II. some themes are more important than others
   III. only one voice has the theme and all other voices are supportive of that theme
   IV. the most important theme is distributed to many voices
   V. there may be more than one important theme occurring at the same time
   a. I only
   b. II and III
   c. II and IV
   d. II, IV, and V

5. The musical excerpt (given by your teacher) is best described as ____________.
   a. homophony
   b. polyphony
   c. monophony
   d. homorhythmic

6. The musical excerpt (given by your teacher) is best described as ____________.
   a. homophony
   b. polyphony
   c. monophony
   d. homorhythmic
7. Marcato can best be described as ______________.
   a. crisply detached
   b. smoothly connected
   c. accented, but connected
   d. plucked

8. Legato can best be described as ______________.
   a. crisply detached
   b. smoothly connected
   c. accented, but connected
   d. plucked

9. Staccato can best be described as ______________.
   a. crisply detached
   b. smoothly connected
   c. accented, but connected
   d. plucked

10. Diction is ______________.
    a. the style of a piece
    b. the tempo marking
    c. way in which words are pronounced
    d. the initial sound in singing

11. In music the tonic refers to the ______________.
    a. 1st scale degree
    b. 2nd scale degree
    c. 4th scale degree
    d. 5th scale degree

12. In music the dominant refers to the ______________.
    a. 1st scale degree
    b. 2nd scale degree
    c. 4th scale degree
    d. 5th scale degree

13. In music a consonance refers to ______________.
    a. pleasant sounds
    b. harsh sounds
    c. major sounds
    d. minor sounds
14. In music a dissonance refers to ________________.
   a. pleasant sounds  
   b. harsh sounds  
   c. major sounds  
   d. minor sounds

15. Form in music can best be described as ________________.
   a. the harmonic progression of the piece  
   b. the structure of the piece  
   c. the articulation of the piece  
   d. the style of the piece

16. The climax of a phrase can best be described as ________________.
   a. the beginning of the phrase  
   b. the loudest part of the phrase  
   c. the point of the phrase where the line rises to and ascends away from  
   d. the end of the phrase

17. Forte refers to ________________.
   a. accented  
   b. held  
   c. loud  
   d. soft

18. Piano refers to ________________.
   a. accented  
   b. held  
   c. loud  
   d. soft

19. The Sistine Chapel was painted by ________________.
   a. Leonardo da Vinci  
   b. Michelangelo  
   c. Vincent van Gogh  
   d. Pablo Picasso

20. Guernica was painted by ________________.
   a. Leonardo da Vinci  
   b. Michelangelo  
   c. Vincent van Gogh  
   d. Pablo Picasso
21. *Mona Lisa* was painted by _____________.
   a. Leonardo da Vinci  
   b. Michelangelo  
   c. Vincent van Gogh  
   d. Pablo Picasso

22. *Starry Night* was painted by _____________.
   a. Leonardo da Vinci  
   b. Michelangelo  
   c. Vincent van Gogh  
   d. Pablo Picasso

23. Impressionist art is most associated with _____________.
   a. Georges Seurat  
   b. Frank Lloyd Wright  
   c. Claude Monet  
   d. M.C. Escher

24. Impressionist paintings can best be described as _____________.
   a. individual dots in close enough space to each other to form an image  
   b. indistinct scenes with blurred lines and dulled colors  
   c. thick, heavy brushstrokes, expressing frenzy and raw emotion  
   d. the use of bold colors with clearly distinguishable figures

25. Pointillism is most associated with _____________.
   a. Georges Seurat  
   b. Frank Lloyd Wright  
   c. Claude Monet  
   d. M.C. Escher

26. Pointillist paintings can best be described as _____________.
   a. individual dots in close enough space to each other to form an image  
   b. indistinct scenes with blurred lines and dulled colors  
   c. thick, heavy brushstrokes, expressing frenzy and raw emotion  
   d. the use of bold colors with clearly distinguishable figures

27. Texture in visual art can best be described as _____________.
   a. an indication of movement by the repetition of motifs  
   b. the mixing of colors from the color wheel  
   c. the size and shape of the line used to outline motifs  
   d. how visual art feels
28. Rhythm in visual art can best be described as ________________.
   a. an indication of movement by the repetition of motifs
   b. the mixing of colors from the color wheel
   c. the size and shape of the line used to outline motifs
   d. how visual art feel

29. Progressive rhythm can best be described as ________________.
   a. a motif repeated in no apparent order
   b. a motif varied or rotated
   c. a repetition of wavy lines
   d. a motif steadily varied every time it is repeated

30. Colors that maintain their distinctness when painted closely together are called ________________.
   a. complementary colors
   b. primary colors
   c. secondary colors
   d. intermediate colors

31. Colors that are created by mixing two primary colors together are called ________________.
   a. complementary colors
   b. primary colors
   c. secondary colors
   d. intermediate colors

32. Dissonant intervals are similar to ________________.
   a. complementary colors because they absorbs each other’s light maintaining the distinctiveness of each color
   b. reflective colors because they reflect each other’s light muddling the distinctiveness of each color
   c. texture in visual art because the way it feels is similar to the way music sounds
   d. rhythm in visual art because the observer’s eye progresses through the artwork by means of musical rhythm

33. Consonant intervals are similar to ________________.
   a. complementary colors because they absorbs each other’s light maintaining the distinctiveness of each color
   b. reflective colors because they reflect each other’s light muddling the distinctiveness of each color
   c. texture in visual art because the way it feels is similar to the way music sounds
   d. rhythm in visual art because the observer’s eye progresses through the artwork by means of musical rhythm
34. The line of a musical phrase is similar to ________________.
   a. complementary colors because they absorb each other’s light maintaining the distinctiveness of each color
   b. reflective colors because they reflect each other’s light muddling the distinctiveness of each color
   c. texture in visual art because the way it feels is similar to the way music sounds
   d. rhythm in visual art because the observer’s eye progresses through the artwork by means of musical rhythm

35. Musical articulation is similar to ________________.
   a. complementary colors because they absorb each other’s light maintaining the distinctiveness of each color
   b. reflective colors because they reflect each other’s light muddling the distinctiveness of each color
   c. texture in visual art because the way it feels is similar to the way music sounds
   d. rhythm in visual art because the observer’s eye progresses through the artwork by means of musical rhythm

36. The architectural structure of the building (given by your teacher) is most closely associated with the musical form of ________________.
   a. sonata
   b. rondo
   c. da capo
   d. theme and variations
Appendix D: Exit Survey for Chorus Students

Please answer the following questions regarding the interrelated arts lessons that your choral director taught you.

Directions: Fill in bubble on your answer sheet that corresponds with your level of agreement for each statement:

A = Strongly Agree
B = Agree
C = No Opinion
D = Disagree
E = Strongly Disagree

1. Overall, the two units of study (performance unit and guided listening unit) were helpful in my understanding of musical concepts.

2. I have a greater understanding of the musical concepts most prevalent in the performance piece than I had prior to this unit of study.

3. I have a greater understanding of the musical concepts most prevalent in the guided listening piece than I had prior to this unit of study.

4. I have a greater understanding of visual art concepts than I had prior to this unit of study.

5. I have a greater understanding of visual art exemplars than I had prior to this unit of study.

6. I have a greater amount of knowledge of visual artists and their works than I had prior to this unit of study.

7. I see a relationship between musical concepts and visual art concepts.

8. Being able to see a visual depiction of a musical concept assisted me in my understanding of that musical concept.
Directions: Answer the following questions in the space provided.

1. What aspects of the interrelated arts unit did you find most insightful? How did it help your understanding of musical and visual art concepts?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. What aspects of the interrelated arts unit did you find most confusing? How could it be clarified to help your understanding of musical and visual art concepts?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Appendix E: Exit Survey for Choral Directors

Please answer the following questions regarding the interrelated arts lessons that you taught.

Directions: Fill in bubble on your answer sheet that corresponds with your level of agreement for each statement:

A = Strongly Agree
B = Agree
C = No Opinion
D = Disagree
E = Strongly Disagree

1. Overall, the two units of study (performance unit and guided listening unit) were helpful in my teaching of musical concepts.

2. The lessons that dealt with the musical concepts most prevalent in the performance piece were helpful in my teaching of musical concepts.

3. The lessons that dealt with the musical concepts most prevalent in the guided listening piece were helpful in my teaching of musical concepts.

4. I am more confident in my ability to teach visual art concepts than I was prior to this unit of study.

5. I am more confident in my ability to teach about visual art exemplars than I was prior to this unit of study.

6. I am more confident in my ability to teach about visual artists and their works than I was prior to this unit of study.

7. I am more confident in my ability to teach relationships between musical concepts and visual art concepts, fulfilling National Standard #8 (understanding relationships between music, the other arts, and disciplines outside the arts).

8. Being able to see a visual depiction of a musical concept was helpful to my students in their understanding of that musical concept.
Directions: Answer the following questions in the space provided.

1. What aspects of the interrelated arts unit did you find most insightful for your students? How did it help their understanding of musical and visual art concepts?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. What aspects of the interrelated arts unit did your students find most confusing? How could it be clarified to help their understanding of musical and visual art concepts?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Arts Partnerships, Schools, and Research

Neryl Jeanneret, The University of Melbourne

Abstract

In addition to a growing number of arts partnerships with education in Australia, there has also been an increasing interest by arts organizations in investigating the impact of their programs through more rigorous examination and in collaboration with researchers (for example, ArtPlay, 2006; Arts Victoria, 2008; The Song Room, 2008). In 2006 the Australia Council for the Arts funded an ambitious two year arts partnership project between one of Australia’s premier music organizations and a regional community. The aim was to involve a whole community in a music enrichment program that brought together elementary and secondary students, teachers, community musicians, members of the community and musicians from outside the area with a broad range of objectives. Part of the funding was to be devoted to researching the impact of the project in relation to the proposed outcomes sought. This paper reports on a number of difficulties that arose in the research process which also highlights the importance of collaboration and negotiation with all parties concerned with a project. The data were examined in relation to two frameworks developed by Ofali (2004) for the Arts Council England report Artists Working In Partnership With Schools- Quality Indicators And Advice For Planning, Commissioning And Delivery with suggestions of how a research arm for such projects might be considered in light of these frameworks.

Background

There is a growing body of research that supports the positive educational and social impact of the arts on young people (Fiske, 1999; Deasy, 2002; Bamford, 2006). There has also been an interest in the role of arts partnerships with schools; and Sinclair (2006) suggests that it is the “sustained nature of partnerships that is the critical factor in maximizing the potential positive impacts of the arts on young people” (p. 5). Further to this, Bamford (2006) states that, “Quality arts education tends to be characterized by a strong partnership between the schools and outside arts and community organizations” that not only includes partnerships between schools and arts organizations but between teachers, artists and community (p.141) when she reported on the UNESCO, Australia Council for the Arts and International Federation of Arts Councils and Cultural Agencies (IFACCA) collaboration. More recently, Galton, (in press) notes that while artists have been working in schools for some time “there is little available evidence of the effect that such interventions [have] had on schools”. Since 2001, the Australia Council for the Arts has commissioned six education and the arts research projects which have centered on arts participation with children in middle school years (aged 9 to 15 years) and particularly on children perceived to be ‘at risk’. Hunter’s (2005) overview of these six Australia Council programs summarized the scope of the results of these projects and provided a list of essential ingredients for an effective arts education project which included:

- student-centered learning,
- administrative support,
- integrated professional development,
- an integrated program,
• ‘authentic’ learning,
• an exposure to the diversity of the arts,
• positive role models,
• recognition of cultural difference,
• continuity and sustainability, and
• artists as effective partners.

Hunter’s essential elements reflect similar suggestions from the United Kingdom. In her report for the Arts Council England, Ofali (2004) acknowledged the importance of not only these elements of successful arts education projects, but also the importance of coherent planning and delivery as shown in the diagrams below (see Figures 1 and 2). These diagrams clearly identify a set of components necessary in what is seen as a two-phase artist-in-schools partnership - the planning and the combined delivery and outcomes.

Figure 1: Partnership Planning Preparation (Ofali, 2004)
In addition to the examination of arts partnerships with schools in Australia, there has been an increasing interest by the arts organizations themselves (rather than funding and government bodies) in examining the impact of their programs through deeper investigation and in collaboration with researchers (for example, ArtPlay, 2007; Arts Victoria, 2008; The Song Room, 2008). This type of collaboration is not new, one example being the sustained investigation into the Dallas Arts Partners (Dallas Arts Partners, 2004). What has come to light in the Australian context is the size and scope of such research projects envisioned by some of these organizations that would make even the most seasoned researcher balk. One such example is examined in this paper. The Ofali frameworks became very useful in the organization of the data for the final research report for reasons that will become evident but, as a result of this project, I am suggesting that there should be consideration given to adding a research component to such a framework to aid such organizations in the development of a research plan that will yield meaningful and useful information.
The Project

In 2006 the Australia Council for the Arts funded an ambitious two year arts partnership project between one of Australia’s premier music organizations and a regional community. The aim was to involve the whole community in a music enrichment program that brought together elementary and secondary students, teachers, community musicians, members of the community, and musicians from outside the area with the broad range of objectives noted below.

1. provide equitable access to quality music education through intensive investment in one regional community
2. build a replicable collaboration model involving arts, education, government and community
3. build local capacity in creativity, imagination and innovation which will enable sustainable benefits after the project’s conclusion
4. provide quantitative and qualitative analysis of the project on which recommendations for future programs can be based
5. provide musicians with professional development and increased income
6. operate the program on a sound financial base, providing regular transparent reporting
7. promote awareness of the project well beyond the community bounds to stimulate development of similar projects elsewhere (from the original proposal, 2006).

Part of the funding was to be devoted to Objective 4 that would research the impact of the project and develop recommendations for future programs. The organization advertised for a researcher to design and implement a research plan that addressed what had become the more clarified aims of the project (Figure 3) and a young researcher (in the process of a part-time PhD) was employed in July 2006. This researcher proceeded to plan for the whole project and implemented the first Phase of the research throughout the remainder of 2006.

---

Figure 3: Focused Aims of the Project

For the students:

- increased love and understanding of and engagement in music
- improved ability to work with others
- increased problem solving, planning and organizational skills
- improved communication and critical thinking skills
- increased self esteem and confidence
- inspiration and increased confidence in creative self expression

For the teachers

- opportunities to work along side highly respected musicians leading to enhanced motivation and re-energized ideas
- increased skills, knowledge and expertise in the teaching of music to support curriculum implementation
- more open, flexible and innovative approach to teaching
- contribute to the professional development of teachers across the school
For the community

- increased sense of identity and community
- pride in their young people
- enhanced and reinforced Australian culture and identity

For the musicians

- training and skills development under expert supervision to become true educational collaborators in the classroom
- increased earned income
- deepened involvement in and connection with communities, working as role models as performers and creative artists, giving tangible evidence of the value of the arts in contemporary Australia
- opportunities for artists to contribute to music education and growth within their community (Project Plan, 2006).

The project was to take place over two years and would be conducted in three phases. In each phase a performing group and composers would work intensively in the schools in the community for a week at a time (See appendix for the Scope and Timeline for the Project). It was anticipated that 13 elementary and secondary schools with over 400 students within those schools would be involved. The research design consisted of a mixed methods approach that included data collected by way of pre- and post-test surveys, observations, interviews, focus groups, photographs, video-recording, artifacts, reflective journals and written reflections (Table 1).

Table 1: Data collected according to role of participants in the study.

<table>
<thead>
<tr>
<th></th>
<th>Survey</th>
<th>Observations</th>
<th>Photographs</th>
<th>Video</th>
<th>Artifacts</th>
<th>Reflection</th>
<th>Focus Group</th>
<th>Interviews</th>
</tr>
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<tbody>
<tr>
<td>Music Teachers</td>
<td>X*</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music Students</td>
<td>X*</td>
<td>X*</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Community musicians</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Professional musician/composers</td>
<td>X*</td>
<td>X*</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X*</td>
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<tr>
<td>Community</td>
<td>X*</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
</tbody>
</table>

* Collected data that became part of the Final Report.
At the beginning of 2007, the Melbourne Graduate School of Education at the University of Melbourne was invited to take over the research component of the project. With a research budget of $10,000 (later increased to $15,000), the original plan was not feasible and there had to be a reduction in the proposed scope of the research. A team of three researchers completed the project. Without considerable time over allocated by the budget, much of the anticipated research and reporting would have been impossible. Thirty of the research assistant’s days were provided through an internship placement that would have added over $8,000 to the cost. The database designer spent many hours over and above allocated funding solving data entry and programming problems in order for some meaning to be made of the huge amount of quantitative data collected, much of which was eventually discarded. Unfortunately, the team did not use many of the hours of expensive and valuable video footage gathered by an employed professional. We were prepared to spend the hours over and above the budget because it was both an ambitious and worthwhile project we were committed to supporting (See the Scope and Timeline for the Project for Phases where data was collected).

Analysis

The qualitative data obtained from the surveys, observations, focus groups and interviews was compiled, coded and analysed against the project aims presented in Figure 1. Much more informative data with easily recognised recommendations for future projects came from using the Ofali diagrams as a framework for organizing the Report. The quantitative data from the elementary students were entered and examined in relation to frequency distributions and mean changes from pre- to post-test results.

Wide ranging and rich information came from the qualitative data about the impact of the activities on individual students, teachers and schools. The survey data revealed some interesting information but caution had to be exercised in attributing too much weight to these results. There were difficulties that arose from both the design and the administration of the quantitative aspect of the research. There was considerable difficulty matching students on the pre- and post test surveys over all the phases. In some cases different student cohorts participated in Phases 1 and 2. For example, Grade 6 students in 2006 had moved out of the school in 2007. As the project progressed, there was increasing difficulty with the survey return. Given that the arts organization administered evaluation surveys as well as the research surveys, it seems the participants became increasingly less inclined to complete and return requests for written material. It was also noted that a number of students did not take the survey seriously and ticked all the same column (eg I don’t do most of the time I hardly do this at all because I really don’t like it.) regardless of the nature of the item. The researchers felt that while the use of the Likert-scale faces (Figure 4) might be appropriate for young children, Grades 5 and 6 find them unsophisticated and would respond more readily to written descriptions of the scale. The descriptions of the faces also seemed overly elaborate and contained a mixture of meanings. For example, enjoyment of doing something was coupled with a time factor. If students enjoyed doing something, it was assumed that they did it all the time. It was also noted that in future projects, the surveys need to be administered, supervised and collected by the researcher rather than relying on already busy teachers, a number of whom did not mail back the surveys in spite of repeated requests.
The origins and design of the survey, particularly the non-music items that were supposedly related to extra-musical attributes such as self-esteem, and the method of analysis were not clear from the information provided. Unfortunately the researchers were obliged to continue using the original survey because there had been considerable data already collected and awaiting analysis. It became more and more obvious that the planning of items related to psychological dimensions such as self-esteem, confidence and critical thinking skills, had been given little thought in relation to the reliability, validity and credibility of such measures in relation to previous research in the field.

The original scope of the research planned for data collection from over 400 students in 13 schools but these numbers where severely reduced in the case of the quantitative data due to the numerous problems noted, including history, mortality, poor return rate and difficulties matching surveys. The final comparison of pre- and post-test surveys involved six of the elementary schools and 111 students. It was interesting that the students’ attitudes towards music and music making were quite positive at the outset. For example, on the first two items, I like making up music and I like playing instruments, 65.28% students responded with “most” or “some” of the time on the first item and 68.75% on the latter. On the other hand, there was a very obvious, positive shift for those students whose ranking on the musical items was “undecided” or negative on the pre-test. It appears that the greatest impact occurred with those students who were either negative or undecided about a variety of music experiences before the project. It is important to ascertain the kinds of musical experience students have had prior to the project and helpful in the research design and the planning of the intervention program for the school, so that changes in attitudes can confidently be attributed to the impact of the program. There was also a high initial positive response to I like playing musical instruments and it was found that 44% of the students on the pre-test nominated that they played an instrument so there was not likely to be a huge shift on the post-test. The researchers then looked at the differences with students who had been negative on the pre-test. Similarly, it could be assumed that with 44% of the students already playing an instrument, there would not be great changes in attitude to the item I want to learn a musical instrument. It is interesting, though, that the means for both pre- and post-tests were quite negative. Perhaps students were a little confused about how they should respond if they were already learning an instrument?

The problem that arose from trying to glean credible information from the quantitative data serves to highlight the importance of planning in consultation with experienced researchers. As noted above, the design
and administration of the survey showed a lack of knowledge in the area. Experienced researchers know a range of established tools and approaches that would elicit meaningful and credible information.

**Reporting the results**

The following section examines the results in relation to aspects of the Ofali frameworks. There were data that could suggest improvement in all aspects of the frameworks but those of particular interest in light of the focus of this paper are: clarity of purpose; shared understanding of aims and objectives; project brief; partner selection procedure; and the systems in place to support the project.

*Clarity of purpose, Shared understanding of aims and objectives, Project brief*

The data indicated that initially there was neither a clarity of purpose nor a shared understanding of what the project was aiming to achieve. The arts organization’s broad objective to establish “an entirely new platform of genuine collaboration” needed to be better defined and broken down into achievable aims that would emerge from negotiation and collaboration with the community. According to the teachers and administrators who were interviewed, the aims and objectives of the project were vague and the learning outcomes were not clearly conveyed to the schools. The outcomes were also viewed as vague by the previously employed musicians who were not sure how this project was significantly different from what they had done in programs in the past. It should be noted that in response to the feedback from Phase 1, the arts organization adapted the program with more clearly defined objectives to better suit schools, especially for the secondary schools involved in Phase 3. It was obvious that once schools were consulted about their specific needs, the project had greater perceived purpose for the teachers. They could now make a connection between what they were already doing and that the proposed project could complement and enhance their curriculum. Clearly, for the maximum benefit of all, the objectives of the program should be planned together with schools as suggested by Ofali rather than imposed.

Similar concerns effected the research on the clarity of purpose. While there seemed to be a number of sets of aims and objects that clouded the focus of the design, the anticipated scope of the research was far too large for the budget allocated. Careful thought and planning needs to take place to develop manageable and feasible research questions and a research design that can be accommodated within the larger project. There should be careful consideration of how qualitative and/or quantitative methods can provide evidence for changes which can be attributed to the intervention. Obviously there needs to be a shared understanding of aims and objectives but there also needs to be a shared understanding of both the organization and its operations, and how research can and might function in this context. There should be a shared vision of the potential research and an understanding of the roles and responsibilities when implementing the research design. It follows that the Project Brief should contain a clear set of manageable deliverables and time-line for the information sought.

*Partner selection procedure*

While it is understood that time issues were a problem for the arts organization, the selection period was very short and the project parameters were not clearly defined prior to selecting schools. Not all the schools and principals were consulted prior to the community accepting the project nor were all schools supportive of the project. It was not taken up by some schools because there was no opportunity to consider how the project might complement the existing classroom programs. Other schools were slightly irritated at having to allocate time to the program at short notice and without sufficient consultation. There also seemed to be a perception on the part of arts organization that an insignificant degree of music education was taking place in the schools, a perception that was possibly supported by the community’s original expression of interest. The number of
elementary students who nominated they played an instrument (44%) was well above what might be the case in other country regional areas and clearly shows there was an active musical culture in a number of the schools. Perhaps if more thought had been given from the start, the project could have started with a smaller number of schools; with the final aim of adapting and expanding the project over time as the needs and interests of the community as a whole became more obvious.

In the case of the research, a partner with the appropriate experience and qualifications needs to be recruited early in the project development with collaborative consideration and planning taking place in relation to both the project and research arm.

*Systems in place to support the project*

Phase 1 of the project took an enormous amount of time and resourcing from the arts organization that would be unsustainable without significant outside funding. There were also difficulties in trying to administer the project from their Head Office, which was interstate, and the state office, which was two hours away. It became obvious that the role of the local liaison officer was absolutely essential in maintaining a conduit for information to and from the community to the organization. The budget and staffing for such a project needs to acknowledge the significant amount of time it takes to set up the implementation and allow staff time accordingly. Similarly, it is critical that a local liaison person not only be identified very early in negotiations with a clearly stated role but also be included in the budget for designated time devoted to the project each week.

If it is possible, the organization might consider a smaller scale, pilot study or scoping exercise to assist in the development of a research plan that would set up a manageable operation in light of the comments above. There also needs to be a clear delineation of the roles and responsibilities of both the researcher and organization, and acknowledgement that there needs to be a flexibility of systems to respond and evolve during the project. Considerable thought also needs to be given to the development of a feasible budget for all aspects of the project.

With reference to the above observations, I suggest that Ofali’s framework could be valuable with the addition of a research arm (Figure 5) in the Partnership, Planning Preparation phase.
Figure 5: Partnership, Planning, Preparation

**With schools**
- partnership selection procedure
- shared understanding of aims and objectives
- clarity of purpose
- project brief
- systems in place to support the project
- artist familiar with educational process, school and particular needs
- contract

**With researchers**
- partnership selection procedure
- shared understanding of aims and objectives
- clarity of purpose
- project brief
- systems in place to support the project
- recruit researcher with appropriate experience
- collaborative consideration of Project & research arm
- shared understanding of aims and objectives
- shared understanding organization & research
- shared understanding of roles
- shared vision of potential research
- manageable & feasible research questions
- manageable objectives that are observable, assessable
- developed with feasible budget
- consider how can qualitative & quantitative methods show changes are attributable to intervention
- clear set of manageable deliverables
- manageable time-line for information sought
- consider smaller scale pilot study or scoping exercise
- clear delineation of roles of researcher and organization
- flexibility of systems to respond & evolve

**Partnership Planning Preparation**
Conclusion

Research that has an impact such as Champions of Change (Fiske, 1999) are large-scale, well-funded projects with long term realistic objectives and time-frames. There is a need for greater understanding on both the part of organizations and academics of each other’s expertise and knowledge, and a blending of this expertise to maximize the potential research. Organizations need a range of options with well-designed and appropriate measures to match their intentions.

Advocacy versus research

There also needs to be an acknowledgment of the difference between research and advocacy, and the purpose of the research. Generally these organizations are using some sort of data collection that provides information about their programs; but they are frequently unaware of the differences between “feedback” and research. These organizations traditionally use a relatively simple evaluation form that serves as a functional tool to provide feedback into their operations and to provide information about the success of the program. The evaluation is usually self-reporting, related to enjoyment/satisfaction on the part of the students, sometimes about their perceptions of what they have learnt, and the value of the program as perceived by the teachers. Arts organization are to be applauded for wanting to look more deeply at the effects of their program across a broad range of dimensions including the psychological but too often make a quantum leap to wanting to make a variety of ambitious claims based on evidence, the collection of which is not practical in terms of logistics, time and budget.

Using the Ofali frameworks helped organize the reporting of the findings for this project and provide recommendations for improvement in future projects of this type. I would strongly urge that thought be given to the consideration of the suggested research dimensions. It would seem very timely for academics in the field to establish some guidelines for arts organizations contemplating researching their practice and the impact of their partnership programs with schools.

References


Young Children’s Responses to Familiar and Unfamiliar Activities

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Abstract

In order to determine whether familiar and unfamiliar activities elicit more responses in young children, two early childhood music classes were administered a treatment during two activities immediately following the greeting song. The treatment consisted of 5 weeks of familiar activities and 5 weeks of unfamiliar activities. Fifteen children, aged 9 to 36 months, demonstrated three main categories of responses: looking, movement, and vocal responses. The responses were videotaped, and two early childhood music teachers counted the responses from the videotapes. The interjudge reliability was .42 for looking responses and .63 and .61 for the movement and vocal responses. The low interjudge reliability may have been due to insufficient judges’ training. The results showed that there was a statistically significant difference in the movement responses, demonstrating greater responses in the familiar activities at the .05 level. These findings suggest that music teachers should continue to employ both familiar and unfamiliar activities, but children may need exposure to familiar activities before they have readiness to respond. Further research is needed to discover if factors other than the activity affect children’s willingness to respond.

Music and language are similar in that they both involve the organization of sounds. In fact, there is an adage that states that, “music is a universal language.” Papoušek addresses their apparent physical similarities, stating, “One obvious link between language and music is the dual function of the human vocal tract: it serves both as a speech organ and as a musical instrument” (Papoušek, H., 1996, p. 42). Gordon (2003), however, argues that, because music does not have grammar or sentence structure, it is not a language. Nevertheless, there is still a relationship between these two distinct forms of communication.

By looking more deeply at the processes in acquiring language and music, the connections between these processes become clearer. The process of acquiring language begins before birth and continues through infancy as children listen to language and learn to form words and sentences (Gordon, 2003). Acquiring music occurs in a similar process. Sloboda (2005) describes this process as having four stages, in which a person must listen, organize the information, create patterns, and finally convert the sounds into a response. Gordon (2003), similarly, describes the process as starting first with listening. However, he extends the language analogy, noting that, after children listen and acquire a vocabulary of sounds, they begin to babble musically, as children babble in language. Then, as children begin to understand the music they hear, they become able to imitate musical phrases and then whole songs and chants. Finally, they realize that these songs and chants can be symbolized into music notation, and children begin to read and write music (Gordon, 2003).

In order to help young children begin to process music, Gordon developed his Music Learning Theory for Newborn and Young Children (Gordon, 2003). Unlike other early childhood music methodologies, the goal of Music Learning Theory is to support children’s development of audiation (Gordon, 2003). Gordon specifically defines audiation as music that “takes place when one hears and comprehends music silently, the sound of the music no longer being or never having been physically present” [his italics] (Gordon, 2003, p. 25). His goal is that a child will be able to think musically, similarly to the way a person can think using words and language.
Children must develop a musical vocabulary of a variety of tonal and rhythm patterns, similar to the vocabulary of words in language, and they must also become acquainted with musical syntax, or the arrangement of pitches and rhythms in order to audiate music (Gordon, 2003). Gordon described the process of developing audiation in his stages of preparatory audiation (Gordon, 2003). Preparatory audiation, which begins at birth and continues until between the ages of two to four, has three types: acculturation, imitation, and assimilation. Through these stages, children absorb sounds, begin to mimic responses, and then coordinate their breath and movements to correspond to the music (Gordon, 2003).

In an early childhood music class that follows Music Learning Theory, the goal is to help children progress towards audiation, thus making them more musical. However, the type of instruction in those classes is different from that in an elementary general music class. Rather than the “formal” instruction that is typical in an elementary classroom, young children should have informal guidance (Gordon, p. 3, 2003). In structured informal guidance, the emphasis is not on producing correct responses, but rather on providing specifically planned activities that encourage students to create any response. Then through listening and comparing their responses to the responses of others, children can learn to differentiate between correct and incorrect responses (Gordon, 2003).

In preparatory audiation, children are provided with a model not only from the teacher, but from the other parents and caregivers who accompany the children in the class. As a result, the children receive musical stimulus from a variety of musical models. In addition, the majority of songs and chants are sung without words using a neutral syllable. Gordon (2003) believed that music with lyrics can be a distraction from the actual musical content of the repertoire, so most repertoire is performed without lyrics. Also, the teachers are trained to interact with the children’s responses in a sort of sound play (Hornbach, 2005). If a child makes a response, the teacher will incorporate that response into the teaching sequence as a way to recognize the child’s response and to encourage more responses. Because the music classes observed in this study also follow Music Learning Theory, the teacher of these classes employed similar teaching techniques.

While there are many early childhood music programs using structured informal guidance, there is little research done to explore the effectiveness of these curricula on the musical development of young children. Specifically, there is little research to help music teachers structure the order and sequence of musical events. Because children respond differently to different types of activities, it is important that researchers discover how best to implement different types of activities in an early childhood music class, including familiar and unfamiliar activities, in order to most effectively encourage responses from children.

There have been many studies that have sought to categorize the types of responses in early childhood (Burton, 2002; Cerniglia, 2006; Hicks, 1993; Holahan, 1987; Hornbach, 2005; Kelley & Sutton-Smith, 1987; Loong, 2006; Miller, 1986; Morehead & Pond, 1978; Moog, 1976; Reynolds, 2006; Shelley, 1981; Smith, 2005; Valerio, et. al., 2006; Young, 2002), and there have been some, albeit fewer, studies that have looked at young children’s responses in the setting of an early childhood music class (Hicks, 1993; Holahan, 1987; Loong, 2006; Reynolds, 2006; Valerio, et. al., 2006). However, there seems to be a need to study the responses of children in familiar and unfamiliar activities to help inform early childhood music teachers how to best structure activities in their classes to encourage responses from students, and thus, facilitate structured informal guidance to lead young children towards achieving audiation. The purpose of this study was to explore what types of activities elicit listening, movement, and vocal responses in children from birth to three years in structured informal guidance. The problems of this study were to (1) determine if familiar or unfamiliar activities elicit more responses in young children aged birth to three years, (2) determine if there is an interaction between the types of responses young children produce and the type of activity (familiar or unfamiliar) that elicits the response.
Related Research

Children from birth to age three, who are typically in the acculturation and imitation types of preparatory audiation, produce a variety of responses. These may include looking responses, movement responses and vocal responses. While it is difficult to determine at exactly what age a child first responds to music, studies have shown that even infants respond to music by stopping their activity and turning towards the sound source (Hicks, 1993; Moog, 1976). While young children may not make any sounds or movements, it is clear that they are listening because of the clear change in their actions, as demonstrated by the looking response. In an early childhood music class, though, the music teacher is not the only source providing a musical stimulus. Caregivers, and even other children are creating musical stimuli, and thus, looking responses towards any musical stimulus in the early childhood music classroom should be considered a response because of the insight it gives into young children’s musical processing.

The next response to develop in young children is movement responses (Hicks, 1993; Holahan, 1987; Kelley & Sutton-Smith, 1987; Moog, 1976; Moorhead & Pond, 1978). Some of the actions categorized as movement responses include waving arms, kicking feet, head nodding, bending the knees, hitting objects, bouncing, and swaying (Moog, 1976; Moorhead & Pond, 1978). These movements are not necessarily coordinated with the music. However, Moog (1976) observes that, as children approach three years of age, they begin to show brief responses that coordinate rhythmically to music.

Vocal responses, the third response to develop, can include musical vocal responses and non-musical vocal responses. Both types of vocal responses are important because they both indicate that the children are processing the musical sounds they hear. Non-musical vocal responses are sounds that young children make that are different from songs and chants, but are in response to a musical stimulus. Valerio, et. al., lists these as “speaking, coughing, crying, laughing, raspberries, [and] screams” (Valerio, et. al., 2006, p. 39). Hicks (1993) also records squeals as a non-musical vocal response.

On the other hand, musical vocal responses are vocalizations that have a sense of musicality to them, as implied by the name. Moog describes the beginning musical responses of young children as “babbling songs” that occur with in a small range of pitches, have simple rhythms, and often are performed on one sound or syllable (Moog, 1976, p. 75). In addition, researchers have documented vocal responses that include rhythm patterns, tonal patterns, melodic patterns, songs, and rhythm chants (Valerio, et. al., 2006), as well as singing the tonic and dominant pitches of a given song (Hornbach, 2005). All of these types of responses are specifically encouraged through activities created according to the Music Learning Theory methodology (Gordon, 2003).

Moog (1976), Hicks (1993), Reynolds (2006), and Valerio, et. al. (2006), explored these categories of observable responses in young children. While the Moog (1976) study considered all three kinds of responses, his study was completed in a naturalistic setting, rather than in an early childhood music classroom. Hicks (1993) considered all three response categories. However, Hicks looked at responses to familiar and unfamiliar activities during selected weeks throughout the study’s time frame, rather than each week.

In addition, few studies have considered the effect of early childhood music curricula on children’s responses. The first study to look at familiar activities is Moog (1976). In his study into the musical development of young children, Moog played a set of listening examples to children from birth to the age of six. The children had the opportunity to hear the music multiple times, making those songs familiar to the children. In addition, Hicks (1993) and Reynolds (2006) studied children’s responses in both familiar and unfamiliar contexts. While Hicks followed the Moog study by using familiar and unfamiliar songs, Reynolds broadened the scope by considering familiar and unfamiliar vocal events, categorizing the types of vocalizations that adults produced in the context of an early childhood music class (Reynolds, 2006).
In the Moog study (1976) and the Hicks study (1993), no definition was given for a familiar and unfamiliar song. Reynolds briefly defined the familiar and unfamiliar adult vocal events in her study, stating, “The researcher labeled a new vocal event unfamiliar the first time it was presented, and familiar for subsequent repetitions” (Reynolds, 2006, p. 42). However, in this study, the researcher looked at familiar and unfamiliar activities, and since no definition of these terms have been created, the research used the following definitions:

- **Familiar Activity**: an activity in an early childhood music class that includes a song or chant and tonal or rhythm patterns and has occurred before in the context of the music class.
- **Unfamiliar Activity**: an activity in an early childhood music class that includes a song or chant and tonal or rhythm patterns and has not occurred before in the context of the music class.

Specifically, this study focused on familiar and unfamiliar activities, rather than familiar and unfamiliar vocal events, in order to determine the effect they had on young children’s responses. In this way, the researcher could examine young children’s looking, movement, and vocal responses to different types of activities.

**Method**

The participants of the study included 15 children enrolled in two early childhood music classes at a community music school in the Midwest. The children ranged in age from 9 to 36 months, and included children of African American, Asian American, and Caucasian descent. The children attended class with a caregiver, who was encouraged to participate in the class activities and serve as an additional model for the children.

**Design and Procedures**

The early childhood music classes met once a week for 45 minutes for 10 weeks. A trained early childhood music teacher taught both of the classes and administered the treatment. The first two activities of each class were videotaped using a handheld video camera operated by the researcher, so that the camera could be directed towards specific events.

All of the activities in the treatment were designed according to the principles of Music Learning Theory (Gordon, 2003), including using songs without words, tonal and rhythm pattern guidance, and purposeful teacher silence. Of the two activities videotaped in each class, one focused on a tonal objective and one focused on a rhythm objective. The tonal activity always included a song without words, tonal patterns, and play with a bean bag. The rhythm activity always included a chant without words, rhythm patterns, and movement including continuous flow and body awareness. In addition, the two activities always occurred at the same point in the class, immediately following the initial greeting song.

Each class received 10 weeks of treatment, including 5 weeks of familiar activities and 5 weeks of unfamiliar activities. The first class (Class A) received familiar tonal and rhythm activities for the first 5 weeks and unfamiliar tonal and rhythm activities for the last 5 weeks. The second class (Class B) received the treatment in reverse order, with the unfamiliar tonal and rhythm activities for the first 5 weeks, followed by familiar tonal and rhythm activities for the last 5 weeks. By reversing the order of treatment, the researcher could control for the order of treatment and the behavioral changes that occur as the children become accustomed to the environment.

The familiar activities included the same song and chant from week to week, keeping the tonality, meter, and the prop the same. However, to control for the differences in tonality and meter, Class A received a
familiar activity in major tonality and triple meter, and Class B received a familiar activity in harmonic minor tonality and duple meter.

The unfamiliar activities changed every week. While the tonal activity changed in the song content and tonal pattern content, the way it was presented by the teacher remained constant. The same is true for the rhythm activity. However, the same sequence of unfamiliar tonal and rhythm activities was presented to both A and B, but in reverse order. In addition, to allow both classes to have experiences with the same set of activities, the familiar activity for Class A was included as one activity in the unfamiliar set for Class B, and the familiar activity for Class B was included in the unfamiliar set for Class A.

Analysis

The videotaped data was reviewed by two judges, who were both experienced early childhood music teachers. The judges categorized responses from the children into single responses,—looking, movement, and vocal—as well as dual responses, which included pairings of the responses listed above. The dual responses were then separated and analyzed according to the three categories of responses: looking, movement, and vocal. The judges results were analyzed to determine interjudge reliability, and t-tests were used to determine if there was a statistically significant difference between the types of responses that occurred in the familiar and unfamiliar activities.

Results

Two experienced early childhood music teachers reviewed the videotapes. Interjudge reliability was calculated using a Pearson product moment correlation for each type of response (Patton, 2007). The looking responses yielded a low interjudge reliability of .42. The movement and vocal responses yielded higher correlations of .63 and .61, respectively. The lack of agreement may have been due to insufficient judges’ training.

The judges recorded a total of 1815 responses to familiar activities and 1534 responses to unfamiliar activities (Table 1). Children gave similar looking responses, regardless of the type of activity. The movement response category was the only response type to show a statistically significant difference between the two treatments, demonstrating greater responses in the familiar activities at the .05 level. While the vocal responses did not show a statistically significant difference, its difference at the .065 level indicates that the vocal responses tended to be greater in the familiar activities. However, statistical significance could not be demonstrated within this study’s 10-week time frame.

Table 1

<table>
<thead>
<tr>
<th></th>
<th>Looking Response</th>
<th>Movement Response</th>
<th>Vocal Response</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Familiar Activity</td>
<td>753</td>
<td>724</td>
<td>338</td>
<td>1815</td>
</tr>
<tr>
<td>Unfamiliar Activity</td>
<td>751</td>
<td>548</td>
<td>235</td>
<td>1534</td>
</tr>
</tbody>
</table>
Discussion

While the total number of responses to familiar activities was greater than the total responses to unfamiliar activities, the difference was not enough to be statistically significant. This may be due to the difficulty in judging these responses. Often, there would be multiple responses from multiple children occurring simultaneously, as is natural in an early childhood music class, but these multiple responses were difficult to accurately record. Also, it is probable that events occurred that were not picked up by the videotaping, and thus were not recorded by the judges.

An additional reason why there was not a significant difference between familiar and unfamiliar activities may be due to the strengths of other uncontrollable factors that affect young children and their willingness to respond in an early childhood music class. For example, the researcher noted informally while videotaping that the students seemed to be greatly impacted by the weather or by how they were feeling. The data collection took place from January to April in the Northern Midwest. If the weather was particularly cold, there tended to be fewer children in attendance, and the children did not seem to give as many responses. However, if there was a light amount of snowfall, the children seemed excited by the weather, which showed an increase in their responses. Additionally, if a child was feeling sick or tired, he or she tended to give fewer responses than those children who were feeling well. These factors seemed to have a greater impact on the children’s desire to respond than the type of treatment alone.

Another limitation of this study was the inability to describe the quality of the students’ responses. While there is value in documenting the type and amount of responses, the researcher found that the students exhibited different characteristics when responding to an activity that was familiar versus an activity that was unfamiliar. For example, when students initially heard a new song or chant for the first time, their looking responses were often without movement and for a longer period of time. Looking responses that occurred during a song or chant they had heard before was often accompanied by movement or vocal responses. For example, when presenting the familiar rhythm chant, the music teacher would end the song by touching her head, then clapping, then touching the floor, which matched the rhythm found in the song. During weeks nine and ten, after the class had previously heard the song in three other classes, a three-year-old boy finally recognized the repetition in the pattern, and he happily looked right at the teacher and imitated the pattern with his body and with his voice. He seemed proud and excited to have finally “figured it out.” This quality of his responses, and the stimulation that caused them were not addressed in this study.

Conclusions

While Moog (1976) was able to document all three categories of responses,—looking, movement, and vocal—the responses occurred in a naturalistic setting and were analyzed qualitatively. Valerio, et. al. (2006) considered children’s responses to familiar and unfamiliar adult vocal events, rather than the type of activity. Hicks (1993) documented all three types of responses, but only during selected weeks during the study’s time frame. In this study, however, all three types of responses were recorded through quantitative methods for each week of the study’s duration.

The goal of this study was to explore if young children respond differently to familiar activities than to unfamiliar activities. The similarity in the amount of looking responses between the familiar and unfamiliar activities demonstrates that young children were attentive to activities regardless of the familiarity of the activity. The results that the movement responses and vocal responses occurred more often in the familiar activities suggest that children needed to become familiar with the musical activities before they had readiness to respond in those ways. Thus, early childhood music teachers should not expect young children to give as many movement or vocal responses until they have had time to become familiar with the musical activity.
The finding that there is not a statistically significant difference between familiar and unfamiliar activities causes one to question whether there is a hierarchy of priorities that affect young children’s willingness to respond. Further research is needed to determine if factors such as children’s mood and state of health, as well as the weather, affect children more than the familiarity of an activity. Also, because the characteristics of the children’s responses cannot be adequately described through quantitative means, further research is needed to explore this topic qualitatively.

Nevertheless, early childhood music teachers should provide their students with experiences in both familiar and unfamiliar activities in lessons. Since children need to acquire a large musical vocabulary in order to be able create their own musical sounds, they need to be exposed to a variety of songs and chants; thus, unfamiliar activities are necessary for introducing new musical content. At the same time, young children need to hear musical ideas multiple times before they are able to successfully imitate it, and they need many experiences to practice their acquired musical vocabulary. This is best accomplished through familiar activities.

Young children acquire musical understanding in a process that is similar to how they learn language. They must hear a variety of sounds and begin to sing and chant short patterns before they are able to perform whole songs, as well as eventually read and write music. Exploring young children’s musical responses gives insight into how children think about music, and by continuing to study these types of responses and when they occur, music educators will be better equipped to provide meaningful and appropriate activities to help young children learn to audiate.

References


Cross-Cultural Competence of Student Teachers in Music Education

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Abstract

The purpose of this study was to investigate the cross-cultural competence of music education majors enrolled in student teaching. Study participants (N = 86) from 19 colleges and universities in the Southeastern United States completed a survey designed to assess their cross-cultural competence as related to: factors (a) fostering and (b) constraining readiness for teaching in culturally diverse educational environments, and (c) educational experiences during teacher preparation relative to multicultural education and multicultural music education. Study results indicated that the majority of respondents were aware of how cultural differences may impact their teaching and students’ learning, had encountered music of a variety of cultures in their own music education, had received specific instruction on creating and executing multicultural music experience for students, and had opportunities to be involved with projects related to multicultural music education. Study results neither confirmed nor negated that respondents held attitudes and beliefs hindering their readiness to teach in culturally diverse educational environments. Results of the current study suggest that additional investigations involving a larger sample are warranted and should include an examination of the effects of specific demographic variables on music student teachers’ cross-cultural competence.

Introduction

The socio-cultural heterogeneity of public school student populations and the concomitant socio-cultural homogeneity evidenced in the population of many teacher preparation programs have prompted a focus in teacher education on developing pre-service teachers who are sensitive to and knowledgeable about the influence that culture may have on students’ learning (Banks, 1994; Gay, 1994, 2002; Ladson-Billings, 1995; Nieto, 1996; Villegas & Lucas, 2002). In addition, standards established by the National Council for the Accreditation of Teacher Education (NCATE) obligate faculty desiring accreditation for their programs in teacher education to address issues of diversity in the preparation of teachers (NCATE, 2002). Consequently, engendering cross-cultural competence among pre-service teachers has become a primary goal in general teacher education. Lynch and Hanson defined cross-cultural competence as “the ability to think, feel and act in ways that acknowledge, respect and build upon ethnic, socio-cultural and linguistic diversity” (1998, p. 49). Additionally, cross-cultural competence implies an ability to teach in ways that are responsive to how varying culturally-specific knowledge bases impact learning (Gay, 2002).

A thorough review of the literature to date suggests no data are available on the race or ethnicity of students enrolled in music teacher preparation programs nationally; however data summaries reported yearly by the National Association of Schools of Music (NASM) suggest that the undergraduate student population of NASM-accredited music programs is not racially diverse. A report from 485 institutions indicated that, of students receiving Baccalaureate Professional Degrees in music in the 2006-2007 academic year, 6.6% were African American, 0.5% were American Indian/Native Alaskan, 3.9% were Asian, 5.9% were Hispanic/Latino, 0.4% were Pacific Islander, 76% were White, and 6.9% were Other/Race-Ethnicity Unknown (NASM, 2007).

An estimate of the racial and ethnic makeup of the music education profession nationally may be inferred from results of a 2004 membership profile and segmentation study sponsored by MENC: The National Association for Music Education (MENC). Results indicated that slightly more than 90% of MENC members
were White. Members identifying themselves as Black/African American, Hispanic/Latino, Asian, or Other respectively represented 5.8%, 1.7%, .6% and 1.2% of the total MENC membership (Eureka Facts, 2004).

The NASM and MENC survey data suggest that racial and ethnic diversity are not characteristics either of in-service or pre-service music teacher populations. The music education profession has recognized this trend and has responded to the need to include culturally diverse perspectives in music curricula at all levels, including music teacher preparation programs. Typically, this response has been characterized by the inclusion of a world music survey course as a required component of undergraduate music education degree programs, and by emphasizing instructional strategies and materials designed to facilitate teaching about musical structures and expression as they are manifested in varying cultural contexts. More recently, however, considerations of how to prepare music teachers who can function effectively in, and have positive attitudes toward culturally diverse educational environments have gained importance in music teacher education.

Motivated, in part, by a desire to direct thinking about music teaching and learning, and consequently music teacher education in new ways, Butler, Lind, and McKoy (2007) developed a conceptual model (see Figure 1.) identifying five interrelated dimensions of the teaching and learning process in music which, when framed within the context of race, ethnicity, and culture, may foster or inhibit the teaching and learning process in music.
Figure 1: Conceptual model illustrating dimensions of the music teaching and learning process influenced by race, ethnicity, and culture.
Several components of the “Teacher” dimension of the model were formulated from research indicating that pre-service teachers’ racial and cultural backgrounds, values, attitudes, beliefs, and experiences are influential in the teacher preparation process (Bradfield-Kreider, 2001; Foster, 1995; Gay & Howard, 2000; Gollnick, 1996; Marshall, 1999; Thorsén, 2002; Villegas & Lucas, 2002). Consequently, these factors may impact pre-service teachers’ ability to develop knowledge, skills, and dispositions contributing to cross-cultural competence, and therefore may influence their preferences for teaching in culturally diverse education settings as in-service professionals.

How effective are music teacher education programs in preparing pre-service music teachers to meet the challenges of a racially, ethnically, and culturally diverse educational landscape? Research indicates that though pre-service music teachers are comfortable with the idea of teaching in ethnically and racially diverse educational environments, they are ambivalent about teaching in such environments, and demonstrate greater preference for teaching in suburban schools with student populations that reflect their own cultural backgrounds (Kelly, 2003; McKoy, 2006). Reeder-Lundquist (2002) noted that students in music education programs “are being asked to operate effectively in a social, historical, and aesthetic context, which is not at all the same—and is vastly more complex—than the cultural context for which they have been prepared in typical higher education” (p. 634). Additionally, Barry (1999) found that lack of congruence between the contexts of college music education classes and those of some public school classrooms can pose significant challenges for pre-service music teachers and impede their ability to translate their knowledge of multicultural music instruction to culturally responsive teaching practices. These observations suggest that for music teacher education programs, issues of cross-cultural competence are especially salient, and the achievement of such competencies among pre-service music teachers, particularly by the time they enter their semester of student teaching, should be of concern to music teacher educators and to the music education profession.

The purpose of this study was to investigate the cross-cultural competence of music education majors enrolled in student teaching. Specifically, the study focused on the following research questions:

1. To what extent do student teachers in music education hold knowledge, skills, and awareness about cultural differences that foster readiness to teach in multicultural educational settings?
2. To what extent do the personal attitudes and level of cultural awareness of student teachers in music education constrain readiness to teach in multicultural educational settings?
3. To what extent have student teachers in music education had experiences during teacher preparation relative to multicultural education and multicultural music education that promote readiness to teach in multicultural educational settings?

**Method**

**Survey**

A survey developed by Wiggins and Follo (1999) was modified for use in this study. The modified survey consisted of 31 statements, each with a five-point Likert response scale designed to assess participants’ cultural competence as related to: factors (a) fostering and (b) constraining readiness for teaching in culturally diverse educational environments, and (c) educational experiences during teacher preparation relative to multicultural education and multicultural music education. Factors fostering readiness for teaching in culturally diverse educational environments pertained primarily to knowledge and skills as associated with culture and pedagogical issues. Factors constraining readiness referred to awareness of cultural differences and personal attitudes. Teacher preparation referred to pre-service teachers’ exposure to or experience with multicultural issues or multicultural teaching practices in their teacher preparation programs.
Response options for the Likert scale were Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree, with respective score values ranging from five points to one point for items addressing the “Foster” and “Teacher Preparation” dimension subscales of the survey. For items comprising the “Constrain” dimension subscale of the survey, score values for the response options were reversed, ranging from one point for Strongly Agree to five points for Strongly Disagree. The remaining items in the survey solicited demographic information regarding participants’ gender; race/ethnicity; the type of community setting of schools in which they conducted their practicum and student teaching experiences; primary area of concentration in the music education program; and the United States census geographical region or country outside of the U.S. in which they grew up.

Wiggins and Follo (1999) reported alpha coefficients of reliability of .77, .68, and .88 respectively for the Foster, Constrain, and Teacher Preparation dimension subscales of their survey; internal consistency reliability for the total survey was not reported. The modified survey was piloted with 18 student teachers in music education, none of whom participated in the current study. Internal consistency reliability analyses for the modified survey revealed respective alpha coefficients of .50, .58, and .61 for the Foster, Constrain, and Teacher Preparation dimension subscales. Internal consistency reliability for the total survey was .80.

Based on feedback from respondents and the results of the reliability analyses of the piloted modified survey, four survey items were eliminated: one from the Foster dimension subscale, two from the Constrain dimension subscale, and one from the Teacher Preparation dimension subscale. Additionally, one item each from the Foster and Constrain dimension subscales were reworded.

Participants and Data Collection

The population of interest for this study was music education student teachers in 79 college and university undergraduate music education programs accredited by the National Association of Schools of Music (NASM) and located in the South Atlantic census geographic division of the United States, comprised of the District of Columbia, the commonwealth of Virginia, and the states of Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, and West Virginia. Faculty contact persons for music education programs in the 79 institutions were emailed regarding their willingness to conduct the survey with their student teachers. Positive responses were received from faculty contacts in 21 of the 79 institutions and represented six states within the South U.S. census geographic region: Florida, Georgia, North Carolina, South Carolina, Virginia and West Virginia.

Once the total number of student teachers was determined (N = 109), paper copies of the survey along with information on informed consent, a script for use in presenting the survey, and an addressed envelope with prepaid postage were sent by land mail to faculty contacts for dissemination to participants. Student teachers’ completion of the survey constituted their consent to participate in the study. Paper surveys were used to collect data instead of an online survey because of research indicating widely varying response rates and possible psychometric biasing effects for web-based surveys (Antons, Dilla, & Fultz, 1997; Couper, Blair, & Triplett, 1999; Idleman, 2003; McCoy, Marks, Carr, & Mbarika, 2004). Surveys were returned by land mail from 19 of the 21 institutions whose faculty contacts initially agreed to conduct the survey with their student teachers (N = 96). The number of institutions and participants from each state were as follows: Florida, 3 (n = 17); Georgia, 5 (n = 18); North Carolina, 5 (n = 29), South Carolina, 4 (n = 19); Virginia, 1 (n = 1); and West Virginia, 1 (n = 12). Eleven were public state institutions and eight were private institutions.

Fourteen of the 96 surveys returned were incomplete; ten of the 14 surveys were incomplete to an extent that rendered them unusable for the study. For the remaining four surveys, one missing item response
was noted for each of three surveys (one for survey item 7 and two for survey item 23) and an additional survey had three missing item responses (survey items 29, 30, and 31). Rather than omit these four surveys, a maximum likelihood estimation procedure was conducted to impute values for the missing data, using the Missing Variables Analysis (MVA) module for the SPSS Base version 15.0 software (SPSS, 2006), bringing the number of usable surveys to 86. The adjusted data set was analyzed using descriptive statistical procedures.

Results

Demographic Data

The number of female respondents (55%; \( n = 47 \)) exceeded the number of males (45%; \( n = 39 \)). The majority of respondents identified their racial/ethnic background as White (81%; \( n = 70 \)). Of the remaining respondents, five (6%) were African American, three (4%) were Asian American, two (3%) were Multiracial, two (2%) were Hispanic/Latino, and one respondent each (1%) self-identified as Asian American/Pacific Islander, and Native American/American Indian. “Other” was the racial/ethnic dimension indicated by 2 (2%) respondents; however no additional clarifying information was provided.

Most of the respondents grew up in the South (74%; \( n = 64 \)) and Northeast (13%; \( n = 11 \)) U.S. geographic census regions. Other regions reported by respondents included Midwest (3%; \( n = 3 \)) and West (3%; \( n = 3 \)). Five respondents (6%) grew up in countries outside of the United States: Belize, France, Germany, Singapore, and Turkey. English was the primary language spoken by 99% of respondents; one respondent’s primary language was Turkish.

Thirty-eight percent of respondents (\( n = 33 \)) conducted their practicum experiences in suburban school settings; 62% (\( n = 53 \)) indicated they had conducted their school practicum experiences in combinations of suburban, rural, and urban community settings. Additionally, 48% (\( n = 41 \)) of respondents were conducting their student teaching in schools in suburban community settings at the time of the study, whereas 52% (\( n = 45 \)) were student teaching in multiple schools in suburban, rural, and urban communities.

A variety of music education degree program concentrations were represented in the respondent sample. The band instrumental music program concentration was indicated most frequently by respondents (44%; \( n = 38 \)), followed by choral/general (41%; \( n = 35 \)), and string instrumental music (9%; \( n = 8 \)). Other program concentrations included choral/band (2%; \( n = 2 \)), choral/general/band (2%; \( n = 2 \)) and choral/guitar (1%; \( n = 1 \)).

Survey Dimensions

Survey items were grouped into three subscales according to the Foster, Constrain, and Teacher Preparation dimensions, and the item responses were analyzed using descriptive statistical procedures. Means, standard deviations, frequencies, and associated percentages for items in the Foster dimension subscale are presented in Table 1.
Table 1: Response Means, Standard Deviations, Frequencies, and Associated Percentages for the Foster Dimension Subscale

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>Mean</th>
<th>SD</th>
<th>SA Freq. (%)</th>
<th>A Freq. (%)</th>
<th>N Freq. (%)</th>
<th>D Freq. (%)</th>
<th>SD Freq. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. I am comfortable teaching in culturally diverse classrooms with students who share different values.</td>
<td>4.13</td>
<td>0.89</td>
<td>31 (36)</td>
<td>41 (48)</td>
<td>8 (9)</td>
<td>5 (6)</td>
<td>1 (1)</td>
</tr>
<tr>
<td>5. I think that instructing students in the music of different racial/ethnic groups and cultures is important in music education</td>
<td>4.67</td>
<td>0.50</td>
<td>59 (69)</td>
<td>26 (30)</td>
<td>1 (1)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>6. I can explain how culture mediates students’ learning of music content.</td>
<td>3.86</td>
<td>0.77</td>
<td>15 (17)</td>
<td>49 (57)</td>
<td>17 (20)</td>
<td>5 (6)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>7. I understand how factors related to culture, race, and ethnicity may impact the teaching and learning process in music.</td>
<td>4.19</td>
<td>0.64</td>
<td>26 (30)</td>
<td>51 (59)</td>
<td>8 (9)</td>
<td>1 (1)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>11. I understand how socio-cultural factors may influence students’ music preferences.</td>
<td>4.14</td>
<td>0.74</td>
<td>26 (30)</td>
<td>50 (58)</td>
<td>6 (7)</td>
<td>4 (5)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>20. I can identify subtle forms of racism, including unintended cultural bias, which might influence my own teaching.</td>
<td>3.79</td>
<td>0.83</td>
<td>11 (13)</td>
<td>56 (65)</td>
<td>10 (12)</td>
<td>8 (9)</td>
<td>1 (1)</td>
</tr>
<tr>
<td>22. I am able to tailor music instruction to the needs of all my students.</td>
<td>4.07</td>
<td>0.70</td>
<td>22 (26)</td>
<td>50 (58)</td>
<td>12 (14)</td>
<td>2 (2)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>24. I can describe the historical antecedents to the marginalization of Black and Hispanic students at school.</td>
<td>3.10</td>
<td>0.93</td>
<td>3 (3)</td>
<td>29 (34)</td>
<td>32 (37)</td>
<td>18 (21)</td>
<td>4 (5)</td>
</tr>
<tr>
<td>26. I have considered my role as a teacher in school-community relations.</td>
<td>3.95</td>
<td>0.78</td>
<td>17 (20)</td>
<td>54 (63)</td>
<td>10 (12)</td>
<td>4 (5)</td>
<td>1 (1)</td>
</tr>
<tr>
<td>28. I can explain how my cultural background influences the values and beliefs I hold for making decisions about music curriculum and instruction.</td>
<td>4.09</td>
<td>0.78</td>
<td>25 (29)</td>
<td>49 (57)</td>
<td>7 (8)</td>
<td>5 (6)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>29. I am comfortable raising questions about multicultural issues in groups of peers.</td>
<td>4.16</td>
<td>0.75</td>
<td>29 (34)</td>
<td>45 (52)</td>
<td>9 (11)</td>
<td>3 (3)</td>
<td>0 (0)</td>
</tr>
</tbody>
</table>
Table 1: (Concluded). Response Means, Standard Deviations, Frequencies, and Associated Percentages for the Foster Dimension Subscale

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>Mean</th>
<th>SD</th>
<th>Five-point Response Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>30. I am comfortable raising questions about multicultural issues in my teaching.</td>
<td>3.85</td>
<td>0.86</td>
<td>19 (22)</td>
</tr>
<tr>
<td>31. I am comfortable raising questions about multicultural issues in university or other formal educational settings.</td>
<td>4.09</td>
<td>0.85</td>
<td>28 (33)</td>
</tr>
</tbody>
</table>

N = 86

Note 1: SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree

Note 2: Percentages may not equal 100 due to rounding

The thirteen item statements comprising the Foster dimension subscale of the survey were designed to examine the extent to which music student teachers held knowledge and skills fostering readiness for teaching in culturally diverse educational environments. With the exception of item 24, most respondents strongly agreed or agreed with all of the statements comprising the dimension subscale. Response means for all item statements in the subscale except item 24 were above the midpoint of the score value range between the Neutral and the Agree response options. Item 5, which assessed respondents’ extent of agreement with the statement that multicultural music instruction is important in music education, was the only item in the subscale with which a majority of the respondents indicated strong agreement (69%; n = 59), and also was the item that attained the highest mean score (M = 4.67; SD = 0.50). For item 24, which had the lowest mean score of all items in the subscale (M = 3.10; SD = 0.93), percentages were identical (37%; n = 32) for respondents who strongly agreed or agreed and those who were neutral regarding their ability to describe circumstances that historically contributed to the marginalization of Black and Latino students in school.

The Constrain dimension subscale of the survey included 10 statements designed to examine the extent to which music student teachers’ level of awareness, attitudes, and beliefs regarding cultural differences hindered their readiness to teach in multicultural educational settings. Consequently, responses to these subscale items were reverse scored. Table 2 presents subscale item means, standard deviations, frequencies, and associated percentages.
<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Mean</th>
<th>SD</th>
<th>SA (%)</th>
<th>A (%)</th>
<th>N (%)</th>
<th>D (%)</th>
<th>SD (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. I would rather teach in mono-cultural school settings.</td>
<td>3.65</td>
<td>0.93</td>
<td></td>
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<td></td>
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<tr>
<td>8. I have limited cross-cultural experiences</td>
<td>3.31</td>
<td>1.18</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>9. I believe that some minority groups, such as Blacks and Hispanics, may not be as capable of learning as other minority groups, such as Asians.</td>
<td>4.49</td>
<td>0.89</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>14. I prefer teaching students whose social class and cultural background are similar to mine.</td>
<td>3.16</td>
<td>0.93</td>
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<tr>
<td>16. I would characterize most of the teachers I’ve had throughout my elementary, middle, high school and college education as racially/ethnically homogeneous (similar to one another).</td>
<td>2.14</td>
<td>0.96</td>
<td></td>
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<tr>
<td>17. I’m unsure about the cultural qualities of social groups other than my own.</td>
<td>3.49</td>
<td>0.92</td>
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<tr>
<td>18. I’m unsure of how biases and stereotypes that I might have for other cultural groups could unintentionally influence my instruction.</td>
<td>3.42</td>
<td>0.94</td>
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<tr>
<td>21. I have a limited understanding of how socio-cultural and/or cognitive factors related to student diversity could influence my personal and academic relationship with students.</td>
<td>3.36</td>
<td>0.91</td>
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<tr>
<td>25. I believe that more problems than assets surround cultural diversity at school.</td>
<td>3.47</td>
<td>1.08</td>
<td></td>
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<tr>
<td>27. I have a limited understanding of the complex relationship among society, schools, and ethnicity.</td>
<td>3.44</td>
<td>1.00</td>
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</tbody>
</table>

N = 86

**Note 1:** SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree

**Note 2:** Percentages may not equal 100 due to rounding

**Note 3:** Responses were reversed scored
Although the majority of respondents either disagreed or strongly disagreed with most of the subscale item statements, 29% to 36% of respondents selected the Neutral response option across six of the subscale items (3, 14, 17, 18, 21, and 25). For item 14, responses for 73% of the respondents were nearly evenly divided between the Neutral category and the combined Disagree and Strongly Disagree categories with regard to respondents’ preference for teaching students of similar culture and social class as themselves. The lowest mean score observed for this dimension subscale was for item 16 (M = 2.14; SD = 0.96); 78% of respondents strongly agreed or agreed that over the course of their K-12 and college education, their teachers represented a racially or ethnically homogeneous group. The highest mean score and the highest percentage of respondent congruence was observed for subscale item 9 (M = 4.49; SD = 0.89); 84% of respondents disagreed or strongly disagreed that the capacity to learn was greater for specific racial or ethnic groups.

Items in the Teacher Preparation dimension subscale of the survey examined the extent of respondents’ experience with multicultural issues and music teaching practices during undergraduate music teacher preparation. Table 3 displays item response means, standard deviations, and frequencies and associated percentages for the subscale.

Table 3: Item Means, Standard Deviations, Frequencies, and Associated Percentages for the Teacher Preparation Dimension Subscale

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Mean</th>
<th>SD</th>
<th>SA Freq. (%)</th>
<th>A Freq. (%)</th>
<th>N Freq. (%)</th>
<th>D Freq. (%)</th>
<th>SD Freq. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I know what multicultural education means</td>
<td>4.22</td>
<td>0.64</td>
<td>29 (34)</td>
<td>47 (55)</td>
<td>10 (12)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>4. Music teachers that I have observed made</td>
<td>3.74</td>
<td>1.00</td>
<td>19 (22)</td>
<td>39 (45)</td>
<td>17 (20)</td>
<td>9 (11)</td>
<td>2 (2)</td>
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<td>mention of the contributions to music of people</td>
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<td>from various racial/cultural groups.</td>
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<tr>
<td>10. I have received instruction on how to plan and</td>
<td>3.55</td>
<td>1.00</td>
<td>12 (14)</td>
<td>40 (47)</td>
<td>17 (20)</td>
<td>17 (20)</td>
<td>0 (0)</td>
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<td>implement multicultural music experiences.</td>
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<td>12. I have discussed the relationship between “hidden curricula”</td>
<td>2.88</td>
<td>1.08</td>
<td>3 (3)</td>
<td>28 (33)</td>
<td>19 (22)</td>
<td>28 (33)</td>
<td>8 (9)</td>
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<td>and unintended cultural bias.</td>
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<td>13. To date, my musical education has included music</td>
<td>4.09</td>
<td>0.82</td>
<td>28 (33)</td>
<td>43 (50)</td>
<td>10 (12)</td>
<td>5 (6)</td>
<td>0 (0)</td>
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<td>of a variety of racial/ethnic cultures.</td>
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<tr>
<td>15. I have completed projects or activities that</td>
<td>3.87</td>
<td>0.94</td>
<td>22 (26)</td>
<td>42 (49)</td>
<td>11 (13)</td>
<td>11 (13)</td>
<td>0 (0)</td>
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<td>included aspects of multicultural music education.</td>
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<tr>
<td>19. I have seen school music classroom environments</td>
<td>3.80</td>
<td>0.93</td>
<td>16 (19)</td>
<td>50 (58)</td>
<td>8 (9)</td>
<td>11 (13)</td>
<td>1 (1)</td>
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<td>with instruction that appeared to be</td>
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<td>multicultural.</td>
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</tr>
</tbody>
</table>
23. I have participated in discussions that have focused on how to adapt different music teaching strategies to the various learning styles of my students.

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.94</td>
<td>0.85</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>51</td>
<td>(22)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>(11)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>(7)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>(1)</td>
<td></td>
</tr>
</tbody>
</table>

\[ N = 86 \]

Note 1: SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree

Note 2: Percentages may not equal 100 due to rounding

Except for item 12, the majority of respondents strongly agreed or agreed with each item statement in the subscale, and response means for these items were above the midpoint of the range between the Neutral and Agree response options. The highest mean score observed for the dimension subscale was 4.22 (SD = .64) for item 1; 89% of respondents (n = 76) strongly agreed or agreed with the statement “I know what multicultural education means.” The lowest mean score for the dimension subscale was observed for item 12 (M = 2.88; SD = 1.08). For this item, 36% (n = 31) of respondents selected the Strongly Agree or Agree response options, whereas 42% (n = 36) selected the Disagree or Strongly Disagree options in response to the statement, “I have discussed the relationship between ‘hidden curricula’ and unintended cultural bias.”

Reliability

Internal consistency reliability was estimated for the overall survey and the three survey dimension subscales using Cronbach’s alpha procedure. Table 4 displays the dimension subscales, observed reliability coefficients, means, and standard deviations, as well as the observed reliability coefficient for the overall survey.
Table 4: Observed Internal Consistency Reliability for Survey Subscales and Overall Survey

<table>
<thead>
<tr>
<th>Survey Subscale</th>
<th>α</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foster</td>
<td>.81</td>
<td>4.01</td>
<td>5.50</td>
</tr>
<tr>
<td>Constrain</td>
<td>.76</td>
<td>3.39</td>
<td>5.57</td>
</tr>
<tr>
<td>Teacher Preparation</td>
<td>.72</td>
<td>3.76</td>
<td>4.18</td>
</tr>
<tr>
<td>Overall Survey</td>
<td>.87</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The reliability coefficients for each of the dimension subscales and the overall survey surpassed the standard criterion of .70 for reliable measures (Nunnaly & Bernstein, 1994). Notably, the coefficient for the Foster dimension subscale was beyond .80, and the observed reliability coefficient for the total survey approached .90. Based on these results, the survey demonstrated acceptable internal consistency for the purposes of this investigation.

Discussion

A 79% response rate was obtained in the current study, which was above the 70% minimum acceptable survey response rate suggested by Gay and Airasian (2002). Nevertheless, as this study examined the extent of cross-cultural competence reported by music student teaching populations at specific colleges and universities, and missing values were imputed for 6 survey items across 4 surveys, caution should be used in generalizing the results of this study to other settings.

Factors Fostering Readiness to Teach in Diverse Educational Environments

Results for the Foster survey dimension subscale suggest that, on average, respondents held content knowledge, skills, and beliefs that promoted a readiness to teach in diverse educational environments. Responses to items in this dimension subscale indicated that the majority of respondents are aware of how cultural differences may impact their teaching and students’ learning.

Responses to two of the items in this subscale were noteworthy. For item 24, which assessed music student teachers’ knowledge of the historical antecedents to the marginalization of Blacks and Hispanics at school, the same number of respondents selected the Neutral response option (37%; n = 32) as selected the Strongly Agree and Agree options combined. Why nearly one third of the music student teachers chose the Neutral response option for this survey subscale item is not clear. They may have done so because they were uncertain as to their knowledge in this area, did not want to concede their lack of knowledge, or did not understand the question due to the specific wording used. Interestingly, the 3 student teachers who strongly agreed that they were knowledgeable with regard to this area identified themselves as White, were from the South and the Northeast region of the United States, and had conducted both their practicum and student
teaching in a combination of suburban and urban, or suburban, urban, and rural school settings. Three of the 5 student teachers who identified themselves as African American agreed with the statement, whereas the two student teachers who identified themselves as Hispanic/Latino disagreed and strongly disagreed as to their knowledge in this area. These interesting results may be attributed to the small number of African Americans and Hispanic/Latino participants in the current study; a larger cross section of participants across racial categories might have revealed different results.

Subscale item 30 received the next highest number of responses for the Neutral option; nearly one quarter of the respondents’ were neutral with regard to their comfort in raising multicultural issues in their teaching. Respondents’ choice of this response option may indicate that they had not engaged in discussions relating to multicultural issues in their teaching, and therefore could not attest to their level of agreement or disagreement in response to the statement.

**Factors Constraining Readiness to Teach in Diverse Educational Environments**

Survey item statements for the Constrain dimension subscale of the survey were negatively worded; thus the responses to these survey items were reversed scored. The overall results for this survey subscale neither confirmed nor negated that respondents held beliefs that hindered their readiness to teach in culturally diverse educational environments. More than one third of the respondents were neutral with regard to: (a) their preference for teaching in a monocultural school setting, (b) their preference for teaching students whose social class and cultural backgrounds were similar to theirs, (c) their uncertainty regarding the cultural qualities of social groups other than their own, (d) their uncertainty of how their own biases and stereotypes regarding other cultural groups might influence their instruction, and (e) the extent of their understanding of how socio-cultural and/or cognitive factors could influence their personal and academic relationships with students. Additionally, nearly a third of respondents were neutral concerning their belief that more problems than assets surround cultural diversity in schools, and nearly one quarter of respondents were neutral with regard to the extent of their understanding regarding the relationship among society, schools and ethnicity. The large percentage of respondents who selected the Neutral response option for these survey dimension items supports previous research results (Kelly, 2003; McKoy, 2006) and suggests either that the participants were ambivalent regarding the item statements or that they found the Neutral response option to be a more socially-acceptable alternative in light of negative attitudes and beliefs they might actually hold.

The only survey subscale item for this dimension with a mean corresponding with the Disagree response option ($M = 4.49$) was item 9, which stated, “I believe that some minority groups, such as Blacks and Hispanics, may not be as capable of learning as other minority groups, such as Asians.” Although 87% of student teachers either disagreed or strongly disagreed with this statement, the fact that 12% of respondents were neutral, agreed, or strongly agreed with the statement is troubling. If teacher expectations influence student learning, then viewing all students as capable of learning, regardless of gender, socioeconomic status, or race or ethnic background, is a disposition that should be engendered among pre-service teachers. Of the students who were neutral, agreed, or strongly agreed with this survey item, the majority were White males, grew up in the South, and conducted practicum and student teaching in programs that specifically utilized a combination of suburban, urban, and rural school settings. These results suggest that investigations of the effects of these demographic characteristics on factors constraining readiness to teach culturally diverse student populations could provide additional useful information.

Responses to survey subscale item 16 indicated that more than three quarters of the respondents would characterize their K-16 teachers as being racially or ethnically similar to one another. Although the survey item did not require respondents to specify the race or ethnicity of the teachers they had, given the research data on the racial and ethnic homogeneity of the public school teaching population, the likelihood is strong that the
teachers were predominantly White. Certainly, having a majority of teachers who comprise a single racial or ethnic group throughout one’s education is not problematic in and of itself; however, exposure to and experience with racially or ethnically heterogeneous teaching populations could contribute positively to the development of attitudes and dispositions that would foster pre-service music teachers’ development of cross-cultural competence with regard to teaching students of diverse cultural backgrounds.

Multicultural Education and Multicultural Music Education Experiences during Teacher Preparation

Responses to the Teacher Preparation dimension subscale indicated that music education student teachers generally have had experiences in their music teacher preparation programs that focused on multicultural education and multicultural music education. Several of the responses to this subscale suggest that the focus on multicultural music by the music education profession in recent years has resulted in a greater number of pre-service music teachers who have encountered music of a variety of cultures in their own music education, have had specific instruction on creating and executing multicultural music experience for students, and have had opportunities to be involved with projects related to multicultural music education.

Responses to other questions in the subscale suggest that a majority of music student teachers have had experiences with concepts and skills related to cultural competence in teaching (as opposed to experiences only with cultural diversity in music content). This is an encouraging outcome, as multiculturalism in general education focuses as much on the impact of race, ethnicity, and culture on teaching and learning as it does on the need to broaden subject matter content to reflect a variety of cultural perspectives.

The one exception to the promising results in this area of the dimension subscale was reflected in responses to the survey item regarding whether respondents had discussed the relationship between hidden curriculum and unintended cultural bias. Only slightly more than a third of the respondents indicated having engaged in such discussions. As defined in the Dictionary of Sociology (Scott & Marshall, 2005), hidden curriculum “refers to the way in which cultural values and attitudes . . . are transmitted, through the structure of teaching and the organization of schools” (p. 1). This transmission is typically implicit, rather than explicit, and is frequently unintentional. The concept of the hidden curriculum may have particular significance for music teacher preparation. Despite efforts to include instructional experiences that expose pre-service music teachers to a culturally broader range of music, most undergraduate music education programs still emphasize the performances practices and traditional cultural aesthetic values of Western European classical music. Indeed, the demonstration of content knowledge and performance skills as related to the Western European classical music tradition is a pre-requisite for student entry into most college and university music programs. Consequently, undergraduate study in music primarily prepares pre-service music teachers to establish and maintain the cultural aesthetic values of Western European classical music in school music programs. Moreover, success in the music education profession customarily has been equated with the successful promulgation of that aesthetic in school music programs. Thus, by equating quality music programs with the norms of the musical aesthetic established in their undergraduate music preparation, new in-service music teachers may implicitly, though inadvertently, communicate the superiority of certain music forms over others that are equally viable, but not well represented in school music curricula.

Conclusion

To the extent that music student teachers surveyed in this study were ambivalent as to issues of personal attitude and their awareness regarding cultural differences, the results of the current study are congruent with results of studies in the broader teacher education literature (Bradfield-Kreider, 2001; Dieker, Voltz & Epanchin, 2002; Nierman, Zeichner & Hobb, 2002; Wiggins & Follo, 1999). On the other hand, the fact that the majority of survey participants indicated having knowledge and skills as related to culture and pedagogical issues, and
experiences in teacher preparation related to multicultural content in music teaching is in contrast to general education research results. These encouraging results are perhaps indicative of changes in instructional focuses that have occurred in music teacher education programs over the past decade.

Results of the current study suggest that additional investigations of cross-cultural competence in music student teachers involving a larger sample are warranted. In addition to continuing the exploration of the extent of cross-cultural competence reported by student teachers in music education, additional studies should investigate the effects of specific demographic categories used to describe the sample in the current study (i.e., gender, race/ethnicity, type of community setting for practicum and student teaching placements, and U.S. or international region of origin) on participants’ reported cross-cultural competence.

The attainment of cross-cultural competence, that is, the ability to teach in ways that acknowledge and are responsive to how varying culturally-specific knowledge bases impact students’ learning, continues to be at the forefront of identified competencies for candidates in teacher preparation programs. Cross-cultural competence has particular significance in terms of desired outcomes for candidates in music teacher preparation programs. Given that music is a source of cultural identity for many groups and communities and is one of several expressive forms through which cultures of the world and micro-cultures in the United States may be known and understood, music teachers must develop competencies that will assist them in valuing the varying culturally-specific knowledge bases and musical ways of knowing that their students bring to the music classroom and using these varying points of reference to facilitate and maximize student learning in music.

References


<http://libproxy.uncg.edu:2273/views/ENTRY.html?subview=Main&entry=t88.e1003>


Assessing Pre-Service Music Teachers:  
Piloting a Measure of Pre-service Teacher Responsiveness  

Beth Gibbs, The Pennsylvania State University

Abstract

The purpose of the study was to determine the suitability of a researcher developed observation rating form to measure teacher responsiveness during peer teaching episodes. Specific questions addressed in the study included: Does the measure yield consistent observations among raters? Is the measure an accurate reflection of raters’ perceptions of pre-service teacher responsiveness? What do raters perceive to be the strengths and weaknesses of the measure?

The raters for this study were music education graduate students and faculty who viewed peer teaching excerpts from an instrumental music education class. Each rater will independently viewed the peer teaching excerpts two times, a week apart. Upon the first viewing, the raters completed the researcher designed Teacher Responsiveness Observation Flowchart. A week later, the raters viewed the peer teachings again, using the Teacher Responsiveness Observation Flowchart to record their ratings. Following the second viewing, raters were interviewed about the strengths and weaknesses of the tool and completed a questionnaire to provide suggestions for improvements. Results of this study may be helpful in providing information about the development of assessments for pre-service teachers.

Teachers interact with students in a variety of ways. Verbal comments, questions, directions, and feedback are supplemented with non-verbal gestures to facilitate communication. Communication is necessary in learning environments so that students are given the opportunity to demonstrate skills and knowledge and teachers are able to aid student progress through adequate diagnosis and remediation. An essential component of the communication interaction between teachers and students is the responsiveness of the teacher. One of the many goals of music teacher education programs is to develop effective teaching characteristics, like responsiveness, in pre-service music teachers in order to adequately prepare them for their future careers as music teachers. Pre-service music teachers are typically defined as undergraduate students enrolled in music education programs prior to a student teaching placement.

Much research in music education has focused on pre-service teachers to gain a better understanding of who enrolls in music education programs, what skills they possess or lack, and how they are developing as teachers. Pre-service teachers vary in personality and background, (Teachout, 2001) and in their opinions about the skills and behaviors important to music teaching (Teachout, 1997). Music teacher educators must determine which teaching skills are most important to address and what opportunities can be presented to pre-service teachers to develop teaching skills. In many music teacher education programs, pre-service teachers are given opportunities to practice teaching both with peers and in authentic classroom or rehearsal settings. Conway (2002) reported that the teaching opportunities provided in undergraduate music education programs were highly valued by pre-service teachers as they indicated the need for more teaching experiences to be integrated into the undergraduate curricula.

Recognizing the value of pre-service teaching experiences, researchers have also investigated the characteristics of effective music teaching pre-service teachers may begin to obtain. Characteristics of effective teaching that have been investigated include, but are not limited to, diagnostic skills (Doerksen, 1999), rehearsal effectiveness (Bergie, 1992), organization, content knowledge, and lesson presentation (Butler, 2001; Hamman & Baker, 1995; Hamman, Lineburgh, & Paul, 1998; Paul, Teachout, Sullivan, Kelly, Bauer, & Raiber, 2001;
Effectiveness between teaching and research studies has been a topic of interest. Yarborough (2001) developed teaching routines. Subsequent research by Yarborough, Price, and Price (1983, 1989) and Price (1983, 1992) investigated the cyclical interactions between teachers and students in music settings which they have labeled sequential patterns of instruction. In a complete sequential pattern of instruction, a teacher initiated task is followed by a student response and subsequent teacher feedback. Depending on the nature of the task and the adequacy of the student response, the task may either be reinitiated or a new task will be given. Yarborough and Price (1989) investigated the difference between pre-service and experienced teachers’ use of sequential patterns of instruction. The researchers noted that mistakes in the sequence occurred most often when student responses were interrupted.

Measures have been developed to assess different aspects of effective music teaching. Doerksen (1999) developed the Aural Diagnostic and Prescriptive Skills Test. This inventory was designed to measure subjects’ responses to high and low level band performances. Bergie (1992) developed the Student Teachers’ Rehearsal Effectiveness Rating Scale (STRERS). The Survey of Teacher Effectiveness (STE), developed by Hamman and Baker (1995) to measure instructional effectiveness, has been used in several studies (Butler, 2001; Hamman, Lineburgh, & Paul, 1998; Paul, et al., 2001; Teachout, 2001). The frequently used STE consists of two weighted categories. The first category, lesson presentation and style (40%), includes vocal inflection, gestures, facial expression, eye contact, and posture. The second category, organization, knowledge and overall effectiveness (60%), includes the use of sequential patterns of instruction, presentation of knowledge, pacing, teaching style, and organization. Evaluators using the STE rate each of the criteria on a 5 point Likert scale.

While measures like the STE provide researchers with a comprehensive profile of teaching characteristics, other researchers have chosen to focus specifically on the interactions that occur between teachers and students in order to understand the cyclical nature of instruction and the response characteristics of effective teachers. Fogarty, Wang, and Creek (1983) were interested in the student performance cues that lead to teachers’ implementation of instructional actions. Specifically, they compared experienced and novice teachers’ use of student performance cues and their subsequent instructional actions. The researchers found evidence of differential patterns between experienced and novice teachers during classroom instruction. Experienced teachers were able to implement a greater variety of instructional actions in response to student performance cues and considered a greater variety of instructional goals when making classroom decisions.

Shavelson and Stern (1981) reviewed research on teachers’ pedagogical thoughts, judgments, and decisions, and formulated a model of the interactive decision making (IDM) that takes place during instruction. Through the model, the researchers demonstrated how IDM could be based upon well-established teaching routines. In the routine, the teacher monitors student progress, seeking cues within acceptable tolerance. If the student performs outside of tolerance, the teacher must decide to either take immediate action or delay action. If a teaching routine is available for handling the problem, the teacher can take immediate action. After initiating the teaching routine to fix the problem, the teacher must monitor student progress again. The IDM teaching routine occurs cyclically and may occur several times in a lesson.

Worthington (1992), in her study of two high school choral music teachers reacting to inadequate or incorrect student singing responses, acknowledged that effective music teaching is more than the verbal communication of knowledge. Worthington compared the choral teachers’ interaction strategies to the academic classroom models by Shavelson and Stern (1981) and Fogarty, Wang, and Creek (1983). Worthington found that factors influencing student and teacher interactions were the teachers’ own philosophies and beliefs about teaching, musical and technical concepts emphasized, and routine teaching techniques.

Yarborough and Price (1981, 1989) and Price (1983, 1992) have investigated the cyclical interactions between teachers and students in music settings which they have labeled sequential patterns of instruction. In a complete sequential pattern of instruction, a teacher initiated task is followed by a student response and subsequent teacher feedback. Depending on the nature of the task and the adequacy of the student response, the task may either be reinitiated or a new task will be given. Yarborough and Price (1989) investigated the difference between pre-service and experienced teachers’ use of sequential patterns of instruction. The researchers noted that mistakes in the sequence occurred most often when student responses were interrupted.
and too many directions were given following task presentations. Furthermore, Yarborough and Price found value in giving pre-service teachers instruction in the use of sequential patterns of instruction.

One of the first places pre-service teachers have the opportunity to practice using sequential patterns of instruction is in peer teaching settings. Although peer teaching lacks the authenticity of teaching school aged children, it provides pre-service teachers with a safe, controlled environment in which they can begin to hone their teaching skills. Peer teaching situations also allow music education faculty and peers the opportunity to provide valuable feedback to pre-service teachers to aid the development of teaching skills. Measures used by music education faculty to assess the teaching effectiveness of pre-service teachers can provide valuable feedback specific for areas in which the pre-service teacher may need improvement. As indicated by Yarborough and Price (1989), one area of effective teaching to be monitored in pre-service teachers is the use of sequential patterns of instruction. Therefore, a measure designed to monitor the responsiveness of pre-service teachers using sequential patterns of instruction could be useful in providing specific feedback about areas of the teaching cycle in need of improvement.

In the current study, teacher responsiveness was defined as the way in which a teacher interacts with a given set of students to appropriately initiate tasks, allow adequate opportunity for student response, and provide appropriate verbal or non-verbal feedback. The purpose of the study was to determine the suitability of a researcher developed observation rating form to measure pre-service music teacher responsiveness during peer teaching episodes. Specific questions addressed in the study include: Does the measure yield consistent observations among raters? Is the measure an accurate reflection of raters’ perceptions of pre-service teacher responsiveness? What do raters perceive to be the strengths and weaknesses of the measure?

Development of Tool

Several designs were considered as the measure was developed. A teacher behavior checklist was considered, but the idea was discarded as raters would be unable to indicate how well the pre-service teacher performed any given behavior. A criteria-specific rating scale was developed including categories for each phase of the teaching cycle, but the researcher encountered two problems with the design. It was difficult to develop appropriate criteria without assuming a hierarchy of behaviors and the amount of reading required by the rater as necessitated by the criteria in each category became cumbersome. In order to simplify the appearance of the tool and to parallel the cyclical nature of instruction, the researcher designed a tool to work as a flowchart, moving from one category of teaching to the next. The Teacher Responsiveness Observation Flowchart (Appendix A) was designed to allow the rater to track subjects’ use of sequential patterns of instruction, previously defined by Price (1992), as they occur and to rate the appropriateness of each component within the cycle. Beginning with task initiation, followed by opportunity for student response and feedback, the rater indicated the appropriateness of each part of the cycle by circling either N – does not occur, 1 – inappropriate, 2 – minimally appropriate, 3 – somewhat appropriate, 4 – appropriate, or 5 – highly appropriate. (“N” is not an option for task initiation because a task initiation would need to occur in order for the cycle to begin.) If the subject re-initiated the task in order to remediate student error, the rater could track subsequent cycles by circling the appropriate ratings in the following row on the observation form.

Methodology

Subjects for the current study included three music education faculty and two doctoral student raters. The raters all had previous experience working with pre-service music teachers in music methods courses at a university in Pennsylvania. Each rater received a set of instructions regarding the nature of the rating task, two copies of the Teacher Responsiveness Observation Flowchart, and one post rating questionnaire (Appendix B). In an effort to determine how intuitive use of the tool could be at face value, raters received no additional training in the identification of cycles of instruction or use of the Teacher Responsiveness Observation Flowchart.
Each rater viewed a compilation of peer teaching tasks compiled by the researcher. The peer teaching examples were edited to isolate 12 separate tasks from an instrumental methods course. Examples of teaching included string teaching, woodwind teaching, brass teaching, and ensemble rehearsal. The excerpted tasks were approximately one to three minutes in duration depending upon the nature of the teaching interaction. Each rater independently viewed the compilation of peer teaching tasks two times, a week apart. During the first viewing, the raters completed the researcher designed *Teacher Responsiveness Observation Flowchart* while viewing the tasks. A week later, the raters viewed the peer teaching tasks again, using the *Teacher Responsiveness Observation Flowchart* to record their ratings a second time. Immediately following the second viewing, the raters independently met with the researcher to discuss their response patterns and explain the thought processes they used when assigning ratings using the measure. Interviews with each rater were recorded using an Olympus Digital Voice Recorder (VN-3100PC). Following the interviews, each rater completed a questionnaire to provide the researcher with feedback about the strengths and weaknesses of the measure. The questionnaire included the following three questions: 1) What do you perceive to be the strengths of the *Teacher Responsiveness Observation Flowchart*? 2) What do you perceive to be weaknesses of the *Teacher Responsiveness Observation Flowchart*? 3) What recommendations do you have for improving the *Teacher Responsiveness Observation Flowchart*?

**Results**

To examine the consistency with which raters recorded observations between the first and second rating tasks, intra-rater correlations were calculated for each category of the *Teacher Responsiveness Observation Flowchart*. The categories included: Task Initiation, Opportunity for Student Response, and Feedback. In addition, the number of teaching cycles identified by each rater was compared to determine consistency between the 1st and 2nd rating task (Table 1).

<table>
<thead>
<tr>
<th>Rater</th>
<th>Task Initiation</th>
<th>Opportunity for St. Resp.</th>
<th>Feedback</th>
<th># Cycles</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>-0.03</td>
<td>0.94**</td>
<td>0.54</td>
<td>0.84**</td>
</tr>
<tr>
<td>B</td>
<td>0.43</td>
<td>0.27</td>
<td>0.13</td>
<td>0.87**</td>
</tr>
<tr>
<td>C</td>
<td>-0.34</td>
<td>0.82**</td>
<td>0.48</td>
<td>0.71**</td>
</tr>
<tr>
<td>D</td>
<td>0.61*</td>
<td>0.88**</td>
<td>0.78**</td>
<td>0.96**</td>
</tr>
<tr>
<td>E</td>
<td>0.06</td>
<td>0.86**</td>
<td>0.83**</td>
<td>0.87**</td>
</tr>
</tbody>
</table>

* *significant at .05

** significant at .01
Correlations of 0.80 or higher were considered indicators of consistency between rating tasks. Consistency was lowest for Task Initiation and Feedback. Raters were more consistent in scoring Opportunity for Student Response and in identifying numbers of teaching cycle re-initiations.

Agreement among raters was also of interest to the study. Inter-rater correlations were examined for both the first and second rating task to determine which categories of the Teacher Responsiveness Observation Flowchart yielded the most agreement between the raters (Table 2). Correlations of 0.80 or higher were considered indicators of consistency between raters. Again, correlations for both first and second rating tasks were lowest in the categories of Task Initiation and Feedback indicating little agreement among raters. Raters scores in the category of Opportunity for Student Response, however, were more consistent reaching $r = .92$ in the first rating task to $r = .96$ in the second rating task.

Table 2: Inter-rater Correlations

<table>
<thead>
<tr>
<th>Task Initiation Rating 1</th>
<th>Task Initiation Rating 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rater</strong></td>
<td><strong>A</strong></td>
</tr>
<tr>
<td>B</td>
<td>-0.26</td>
</tr>
<tr>
<td>C</td>
<td>-0.52</td>
</tr>
<tr>
<td>D</td>
<td>-0.63*</td>
</tr>
<tr>
<td>E</td>
<td>-0.29</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student Response Rating 1</th>
<th>Student Response Rating 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rater</strong></td>
<td><strong>A</strong></td>
</tr>
<tr>
<td>B</td>
<td>0.20</td>
</tr>
<tr>
<td>C</td>
<td>0.92**</td>
</tr>
<tr>
<td>D</td>
<td>0.88**</td>
</tr>
<tr>
<td>E</td>
<td>0.83**</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Feedback Rating 1</th>
<th>Feedback Rating 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rater</strong></td>
<td><strong>A</strong></td>
</tr>
<tr>
<td>B</td>
<td>0.14</td>
</tr>
<tr>
<td>C</td>
<td>0.25</td>
</tr>
<tr>
<td>D</td>
<td>0.55</td>
</tr>
<tr>
<td>E</td>
<td>0.56</td>
</tr>
</tbody>
</table>

* significant at .05 level  
** significant at .01 level
In order to examine the raters’ perceptions of teacher responsiveness in the rating task and the use of the Teacher Responsiveness Observation Flowchart, the recorded interviews with the raters were transcribed by the researcher. The transcriptions were analyzed for significant statements and categorized into common themes among the raters. The themes common among raters included: 1) uncertainty about cycle 2) need for practice using the measure, 3) instigates thinking about teaching cycle, 4) trouble with the rating task, 5) importance of instructional context, and 6) lack of narrative feedback. In addition, rater responses to the questionnaire were analyzed and categorized into statements of strengths of the measure, weaknesses of the measure, and suggestions for improvement (Table 3).

Table 3: Rater Perceptions of the Teacher Responsiveness Observations Flowchart

<table>
<thead>
<tr>
<th>Raters’ Perceptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Uncertainty about cycle</td>
</tr>
<tr>
<td>• Need for practice using the measure</td>
</tr>
<tr>
<td>• Instigates thinking about cycle for students and teachers alike</td>
</tr>
<tr>
<td>• Trouble with task</td>
</tr>
<tr>
<td>• Importance of teaching context</td>
</tr>
<tr>
<td>• Lack of narrative feedback</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strengths and Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>(+) Identifies strengths and weaknesses in a student’s teaching cycle</td>
</tr>
<tr>
<td>(+) Focuses rater attention of specific aspects of teaching</td>
</tr>
<tr>
<td>(+) Simple and concise</td>
</tr>
<tr>
<td>(-) Difficult to define cycle</td>
</tr>
<tr>
<td>(-) Lacks space for narrative feedback</td>
</tr>
<tr>
<td>(-) Difficult to rate without knowing larger context of teaching excerpt</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Suggestions for Improvement</th>
</tr>
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<tr>
<td>• Add “non-verbal” and “verbal” indicators to feedback column</td>
</tr>
<tr>
<td>• Include space for comments</td>
</tr>
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<td>• Identify specific tasks to be evaluated</td>
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In answer to research question 1, “Does the measure yield consistent observations among raters,” results of the pilot indicate that raters were most consistent in their ratings of pre-service teacher opportunity for student response. Raters were not consistent in rating task initiation or feedback. Research question 2 asked, “Is the measure an accurate reflection of raters’ perceptions of pre-service teacher responsiveness?” Rater responses to the questionnaire and the interviews indicated an uncertainty about the rating task and the nature of the teaching cycle which leads the researcher to conclude that the measure is not yet an accurate reflection of teacher responsiveness. The third question, “What do raters perceive to be the strengths and weaknesses of the measure”, was answered primarily through questionnaire responses. The simplicity and focus of the measure was found to be its strength. The weaknesses of the measure revolved primarily around the rating task in the pilot and included difficulty defining individual teaching cycles and trouble rating without knowing the larger teaching context of each excerpt.
Discussion

The lack of consistency in rater scores between first and second ratings in the categories of Task Initiation and Feedback is an indication that the Teacher Responsiveness Observation Flowchart lacks reliability in reporting scores for at least two of the three categories on the measure. It is unsurprising that subsequent analysis of agreement between raters also resulted in a low degree of consistency on the same two categories. The higher degree of consistency in the Opportunity for Student Response category may indicate that this specific part of a teaching cycle is the clearest to identify and score as a rater. None of the raters received formal training in identifying cycles of instruction or using the Teacher Responsiveness Observation Flowchart. As a result, each rater was required to draw upon his or her own past experiences providing feedback to pre-service teachers in order to make decisions about how to score the peer teaching excerpts. Differences in instructional style and music teaching background of the raters may have led to variability in determining the effectiveness of teaching behaviors exhibited in the peer teaching excerpts. It is likely the Opportunity for Student Response category was more consistent than the other two categories because this part of the cycle is enacted similarly across different music teaching contexts.

As a tool for teaching and providing feedback in music teaching methods courses, the intra-rater correlations are of greater concern than the inter-rater correlations. In a classroom setting, the concern is that the instructor of the course is consistent in his or her feedback from week to week. Because music teacher educators approach instructional strategies in different ways, it would be important for an instructor to determine effective use of the teaching cycle within a specific music teaching context. Understanding the appropriate teaching strategies to be used in a specific context would help to improve consistency in the ratings of pre-service music teaching.

The rater interviews provided rich information about the efficacy of the Teacher Responsiveness Observation Flowchart as a measure of pre-service teacher responsiveness. Rater interviews revealed a high degree of uncertainty about identifying cycles of instruction in the excerpts of peer teaching. Trouble with the rating task resulted from a lack of practice using the tool, ambiguity about the appropriateness of pre-service teacher actions in the excerpts, and the disjointed context of the DVD excerpts used in the rating task. Without changes to both the responsiveness measure and the rating task, scores obtained from Teacher Responsiveness Observation Flowchart can not be considered an accurate reflection of teacher responsiveness.

Rater responses to the questionnaire provided suggestions for revisions to the Teacher Responsiveness Observation Flowchart. Revisions to the measure should include space for narrative feedback. The raters indicated that space for comments would be helpful in providing additional feedback about responsiveness within the teaching cycles or to help explain numerical scores. In addition, the Feedback category should include indicators of verbal and non-verbal feedback to help specify the type of response given by the pre-service teacher (see Revised Rating Scale suggestion, APPENDIX C). Because some raters ran out of room on the form for Task Re-initiations, the beginnings of cycles could be determined by the rater as they occur. Another approach to identifying the beginnings of tasks would be to have the pre-service teacher identify tasks from their lesson plans ahead of time. A list of the tasks could be attached to the Teacher Responsiveness Observation Flowchart to aid the rater in identifying cycles of teaching.

As a tool for assessing pre-service teachers, the Teacher Responsiveness Observation Flowchart is still in its infancy. Revisions to the measure will need to be tested in a wider variety of contexts to determine how well it would function in different music instructional settings. Future research may also examine how well the Teacher Responsiveness Observation Flowchart could function as a tool for self reflection and peer evaluation. Further investigation is also needed to determine how experienced teachers deliver instruction and whether or not they follow similar cyclical patterns of instruction. Determining what works in an authentic teaching context may help to improve the way pre-service teachers can be taught to interact with their students.
References


APPENDIX A

Teacher Observation Response Form

Rater # _____

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KEY
N – Does not occur
1 – inappropriate
2 – minimally appropriate
3 – somewhat appropriate
4 – appropriate
5 – highly appropriate
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APPENDIX B

Rater Questionnaire

Rater # ____

Please answer the following three questions as thoroughly as possible. Please allow your experiences using the Teacher Responsiveness Observation Flowchart to inform your responses.

1) What do you perceive to be the strengths of the Teacher Responsiveness Observation Flowchart?

2) What do you perceive to be weaknesses of the Teacher Responsiveness Observation Flowchart?

3) What recommendations do you have for improving the Teacher Responsiveness Observation Flowchart?
## APPENDIX C

### Rating Form Revised

Student __________________________________________
Rater ____________________________________________

<table>
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<tr>
<th>Task (Indicate below where task begins)</th>
<th>Task Initiation/Re-initiation</th>
<th>Opportunity for Student Response</th>
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**KEY**

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