TEACHING IMPROVISATION WITHIN THE GENERAL MUSIC METHODS COURSE: UNIVERSITY TEACHER EXPERIENCES, APPROACHES, AND PERSPECTIVES

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The purpose of this study was to investigate the teaching of improvisation in general music methods courses for music education majors. Subjects ($N = 45$) were university general music methods course teachers who participated in the Mountain Lake Colloquium for Teachers of General Music Methods on May 15-18, 2011, in Mountain Lake, Virginia. A researcher-designed questionnaire was used to collect information on instructor experiences, approaches, and perspectives relating to the teaching of improvisation in general music methods courses. Results showed that instructors were diverse in age and in educational degrees held. Almost all (96%) of participants agreed that improvisation skills should be taught in the university general music methods course. The majority (93%) of instructors reported that they currently address improvisation in a general music classroom. Half of those that provided improvisation instruction spend 10% of a typical semester's class time on it. The majority (69%) held specialized certifications, the most popular being Orff Schulwerk. The Orff approach, followed by Dalcroze and Kodály methods, respectively, were used frequently when teaching improvisation in university classrooms. Strategies favored included modeling (71%), group improvisation (67%), and the use of Orff instruments (62%). Emphasis was placed on performance-based assessment, with peer-teaching (81%) and class improvisation sessions (73%) the most popular. Almost all (96%) had experience teaching general music in K-12 grade school settings, and in elementary schools in particular. Elementary K-4 national standards for improvisation were also addressed consistently in university class meetings. While only 40% of the instructors had formally

studied improvisation, over 88% were interested in learning more about teaching improvisation. Although 71% of participants believed that others who play their primary instrument improvised better, and that others had more talent for improvisation (56%), these individuals still felt confident in their ability to teach teachers how to address improvisation (89%), to teach others improvisation (73%), and to become proficient in improvisation (73%). They also enjoyed the challenge of improvisation (59%). Those with higher teaching self-efficacy were also more likely to have formal training in improvisation, and use group improvisation and modeling as teaching strategies. Those with higher composite self-efficacy were more likely to use group improvisation as a teaching strategy.

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CHAPTER I

Statement of the Problem

Practitioners and researchers alike have advocated for the inclusion of creativity within the general music curriculum due to musical and non-musical benefits. According to Paynter (1992), creativity should be the focus of all affective areas of the curriculum and should include imagination, origination, invention, interpretation, and personalized imitation. Learning occurs through independent, innovative responses to ideas and means of expression; thus, creativity is significantly distinctive from received knowledge and from skills acquired through rule-directed learning.

Improvisation is one strategy that can be used by general music teachers as a way to foster creativity within the classroom, and the inclusion of improvisation as one of the National Standards for Arts Education (1994) reaffirms that music educators value its use in the classroom. Improvisation is a way for students to coordinate ear, eye, and imagination and perform what is heard in the mind (McPherson, 1994). Students learn musical improvisation through stages that relate to their age, former musical experiences, and particular ability. This skill is developed through a progression beginning with an understanding of sounds through free exploration, an understanding of musical composition and phrasing, and finally to an understanding of particular styles of music (Konowitz, 1973; Kratus, 1991; Madura, 1999; Swanwick et al., 1986; Thompson, 1980).

Numerous research studies support the idea that improvisation is a creative, rewarding skill (Azzara, 1993; Beegle, 2001; Brophy, 2005; Coy, 1989; Flohr, 1980; Kiehn, 2003; Munsen, 1986; Parisi, 2004). The research suggests that the use of improvisation in the classroom provides teachers with information about student musical

and problem-solving abilities and offers students an opportunity to solve problems and make decisions independently. Students' musical ability also was found to improve and transform as they grew older. Azzara (1993) discovered that students who received instruction with an emphasis on improvisation performed significantly better in musical and problem-solving abilities than students who received instruction without this emphasis.

Incorporating improvisational experiences within the general music classroom is one way to expose students to the benefits of improvisation. Parisi (2004) researched elementary students nine and ten years of age and found that when receiving instruction in melodic and improvisatory discrimination when singing and/or playing a piece in the blues style, students responded with a higher level of discriminatory skill and positive affective response.

Beegle (2001) and Brophy (2005) used Orff-Schulwerk instruments in their studies to teach improvisation to elementary school students. Brophy's (2005) three year longitudinal study of the melodic improvisations of students ages seven through nine (N = 62) showed that their creations were less musically adventurous in the beginning stages, and he recommended that teachers encourage students to improvise in a variety of ways. Beegle (2001) examined three Orff-trained general music teachers' use of improvisation with elementary school students. Findings showed that teacher use of articulate verbal directions and feedback resulted in increased variety of student improvisational responses. Also, teacher use of rhythmic speech resulted in an improvement in accurate phrase-lengths.

Although many teachers value improvisation, research consistently finds a lack of music teacher preparation for, confidence in, and implementation of improvisation in the classroom (e.g., Bell, 2003; Frego & Baltagi, 2006; Madura Ward-Steinman, 2007). Bell (2003) surveyed a sample of K-12 certified music teachers from New York and found that improvisation was considered one of the most difficult standards to implement. Teachers found improvisation too difficult for elementary students, felt unprepared to introduce improvisation to middle school beginners, and lacked self-confidence in their own improvisational ability. Frego and Baltagi (2006) surveyed 59 elementary general music teachers in central Ohio and found that only 10% taught improvisation. These teachers utilized body percussion, non-pitched percussion, and some infrequent scat-singing and vocal call-and-response improvisation. Madura Ward-Steinman (2007) measured vocal jazz teachers' confidence in implementing the 12 improvisation achievement standards, and found that teachers felt "moderately confident" to address the elementary standards, but only "slightly confident" to teach grades 5-8 standards, and "minimally confident" for grades 9-12. The teachers rated their own improvisational ability the lowest of all items but they were highly motivated to learn more.

These findings are due to the fact that few universities introduce improvisation to students, let alone address it in depth (Madura Ward-Steinman, 2007; Shuler, 1995). Students often receive little or no instruction in improvisation unless they study jazz improvisation or receive training in Orff Schulwerk or Dalcroze pedagogy. Reimer (1996) stated that music education faculty members are often traditionally trained, giving them very little experience teaching improvisation. Faculty must then seek out knowledge in improvisation methods, via professional development opportunities at

conferences or summer workshops in Orff, Dalcroze and Kodály approaches (Reimer, 2000). Abrahams (2000) also stresses that many music teachers believe they are meeting the improvisation standard without examining the depth of understanding needed to teach improvisation. Although Beegle's research (2001) showed that teachers tended to agree on the importance and definition of improvisation as creating something new, and believed that modeling improvisation behavior is important for teaching stylistic elements, they disagreed in the amount of structure needed in teaching improvisation and in assessing student outcomes.

Few researchers have attempted to shed light on ways improvisation is being successfully included in the general music methods course for prospective music educators. Campbell and Della Pietra (1995) profiled two students participating in a five-week improvisation training segment in a secondary music methods course. The students' thoughts and actions in regards to improvisation were tracked throughout the course, showing an increase in sensitivity to the development of improvisation for themselves as well as their students. Madura Ward-Steinman (2007) found that improvisation training in a choral methods class improved pre-service teacher confidence to teach improvisation according to the National Standards. Undergraduate students enrolled in a six-week intensive vocal jazz course were administered a pretest and posttest. The test results were then compared with a control group receiving no improvisation instruction, which showed that a six-week improvisation course significantly improved student confidence in teaching improvisation.

Rationale

Though studies have been conducted on the inclusion of improvisation within the general music classroom, there is little research that addresses pre-service music teacher preparation in improvisation within the general music methods course. In addition, there is no known research focusing on what motivates university general music methods course teachers to address the teaching of musical improvisation. Hence, a descriptive study is needed in order to determine current trends in university general music methods course teachers' experiences, approaches, and perspectives in regards to the teaching of improvisation to music education majors.

Problem Statement

Research is needed to identify improvisation techniques that are preferred by university professors in teaching musical improvisation skill in a general music methods course for music education majors. Because improvisation is also one of the least emphasized National Standards in the general music curriculum, continued research is needed to inform teachers how to include improvisation more frequently into their classrooms (Madura Ward-Steinman, 2007; Orman, 2002; Schmidt, Baker, Hayes, & Kwan, 2006), as well as to increase their self-efficacy toward the teaching of musical improvisation.

Purpose of the Study

The purpose of this study was to survey participants in the Mountain Lake Colloquium for Teachers of General Music Methods that took place from May 15 to 18, 2011, in Mountain Lake, Virginia, for their educational experiences, preferred approaches

and strategies, and self-efficacy in teaching musical improvisation within the university general music method course for music education majors. This study addressed the following questions:

1. What educational experiences have university professors had to prepare them to address the teaching of improvisation to music education majors within the general music methods course?
2. What approaches (or methods) and strategies are most preferred and used by university teachers when addressing improvisation in the general music methods course?
3. What are the relationships between self-efficacy ratings for musical improvisation and use of improvisation methods, strategies, standards, and formal study for university general music methods course instructors?

Delimitations

The sample was delimited to university general music methods course instructors, both current and retired, who participated in The Mountain Lake Colloquium for Teachers of General Music Methods from May 15 to 18, 2011, in Mountain Lake, Virginia. The Mountain Lake Colloquium for Teachers of General Music Methods is a biennial gathering that began in 1991 to encourage conversation and sharing between teachers of general music methods courses regarding the future and state of general music education. The colloquium was co-chaired by Nancy Boone Allsbrook, from Middle Tennessee State University, and Mary Goetze, from Indiana University Jacobs School of

Music. The event is sponsored by the Society of Music Teacher Education and NAfME: The National Association for Music Education.

Definitions

Dalcroze Method: A method of teaching music, created by Jaques-Dalcroze, using improvisation, rhythmic solfege, and eurhythmics (Abramson, 1980).

Gordon Music Learning Theory: An explanation of how we learn what we learn; provides a comprehensive method for teaching musicianship through audiation, a term for hearing music in the mind with understanding (Gordon, 2007).

Improvisation: Derived from the Latin work *improvisus*, which means "unforeseen" or "unexpected"; the process of spontaneous creative musical generative behavior, with no expectation or intent of revision of the finished product (Kartomi, 1991).

Jazz: American music developed especially from ragtime and blues and characterized by propulsive syncopated rhythms, polyphonic ensemble playing, varying degrees of improvisation, and often deliberate distortions of pitch and timbre (Goodkin, 2004a).

Kodály Method: A method of teaching music with the aim of developing high musicianship, with a focus on developing inner hearing, mind, emotional sensitivity, and technique (Choksy, 1974).

Orff Schulwerk: An approach to teaching music that encourages creativity through movement, instrument playing, speaking, and singing, and encourages children to learn through play (Goodkin, 2004b; Steen, 1992).

Self-Efficacy: A person's beliefs about their own ability to execute various behaviors successfully (Ormrod, 2008).

CHAPTER II

Review of Related Literature

Research pertinent to the present study will be reviewed according to the following three categories: Teaching improvisation to primary and secondary school students, teaching musical improvisation to pre-service teachers, and elementary general music teacher perspectives on improvisation.

Teaching Musical Improvisation to Primary and Secondary School Students

Multiple studies (Azzara, 1993; Beegle, 2001; Brophy, 2005; Parisi, 2004) in primary schools have focused on musical improvisation. Azzara (1993) developed and then examined the effectiveness of an improvisation curriculum in improving music achievement of elementary school instrumental music students. The research investigated the effect of improvisation study on the music achievement of fifth-grade wind and percussion students, as well as effects of different levels of music aptitude on music reading performance achievement. Students from two elementary schools in centralized suburban school districts near Rochester, New York, were participants in the research. Sixty-six fifth-grade students who had been studying an instrument for a year participated in this study (45 from school A and 21 from school B). The student population was predominately white, although a range of other ethnic heritages was represented. Students were described as middle class. Each setting contained an experimental and control group in which students were randomly selected. Both groups received instruction using *Student Book One* and the *Home-Study Cassette* from *Jump Right In: The Instrumental Series* (Grunow & Gordon, 1989). Two teachers participated in this study and each teacher taught both the control and experimental groups at their

school. Teacher A had six years of experience and Teacher B had seven years of experience teaching instrumental music in public schools.

All students were administered the Musical Aptitude Profile (MAP), a standardized measure which includes three sections: tonal imagery, rhythm imagery, and musical sensitivity. Norms are provided in the test manual for grades four through twelve and each section contains tape-recorded excerpts. Students were asked to discriminate between like and different or same and different paired instrumental performances. Music achievement was measured by having individuals perform three etudes written by the researcher. Students prepared the first etude independently, prepared the second etude with teacher assistance, and read the third etude at sight. Teachers recorded all performances, randomly re-ordered these recordings to a master tape and renumbered them to conceal the identity of the student. Four judges independently rated the performances on three separate occasions, once for rhythmic, expressive, and tonal performance for 66 students who performed three etudes, totaling 594 recordings heard by each judge. Judges were three graduate students and one undergraduate student enrolled at a university school of music in the northeastern United States. A five-point rating scale was used (Azzara, 1993).

Results indicated that students who received instruction that included an emphasis on improvisation performed at significantly higher achievement levels than those students who received instruction without such emphasis. High-aptitude students performed at higher achievement levels than low-aptitude and moderate-aptitude students. The data collected in this study provide evidence that improvisation contributes to the

improvement of instrumental music performance achievement in elementary students (Azzara, 1993).

Two studies (Beegle, 2001; Brophy, 2005) focused on the use of Orff-Schulwerk instruments to teach improvisation in elementary schools. Brophy (2005) examined the melodic improvisations using Orff instruments, of a group of children from ages seven through nine ($N = 62$) for three years. Improvisation was limited to one specific, highly structured setting in a large, urban public elementary school in Memphis, Tennessee, with a total population of 1,045 students. The study began with 96 randomly selected participants but the sample was reduced to 79 in the second year and 62 in the third year through natural attrition.

The participants improvised on alto xylophones as part of a class rondo, in ABACADA form, in which the B, C, and D sections were eight measure improvisations in the key of C pentatonic. Each participant improvised three melodies per year and, in the span of three years, improvised a total of nine melodies. A total of 558 improvisations were collected. Each year participants took the complete Intermediate Measures of Music Audiation (IMMA) and the Mallet Test, a research-designed measure of mallet skill. The Mallet Test had three parts: part one, the child played the pattern c4-d4-e4-g4 with alternating mallet pattern left-right-left-right; part two, the child played the pattern g4-e4-d4-c4 with alternating mallet pattern right-left-right-left; and part three, the subject played the G bar (g4) as rapidly as possible with alternating mallets. The three mallet test parts were given in random order and participants had ten seconds to complete as many correct sequences as possible for each exercise for five trials, with five seconds of rest in between. A mean was taken for each part and the three averages were totaled to

acquire a total Mallet Test score. Improvisations were observed for the inclusion of repeated and developed melodic and rhythmic motives, pulse adherence, phrases, and antecedent/consequent phrases. Repeated-measures multiple analysis of covariance (MANCOVA) was used to analyze data (Brophy, 2005).

Results indicated that characteristics of children's melodic improvisations changed as they aged. The greatest significance of change transpired in the rhythmic and structural characteristics as the students grew older with their musical expressions becoming more organized and conventional. Post-hoc Tukey Pairwise Comparisons showed significant differences between ages seven and eight for the presence of repeated melodic motives ($p < .04$), as well as for pulse adherence, repeated rhythmic motives, and antecedent/consequent phrases ($p < .00$). Significant differences also occurred between ages seven and nine for the inclusion of antecedent/consequent phrases ($p < .01$), presence of repeated rhythmic motives, and pulse adherence ($p < .00$). No significant differences occurred between ages eight and nine. Overall, differences were not as noticeable melodically, possibly a result from the limited range of the alto xylophone, the use of the pentatonic scale, or the musical context of the class rondo (Brophy, 2005). This study reveals that one's improvisation characteristics change over time and that teachers should expect these creations to be musically simple in the beginning stages.

An examination of Orff-trained general music teachers' use of improvisation with elementary school children was examined by Beegle (2001). Three teachers were interviewed and observed for two hours within their classrooms. All teachers were located in the Puget Sound area of Washington state and received all three levels of Orff Schulwerk teacher training. The researcher gave pre-observation and post-observation

interviews, with the use and process of improvisation being the focus. Observations covered four lessons and at least three of the four were transcribed for analysis. Teachers planned their lessons after the pre-interview in order to include improvisations in the context and content of the lessons. Students ranged from second to sixth grade.

Transcripts of the classroom activities were coded using the guidelines of Simpson and Tuson (1995). Each theme was allocated a name, and abbreviations of these names were used to mark their occurrence in the raw data. When more specific categories became apparent, they were coded in a similar manner. The interview data were compared to the observed data according to various themes and were analyzed. The cross-case analysis included the following themes: Providing an environment conducive to creativity, the use of improvisation, the purpose of improvisation, developmental aspects, assessment, pedagogical techniques, achievement standards, and student responses (Beegle, 2001).

Findings also indicated that there was a difference in teaching approach when presenting improvisation. The goals of the individual teachers varied from having the students' creations meet specific musical criteria to having the students focus on individual expression. Similarities and differences were also noticeable between pedagogical methods, and teacher behaviors also influenced students' improvisatory behavior. The most substantial pedagogical finding was that the use of rhythmic speech as opposed to simply counting beats increased students' success in improvising accurate phrase-lengths. The most significant finding related to observable teacher behaviors was that more articulate verbal directions and feedback with specific suggestions for improvement resulted in improved student focus on the musical elements of

improvisation, and that less articulate verbal directions and feedback in the form of general praise with a lack of suggestion for improvement resulted in increased variety of student improvisational responses (Beegle, 2001).

Improvisation is often associated with jazz but little research is found on the topic of jazz strategies in teaching improvisation at the primary and secondary school levels. The research that does exist on this topic supports the idea that incorporating jazz strategies in improvisation lessons improves student productivity and engagement (Coy, 1989; Parisi, 2004). Parisi (2004) assessed fourth and fifth grade students, ages nine and ten, and their affective response and ability to discriminate between a known melody and improvisation after receiving instruction in singing and/or playing a piece in the blues style. Students ($N = 102$) from six fourth and fifth grade general music classes were selected and kept intact for the purpose of the study. All instruction was included within the existing curriculum and taught by the classroom teacher in conjunction with the researcher. Instructional classes were replicated in each grade. Of the equal-sized groups used in this study, group one learned to sing a blues melody, group two learned to play a blues melody on the recorder, and group three acted as the control group and was given non-specific instruction in both singing and playing various melodies. The group that sang a blues melody started by using simple rhythmic syllables and progressed to scat syllables, and eventually created their own lyrics. The group that was instructed to play a blues melody on the recorder first learned the melody by using scat syllables.

Data were gathered as subjects manipulated the dial of the Continuous Response Digital Interface (CRDI). The CRDI is a measuring instrument used to indicate likeability and melodic recognition as it occurs through time. Subjects manipulated the

dial of the CRDI while listening to five taped music examples: Happy Birthday (melody only), Happy Birthday (melody, improvisation, melody, improvisation), Original Tune (melody only), Original Tune (melody, improvisation, melody, improvisation), and Cage Full O'Blues (melody, improvisation, melody, improvisation). Cage Full O'Blues was specifically used as the instructional tune for the two singing and/or playing groups (Parisi, 2004).

An analysis of each student's graph showed that each student response and dial movement was unique throughout the five musical selections, with the stimulus selection, Cage Full O'Blues, rated higher by groups that received specific performance instruction. The results indicate that groups receiving specific instruction in melodic and improvisatory discrimination responded with a higher level of discriminatory skill and positive affective response (Parisi, 2004). The findings support the idea that the use of jazz improvisation as a tool for creativity within the classroom would engage more students in musical participation than activities with no or little improvisation with a jazz influence.

The use of improvisation within a secondary school program has also been a topic of study. Coy (1989) conducted research to determine if middle school band students with two to three years of instrumental music training could develop fundamental skills in jazz improvisation in six weeks. The study compared the effectiveness of researcher-designed materials and multisensory instruction on improvisational skills, rhythmic accuracy, and attitudes.

An instructional manual used in the study focused on performance techniques using limited melodic and rhythmic materials and included 44 rhythm cards, blues scales

in three keys, cassette accompaniment tape, and historical listening examples. All instructions were done in the 12-bar blues form (Coy, 1989).

Subjects consisted of 60 middle school band instrumentalists from two schools of like populations. The control group (n = 30) received the instructional manual for daily use with no teacher intervention. The experimental group (n = 30) received the same instructional manual and 20 minutes daily of teacher directed multisensory instruction during band. This instruction included aural perception, eurhythmics, verbal association, symbolic association, and synthesis (Coy, 1989).

An 18-item rhythm test, 18-item attitude survey, and jazz improvisation performance test were administered in a pretest-posttest design. Three experienced jazz performer-educators independently evaluated randomized, pre-post performance tapes. Multiple t-tests with weighted alpha levels were used to measure gain scores within and between groups. Interjudge reliability was computed with Ebel's reliability formula (r.33 = .81) (Coy, 1989).

Results denoted that the experimental group had a significantly higher (alpha = .002) score on rhythmic accuracy than the control group. The improvisation performance results indicated significant (alpha = .001) improvement in favor of the experimental group. Gain scores within and between groups were significant (alpha = .001) for both groups in performance and rhythm (Coy, 1989). This research suggests that middle school bands can learn fundamentals of jazz improvisation in a limited six-week time with efficient training. Although there was no statistically significant difference in attitude between groups, there was a favorable attitude change toward jazz and jazz study and many students enjoyed learning a new style and creating melodies of their own.

Teaching Musical Improvisation to Pre-service Teachers

Music educators are becoming more responsive to the need for improvisation instruction within the music classroom (Farber, 1991). The *National Standards for Arts Education* (1994) recommended that school children of all levels develop competence in nine music content areas, including improvisation. Teacher awareness of the inclusion of improvisation in the National Standards has come about through conferences and published resources by the National Association for Music Education (NAfME) and related state organizations, as well as university music education departments who revised their student curricula to better achieve these standards (Fonder & Eckrich, 1999; Madura Ward-Steinman, 2007).

Research about teacher awareness of improvisation techniques and how to implement them within their classroom curriculum has been examined. A significant, consistent finding is that there is a lack of teacher preparation, confidence, and implementation of improvisation within schools (Lehman, 1995; Madura Ward-Steinman, 2007). This situation may be due largely to the perception of the lack of preparation in improvisation skill in their undergraduate programs, with many students receiving little to no instruction in improvisation.

Two studies (Campbell & Della Pietra, 1995; Madura Ward-Steinman, 2007) measured the confidence in and preparation for teaching improvisation in a classroom. Campbell and Della Pietra profiled two students in a secondary music methods course to outline emerging views and behaviors on the subject of improvisation training. The study examined the students' understanding of improvisation and its relationship to analytical listening skill, as well as the musical and social interactions that could result from

improvisation study and practice in a group setting. Ways to integrate improvisation study into the curriculum were also addressed.

The methods class was comprised of five undergraduates and three certification-only or special-status students. One profile student was selected from each of these two groups. All students had at least three years of applied lessons and choral and/or instrumental ensemble experience. A five-week improvisation-training segment was included within the required ten-week methods course, with five 90-minute sessions focusing on listening and analyzing model pieces and consequent small group improvisations "in the style of the model." The five models were two-minute excerpts from rhythmic percussion ensembles in Ghana, the Bahamas, China, Vietnam, and Brazil. Ensemble instruments included various drums, rattles, bells, gongs, wood blocks, sticks, and claves (Campbell & Della Pietra, 1995).

Each 90-minute session began with a 25-minute aural analysis of a targeted model piece, which included three listening and discussion sequences. By the third listening experience of the sequence, students were expected to be able to perform, on desks, laps, floor or other surfaces, several key rhythmic patterns represented by the musical whole. When students produced incorrect responses for performance, the course professor and teaching assistant, who were also the investigators of the study, demonstrated them for immediate student imitation and rehearsal (Campbell & Della Pietra, 1995).

The unit on aural analysis was followed by small-group improvisation. Of the eight total students in the course, four students were randomly assigned to two groups each and these groups remained the same for the duration of the study. Students were given similar instruments from the model piece and told to go with their group to a

separate room to create an original piece of music in the style of the model. Students could choose to create their piece spontaneously or deliberately as well as verbally or nonverbally. After 20 minutes of creating with their groups, students were asked to perform their original pieces for the other group (Campbell & Della Pietra, 1995).

Data were collected through pre-study and post-study inventories and verbal protocols or "think-alouds" (a strategy in which stream-of-consciousness ideas by informants on various topics are solicited), videotapes and audiotapes of weekly small-group work sessions and in-class performances, and weekly written "reactions." Results from the study were found by using ethnographic techniques such as key word category coding and triangulation. All eight students' data were collected but focus was placed on the two selected students (Campbell & Della Pietra, 1995).

The data showed that although the profiled students differed in prior experiences and perspectives of teaching and music-making, they both showed evolving awareness of the process of improvisation due to self and student instruction. The study also showed that, in these two cases, improvisation skills could be learned and that a training course could achieve success in providing teaching techniques to facilitate improvisation development (Campbell & Della Pietra, 1995).

Analysis of the two informants' thoughts and behaviors led to the realization of specific themes. The themes were that students in methods courses can, through training: (a) be able to conceive of music improvisation as model-based and directly linked to carefully designed strategies of analytical listening; (b) recognize instructive importance of teacher demonstration, providing "building blocks" through listening, and student imitation; (c) accept tripartite pedagogical structure for encouraging improvisation among

students; and (d) assist other students, socially and interactively, to produce a musical resolution to their individual improvisation tasks or problems (Campbell & Della Pietra, 1995). These findings suggest that it is possible for teacher training courses to bring awareness of and improvement in improvisational teaching techniques.

Music teachers' confidence in their abilities to teach improvisation according to the K-12 achievement standards was examined by Madura Ward-Steinman (2007). The research included two parts: the first study examined vocal jazz workshop participants' confidence in teaching improvisation according to the K-12 National Standards for Arts Education and the second study investigated if a six-week course in vocal jazz would significantly improve undergraduates' confidence in teaching improvisation.

The first part, replicating Madura's 2000 study, included 213 participants from the United States and Brazil at six improvisation workshops at state, national, and international conventions from 2004 to 2006. A five-point scale was used for participants to rate their confidence in teaching improvisation, their own improvisation ability, and personal interest in learning about improvisation. Descriptive statistics and comparisons among grade levels of teaching and nationalities were reported. The questionnaire included 17 items specifically addressing the achievement standards of content standard #3: Improvising melodies, variations and accompaniments (Madura Ward-Steinman, 2007).

Results showed a significant decline in confidence in teaching improvisation from the national elementary school standards to the high school standards, F (1.71, 326.08) = 128.62, $p < .001$. Significant differences ($p < .001$) were found between each pair of grade level means: Grades K-4 achievement standards ($M = 3.53$) showed moderate

teacher confidence, grades 5-8 (M = 3.08) showed slight confidence, and grades 9-12 (*M* = 2.62) showed almost no confidence. These results emphasize a need for improvement in improvisation study for secondary school music teaching. No significant differences were found for nationality (US and Brazil) or for interaction between grade level and nationality. Although music teachers rated their own ability to improvise quite low, they expressed great interest in future opportunities to learn more about teaching improvisation, preferring, in order from highest interest to lowest interest, summer workshops, instructional videotapes, conference sessions, college classes, software, and books (Madura Ward-Steinman, 2007).

Part II of Madura Ward-Steinman's (2007) study examined the confidence of 13 undergraduate participants enrolled in a six-week intensive vocal jazz course at a Midwestern university. A pretest and posttest design was used. Students completed the same questionnaire as used in Part I on the first (pretest) and last (posttest) day of the course. A control group ($n = 19$) consisted of students who were enrolled in two other choral methods classes at that university that did not receive the vocal jazz instruction. The vocal jazz class, conducted by the researcher, included improvisation and non-improvisation aspects of the art of vocal jazz. Questionnaires were anonymous and were combined to create a teaching improvisation confidence score.

A significant improvement in confidence for teaching improvisation was found for the treatment group ($t = -4.30(12)$, $p < .001$), emphasizing a strong rationale for additional courses in improvisation for music teachers. A six-week research-based course in vocal jazz was found to be successful in improving confidence in all levels of

teaching improvisation as described by the achievement standards for improvisation (Madura Ward-Steinman, 2007).

In summary, these studies imply that teacher-training programs can improve teacher confidence and awareness of improvisation techniques within their classroom curricula (Campbell & Della Pietra, 1995; Madura Ward-Steinman, 2007). Madura Ward-Steinman (2007) noted that an emphasis in achieving the more sophisticated improvisation standards for secondary school music teaching needs to occur. Overall these studies show that few teachers believe they possess the necessary skills or confidence to implement improvisation within their classroom curriculum. More research is needed that can recommend specific actions and methods for successfully implementing improvisation within a music curriculum.

Although not specific to pre-service teachers, Watson (2010) examined self-efficacy for jazz improvisation in a study of college music majors. This study had two purposes: to see if self-efficacy and achievement for jazz improvisation were related to particular experience variables, and to examine the effects of aural versus notated pedagogical materials on improvisation performance self-efficacy and achievement in an instrumental jazz setting.

The sample included 62 undergraduate music majors from six Midwestern universities. Students were assigned into two groups, each receiving different instructional modalities. All instructional material was the same for both groups. Students participated in three 70-minute instructional treatment sessions over a span of four days, with four expert judges evaluating pre- and post-instruction improvisation performances using a researcher-created Jazz Improvisation Performance Achievement

Measure. Student self-efficacy in jazz performance was measured using the researcher-created Jazz Improvisation Self-Efficacy Scale (Watson, 2010).

Results suggested a significant ($p < .05$) improvement between pre- and post-instruction in improvisation for the aural training over the notation group. No significant correlations were found between post instruction achievement scores and experience variables. Following instruction, students showed a significant ($p < .001$) increase in self-efficacy for jazz improvisation (Watson, 2010).

Elementary General Music Teacher Perspectives on Improvisation

Two studies (Gruenhagen & Whitcomb, 2012; Koutsoupidou, 2005) have focused on the improvisation perspectives of elementary general music teachers. Gruenhagen et al. (2012) surveyed online a total of 148 elementary general music teachers to determine the types of improvisational activities in elementary general music classrooms in the United States, how often improvisation was occurring, and teacher attitudes concerning the application of improvisation.

Results indicated that the most common improvisational activity used was call-and-response/question-and-answer singing (97%), followed by improvising on unpitched (96%) and pitched (94%) instruments, improvising rhythmic patterns using instruments (92%), and individual students improvising (90%). Researchers identified three broad themes regarding teachers' reflections of these improvisation activities: 1) process, practice, and experience, 2) sequencing, scaffolding, and modeling in instruction, and 3) collaboration, reflection, and creation (Gruenhagen et al., 2012). Several teachers specified they were interested in the quality of the improvisational process rather than with the product. An additional theme included the importance of sequencing when

preparing students for improvisation, with structure, parameters, and a step-by-step process a necessary support at all developmental levels.

Results were mixed concerning the degree to which improvisation was included in the classroom. Seventy three percent of teachers reported that they included improvisational activities but 58% included improvisation between zero and 10% of instructional time. The majority perceived improvisation as essential to student development of musical skills, a significant strategy for students to express musical understanding, and as a creative and supportive process that encouraged more independent thinking and musicianship (Gruenhagen et al., 2012).

English primary teachers' perceptions and practices regarding musical improvisation were examined by Koutsoupidou (2005). Both generalists and specialists ($N = 67$) from various parts of England were surveyed, with a vast majority being female respondents. Researcher-created surveys were sent by mail or were administered through personal contact. Two parts were included on the survey: Personal information and attitudes towards using improvisation in the classroom.

Results indicated positive teacher perceptions and practices regarding improvisation (Koutsoupidou, 2005). Eighty one percent of teachers used improvisation within their classroom, and many believed improvisation had a positive effect on children's musical and creative development. While 19% had training in improvisation in school, this did not significantly affect the likelihood that improvisation would be included within the classroom. Improvisation was mainly included by personal choice of participants (76%). The most common uses of improvisation included response to a visual, verbal or audio stimulus, and as a means of showing emotions, themes, moods,

and ideas. Two-tailed chi-square tests indicated significant associations between several factors (teachers' age, experience, professional qualifications, and educational background) and teacher use of improvisation. Those more likely to include improvisation were older ($p < .01$), more experienced, had teaching qualifications ($p < .05$), and also had improvisation included in higher education. Those with improvisation in higher education were also more likely to include dance/movement improvisation. Fifty percent stated they used improvisation because it was required in the National Curriculum.

These studies suggest that primary general music teachers value the use of improvisation within the classroom and acknowledge their inclusion in national curriculum requirements (Gruenhagen & Whitcomb, 2012; Koutsoupidou, 2005). Koutsoupidou (2005) also stated that improvisation included in higher education positively influenced the inclusion of improvisation in elementary general music classroom settings. More research is needed that could attribute to a greater understanding of K-12 general music teachers' attitudes toward improvisation.

Summary

While there is evidence that learning improvisation not only benefitted primary, secondary, and undergraduate music students (Azzara, 1993; Beegle, 2001; Brophy, 2005; Coy, 1989; Parisi, 2004; Watson, 2010) but also increased self-efficacy and favorable improvisation attitudes in students (Campbell et al., 1995; Coy, 1989; Madura Ward-Steinman, 2007; Parisi, 2004; Watson, 2010), research reveals a lack of music teacher preparation for, confidence in, and implementation of improvisation in the classroom (Lehman, 1995; as cited in Madura Ward-Steinman, 2007). There appears to

be little research that has examined how improvisation can be successfully implemented within a general music methods course (Campbell & Della Pietra, 1995; Madura Ward-Steinman, 2007) as well as teacher perspectives regarding improvisation within the general music classroom settings (Gruenhagen & Whitcomb, 2012; Koutsoupidou, 2005). Further research in this area would provide teachers an increased sensitivity to the development of improvisation for themselves as well as their students.

CHAPTER III

Methodology

Participants

The sample for this study included general music methods teachers who participated in the Mountain Lake Colloquium for Teachers of General Music Methods on May 15-18, 2011, in Mountain Lake, Virginia. On April 13, 2011, I contacted Dr. Mary Goetze, co-founder of the Mountain Lake Colloquium, and requested permission to distribute surveys to general music methods participants during or after the colloquium. This request was accepted. All participants in the colloquium who volunteered to be on the contact list ($N = 120$) were invited to take part in the study (see Appendix A). They were invited to further discuss the topic of improvisation in an interview in person or through Skype at a time and place agreed upon by both parties. Dr. Goetze assisted in the facilitation of the survey contact list, after the study was approved by Indiana University's IRB. A total of 64 general music methods teachers completed the questionnaire, for a response rate of 53%. The one questionnaire that was incomplete and the 18 questionnaires of those participants who had never taught general music methods courses to music education majors in a university setting were not used, which resulted in a final study sample size of 45 university general music methods course instructors for music education majors, both current and retired.

Measure

The researcher-designed questionnaire consisted of 29 open- and closed-type items, with options to elaborate narratively (see Appendix B). The first part of the survey was used to collect background information on the professors who had taught a general

music methods course to university music education majors. The first section specifically addressed research question 1: What educational experiences have university professors had to prepare them to address the teaching of musical improvisation to music education majors within the general music methods course? The second section addressed research question 2: What approaches (or methods) and strategies are most preferred and used by university general music methods course teachers when addressing the teaching of musical improvisation in the general music methods course? Questions in the second section of the survey were inspired and developed based on studies cited in the literature review (i.e., Beegle, 2001; Brophy, 2005; Campbell & Della Pietra, 1995). The last section addressed research question 3: What are the relationships between self-efficacy ratings for musical improvisation and use of improvisation methods, strategies, standards, and formal study of university general music method course instructors? A self-efficacy scale pertaining to jazz performance was adapted from Watson's self-efficacy scale (2010). In addition, a questionnaire examining music teacher confidence in teaching improvisation was also used as a model (Madura Ward-Steinman, 2007). The survey ended with an invitation for participants to further discuss improvisation in the university general music methods course in an interview.

Procedure

The questionnaire was emailed using SurveyMonkey.com to all participants of the 2011 Mountain Lake Colloquium for Teachers of General Music Methods. Participants were emailed initial invitations to participate in March 2012, and two reminder e-mails were sent over the course of three weeks during the months of March and April 2012 to

those who did not respond. No participants volunteered to discuss the topic of teaching improvisation in the general music class further in person or through Skype.

SPSS 19 software and surveymonkey.com were used to calculate all quantitative results. Surveymonkey.com was used to find percentages and frequencies while SPSS 19 was used to find means, standard deviations, correlations, *t*-tests, and Mann-Whitney U test results. Emergent coding was used for all open response questions.

CHAPTER IV

Results and Discussion

Results

Participants represented all nine census divisions of the United States, with only one person teaching in Canada. A small majority (53%) of participants was from the combined Midwest (East North Central) and South (South Atlantic) divisions (see Table 1). Women represented 78% of the population (n = 35) and men represented 22% (n = 10). Their ages ranged from 28 to 76, with a mean age of 47.

Table 1

Frequencies and Percentages for Parts of Country Represented (n = 44)

Area	*f*	%
Northeast: New England	1	2.2
Northeast: Middle Atlantic	4	8.9
Midwest: E North Central	14	31.1
Midwest: W North Central	2	4.4
South: South Atlantic	10	22.2
South: E South Central	3	6.7
South: E South Central	2	4.4
West: Mountain	5	11.1
West: Pacific	2	4.4
Canada	1	2.2

Subjects represented a wide range of types of educational degrees, with approximately 96% holding bachelor degrees, 91% holding master degrees, and 80%

holding doctoral degrees (see Table 2). Two participants held two bachelor's degrees and two participants held two master's degrees.

Table 2

Frequencies and Percentages of Educational Degrees Earned (N = 45)

Degree	*f*	%
BEd	1	2.2
BFA	1	2.2
BA	4	8.9
BS	7	15.6
BME	15	33.3
BM	17	37.8
MEd	3	6.7
MFA	1	2.2
MA	8	17.8
MS	3	6.7
MME	12	26.7
MM	19	42.2
DMA	5	11.1
EdD	4	8.9
PhD	23	51.1
DA	1	2.2
DME	2	4.4
DM	1	2.2

Participants (69%) also held a variety of specialized certification levels with the most participants holding level 1 Orff-Schulwerk certification (see Table 3). Around a third of the sample had completed all three certification levels of Kodály (29%) and all three levels of Orff-Schulwerk (31%). One third (31%) had completed no specialized levels at all.

Table 3

Specialized General Music Certification Levels Earned (N = 45)

Certification	*f*	%
None earned	14	31.1
Kodály Level 1	17	37.8
Kodály Level 2	15	33.3
Kodály Level 3	13	28.9
Dalcroze Level 1	5	11.1
Dalcroze Level 2	0	0.0
Orff Level 1	27	60.0
Orff Level 2	18	40.0
Orff Level 3	14	31.1
Gordon (GILM) Level 1	0	0.0
Kindermusik Level 1	1	2.2
World Music Drumming Level 1	2	4.4
Creative Motion Level 1	1	2.2
Creative Motion Level 2	1	2.2

All but two of the 45 university instructors had also taught general music in a K-12 grade school setting. Of the 43 university instructors who had taught general music in a K-12 school setting, almost all (93%) had experience teaching at the elementary level, with the majority (63%) having taught elementary general music for 10 years or less (see Table 4). Of the 32 participants who had taught middle school general music, 88% had done so for 10 years or less (see Table 5). Only 15 of 45 subjects had taught high school general music, with the majority (n = 9) having taught it for less than four years (see Table 6).

Table 4

Number of Years Teaching Elementary General Music (n = 40)

Number of Years	*f*	%
<4	7	17.5
4-10	18	45.0
11-17	12	30.0
18-24	0	0.0
>25	3	7.5

Table 5

Number of Years Teaching Middle School General Music (n = 32)

Number of Years	*f*	%
<4	12	37.5
4-10	16	50.0
11-17	2	6.3
18-24	0	0.0
>25	2	6.3

Table 6

Number of Years Teaching High School General Music (n = 15)

Number of Years	*f*	%
<4	9	60.0
4-10	4	26.7
11-17	1	6.7
18-24	0	0.0
>25	1	6.7

Participants' primary instruments included a wide variety of instrument families; however, piano and voice clearly dominated (67%), while additional choices included traditional band instruments (see Table 7). All but two of the 45 participants specified a secondary instrument (see Table 8), and many specified more than one instrument choice, thus the total *n* is greater than 43. Voice and piano also dominated the secondary instrument choices (63%), while additional responses represented traditional band instruments, recorder, and strings.

Of the 45 participants, only 18 (40%) had formally studied musical improvisation. Of the 18 people who did study improvisation, 17 specified the instrument on which they studied improvisation (see Table 9). Piano (*n* = 6) and voice (*n* = 5) represented 65% of the responses, followed by Orff instruments (*n* = 3) and recorder (*n* = 3). In an open-response question, seven additional instruments were also named, which included traditional band instruments and electronics. Length of formal improvisation training ranged from one week to 40 years. Seven of the participants specified courses in which they studied improvisation: university teacher training courses (*n* = 3), jazz performance

Table 7

Primary Instrument Represented in Sample (N = 45)

Instrument	*n*	%
Voice	18	40.0
Piano	12	26.7
Flute	4	8.9
Clarinet	2	4.4
Saxophone	2	4.4
French Horn	2	4.4
Trumpet	2	4.4
Trombone	1	2.2
Tuba	1	2.2
Percussion	1	2.2

courses (*n* = 2), Orff certification (*n* = 2), vocal a cappella group (*n* = 1), and Dalcroze certification (*n* = 1).

Participants had varied years of experience teaching university general music methods courses for music education majors. Of the 45 participants, 38 had taught elementary general music methods, 26 had taught secondary general music, and 13 taught combined levels (see Tables 10-12).

The 45 participants were asked if they felt it was important to teach improvisational skills within the university music methods course for music education majors. 53% stated they strongly agreed (*n* = 24), 42% agreed (*n* = 19), 2% disagreed (*n* = 1), and 2% strongly disagreed (*n* =1).

Table 8

Secondary Instrument Represented in Sample (n = 43)

Instrument	*n*	%
Piano	15	34.9
Voice	12	27.9
Clarinet	7	16.3
Saxophone	4	9.3
Violin	4	9.3
Recorder	3	7.0
Flute	3	7.0
Percussion	3	7.0
Trumpet	2	4.7
Oboe	1	2.3
Bassoon	1	2.3
Trombone	1	2.3
Guitar	1	2.3
Double Bass	1	2.3

The 42 subjects who indicated that they taught improvisation were asked what percentage of class time was devoted to addressing the topic across a typical semester-long general music methods course. Precisely half of that group (n = 21) spent 10% of class time addressing improvisation, with an additional 14 (33%) spending 20% of the class time (see Table 13). Only two instructors spent 40% or more of a semester's time on improvisation.

Table 9

Improvisation Study on Instruments Represented in Sample (n = 17)

Instrument	*n*	%
Piano	6	35.3
Voice	5	29.4
Orff Instruments	3	17.6
Recorder	3	17.6
Flute	2	11.8
Saxophone	2	11.8
Trumpet	2	11.8
Clarinet	1	5.9
French Horn	1	5.9
Percussion	1	5.9
Electronics	1	5.9

Table 10

Number of Years Teaching University Elementary General Music Methods Courses (n = 38)

Years	*n*	%
1-4	14	36.8
5-9	9	23.7
10-15	7	18.4
16-20	4	10.5
>20	4	10.5

Table 11

Number of Years Teaching University Secondary General Music Methods Courses (n = 26)

Years	*n*	%
1-4	15	57.7
5-9	7	26.9
10-15	1	3.8
16-20	2	7.7
>20	1	3.8

Table 12

Number of Years Teaching University Combined Elementary and Secondary General Music Methods Courses (n = 13)

Years	*n*	%
1-4	9	69.2
5-9	2	15.4
10-15	0	0.0
16-20	2	15.4
>20	0	0.0

A four-point Likert-scale, ranging from "a great deal" (4) to "none at all" (1), was used to address methodologies used when teaching improvisation in university general music method courses (see Table 14). Of the five methods rated, Orff-Schulwerk was the most used approach ($M = 3.36$), with the majority of subjects (55%) using it "a great deal." Two participants stated that the Orff approach was emphasized in their

Table 13

Class Time Per Semester Spent Teaching Improvisation Skills (n = 42)

Semester Time	*n*	%
10%	21	50.0
20%	14	33.3
30%	5	11.9
40%	1	2.4
50%	1	2.4
60%-100%	0	0.0

Table 14

Descriptive Statistics for Methodologies Used when Teaching Improvisation (n = 42)

Method	Great Deal	Some	Not Much	None at all	Mean	*SD*
Orff	54.8% (n = 23)	33.3% (n = 14)	4.8% (n = 2)	7.1% (n = 3)	3.36	.88
Dalcroze	21.4% (n = 9)	57.1% (n = 24)	11.9% (n = 5)	9.5% (n = 4)	2.90	.85
Kodály	28.6% (n = 12)	42.9% (n = 18)	19.0% (n = 8)	9.5% (n = 4)	2.90	.93
Gordon	4.8% (n = 2)	23.8% (n = 10)	26.2% (n = 11)	45.2% (n = 19)	1.88	.94
Jazz Background	2.4% (n = 1)	21.4% (n = 9)	38.1% (n = 16)	38.1% (n = 16)	1.88	.83

undergraduate training. Kodály (M = 2.90) and Dalcroze (M = 2.90) were used about equally indicating "sometimes," while the Gordon approach (M = 1.88) and personal jazz background (M = 1.88) were rarely used by the majority of participants. Teachers also identified additional approaches used within the methods course that they felt addressed improvisation. Four people stated they included non-western music traditions, with two participants reported using World Music Drumming. One participant stated that the improvisational work used grew from the Comprehensive Musicianship model and Constructivism.

The four-point Likert scale was also used to determine strategies for teaching improvisation in university general music methods courses (see Table 15). Almost all participants (98%) reported that they used modeling (M = 3.69) and group improvisation (M = 3.64) "a great deal" (71% and 67% respectively) or "some" (26% and 31% respectively) in the classroom. Other prominent strategies used were improvising with Orff instruments (M = 3.57), singing (M = 3.45), within a form (M = 3.40), rhythmic speech (M = 3.31), and individual improvisation (M = 3.29). In contrast, the majority of participants rarely if ever used the blues scale (M = 2.29) or recorded accompaniment (M = 1.83) in class. In the varied open responses, two participants reported using body percussion, one named soundscapes and movement, one person reported frequent use of electronics (guitar, digital effects processors, drum pads, etc.), while another emphasized prompts such as books, imagery, and text.

A variety of assessment tools were used by participants when focusing on improvisation within the university general music method course (see Table 16). More than 70% of teachers stated they used peer-teaching and in-class improvisations as

Table 15

Descriptive Statistics for Strategies Used when Teaching Improvisation (n = 42)

Strategy	Great Deal	Some	Not Much	None at all	Mean	*SD*
Modeling	71.4% (n = 30)	26.2% (n = 11)	2.4% (n = 1)	0.0% (n = 0)	3.69	.52
Group improvisation	66.7% (n = 28)	31.0% (n = 13)	2.4% (n = 1)	0.0% (n = 0)	3.64	.53
Orff instruments	61.9% (n = 26)	33.3% (n = 14)	4.8% (n = 2)	0.0% (n = 0)	3.57	.59
Singing	57.1% (n = 24)	33.3% (n = 14)	7.1% (n = 3)	2.4% (n = 1)	3.45	.74
Improvising within a form	47.6% (n = 20)	45.2% (n = 19)	7.1% (n = 3)	0.0% (n = 0)	3.40	.63
Rhythmic speech	54.8% (n = 23)	28.6% (n = 12)	9.5% (n = 4)	7.1% (n = 3)	3.31	.92
Individual improvisation	35.7% (n = 15)	57.1% (n = 24)	7.1% (n = 3)	0.0% (n = 0)	3.29	.60
Analytical listening & discussion	26.2% (n = 11)	42.9% (n = 18)	19.0% (n = 8)	11.9% (n = 5)	2.83	.96
Verbal instructions	16.7% (n = 7)	57.1% (n = 24)	16.7% (n = 7)	9.5% (n = 4)	2.81	.83

(table continues)

Table 15 (*continued)*

Strategy	Great Deal	Some	Not Much	None at all	Mean	SD
Recorder	19.0% (n = 8)	50.0% (n = 21)	21.4% (n = 9)	9.5% (n = 4)	2.79	.87
Blues scale	9.5% (n = 4)	31.0% (n = 13)	38.1% (n = 16)	21.4% (n = 9)	2.29	.92
Recorded accompaniment	2.4% (n = 1)	14.3% (n = 6)	47.6% (n = 20)	35.7% (n = 15)	1.83	.76

Table 16

Frequencies and Percentages of Methods of Assessing Improvisation (n = 42)

Assessment	*n*	%
Peer-teaching in class	33	80.5
Class improvisation sessions	30	73.2
Written lesson plans	19	46.3
Performance test	16	39.0
Field teaching	15	35.7
Portfolio entries	5	12.2
Written test	3	7.3
Recordings	0	0.0

prominent choices. Lesson plans were the most popular written choice for assessment, over portfolios or tests. One person also used group projects as a form of assessment.

The next part of the survey used a four-point Likert scale (5+ Meetings, 2-4 Meetings, 1 Meeting, Never) to address the achievement standards for improvisation

(from the National Standards) for the different grade levels: K-4, 5-8, and 9-12. Of the 42 subjects who taught improvisation in the university general music methods course, 36 taught elementary general music methods and responded to the four achievement standards for grades K-4 (see Table 17). Over half of the participants reported that they addressed all four K-4 standards in two to four class meetings per semester: (1) improvise simple rhythmic and melodic ostinato accompaniments (M = 3.22), (2) improvise short songs and instrumental pieces using a variety of sound sources (M = 3.08), (3) improvise answers in the same style to given rhythmic and melodic phrases (M = 2.94), and (4) improvise simple rhythmic variations and simple melodic embellishments on familiar melodies (M = 2.86). The second and fourth standards were addressed by all teachers in at least one meeting a semester.

A total of 35 (83%) participants taught upper elementary and/or middle school (grades 5-8) general music methods and responded to the three national achievement standards for 5-8 improvisation (see Table 18). As with the elementary standards (K-4), the majority of instructors addressed all standards in approximately two or more class meetings per semester, although the lower means suggest that slightly less time was spent than on the K-4 standards: (1) improvise short melodies, unaccompanied and over given rhythmic accompaniments, in a consistent style, meter, and tonality (M = 2.71), (2) improvise melodic embellishments and simple rhythmic and melodic variations on given melodies in major keys (M = 2.66), and (3) improvise simple harmonic accompaniments (M = 2.49). Between 14%-20% of participants had never addressed at least one standard.

Only 17 teachers of 45 (41%) taught high school (grades 9-12) general music methods courses (see Table 19). Participants addressed each of the five achievement

Table 17

Descriptive Statistics for Semester Time Addressing Improvisation Achievement Standards in Elementary General Music Methods (n =36)

Teaching Standard	5+Meetings	2-4 Meetings	1 Meeting	Never	Mean	*SD*
Improvise simple rhythmic and melodic ostinato accompaniments	30.6% (*n* = 11)	61.1% (*n* = 22)	8.3 % (*n* = 3)	0.0% (*n* = 0)	3.22	.59
Improvise short songs and instrumental pieces, using a variety of sound sources, including traditional sounds, nontraditional sounds available in the classroom, body sounds, and sounds produced by electronic means	22.2% (*n* = 8)	63.9% (*n* = 23)	13.9% (*n* = 5)	0.0% (*n* = 0)	3.08	.60
Improvise answers in the same style to given rhythmic and melodic phrases	19.4% (*n* = 7)	58.3% (*n* = 21)	19.4% (*n* = 7)	2.8% (*n* = 1)	2.94	.71
Improvise simple rhythmic variations and simple melodic embellishments on familiar melodies	11.1% (*n* = 4)	69.4% (*n* = 25)	13.9% (*n* = 5)	5.6% (*n* = 2)	2.86	.68

standards in approximately one class meeting per semester: (1) improvise original melodies over given chord progressions, in a consistent style, meter, and tonality (*M* = 2.47), (2) improvise original melodies in a variety of styles, over given chord progressions (*M* = 2.47), (3) improvise rhythmic and melodic variations on melodies in major and minor keys (*M* = 2.24), (4) improvise stylistically appropriate harmonizing parts (*M* = 2.00), and (5) improvise stylistically appropriate harmonizing parts in a variety of styles (*M* = 1.94). Notably, more than half (53%) never addressed the most

Table 18

Descriptive Statistics for Semester Time Addressing Improvisation Achievement Standards in Upper Elementary/Middle School General Music Methods (n = 35)

Teaching Standard	5+Meetings	2-4 Meetings	1 Meeting	Never	Mean	*SD*
Improvise short melodies, unaccompanied and over given rhythmic accompaniments, in a consistent style, meter, and tonality.	14.3% (*n* = 5)	57.1% (*n* = 20)	14.3% (*n* = 5)	14.3% (*n* = 5)	2.71	.89
Improvise melodic embellishments and simple rhythmic and melodic variations on given melodies in major keys	8.6% (*n* = 3)	65.7% (*n* = 23)	8.6% (*n* = 3)	17.1% (*n* = 6)	2.66	.87
Improvise simple harmonic accompaniments	11.4% (*n* = 4)	45.7% (*n* = 16)	22.9% (*n* = 8)	20.0% (*n* = 7)	2.49	.95

advanced high school improvisation standard "improvise stylistically appropriate harmonizing parts in a variety of styles."

The last Likert scale included 13 self-efficacy questions regarding participants' own improvisational performing and teaching abilities, with participants rating the statements from "strongly disagree" (1) to "strongly agree" (5) (see Table 20). A great majority (89%) felt that they could teach music educators how to teach improvisation (*M* = 4.09), and 73% believed that they could teach someone to improvise (*M* = 3.87). A majority (73%) also believed they could become proficient in improvisation (*M* = 3.91), and 58% enjoyed the challenge of improvising (*M* = 3.69). For the remainder of the self-efficacy items, means near "3" indicated that participants had mixed feelings regarding their ability to improvise, although standard deviations of greater than "1" show

Table 19

Descriptive Statistics for Semester Time Addressing Improvisation Achievement Standards in High School General Music Methods (n =17)

Teaching Standard	5+Meetings	2-4 Meetings	1 Meeting	Never	Mean	*SD*
Improvise original melodies over given chord progressions, in a consistent style, meter, and tonality	23.5% (*n* = 4)	23.5% (*n* = 4)	29.4% (*n* = 5)	23.5% (*n* = 4)	2.47	1.12
Improvise original melodies in a variety of styles, over given chord progressions	17.6% (*n* = 3)	29.4% (*n* = 5)	35.3% (*n* = 6)	17.6% (*n* = 3)	2.47	1.01
Improvise rhythmic and melodic variations on melodies in major and minor keys	11.8% (*n* = 2)	35.3% (*n* = 6)	17.6% (*n* = 3)	35.3% (*n* = 6)	2.24	1.09
Improvise stylistically appropriate harmonizing parts	11.8% (*n* = 2)	17.6% (*n* = 3)	29.4% (*n* = 5)	41.2% (*n* = 7)	2.00	1.06
Improvise stylistically appropriate harmonizing parts in a variety of styles	17.6% (*n* = 3)	11.8% (*n* = 2)	17.6% (*n* = 3)	52.9% (*n* = 9)	1.94	1.20

variability in responses. For example, 9-16% had very strong self-efficacy on those items, and an additional 18-31% had moderately strong self-efficacy.

Internal consistency reliability was found using Cronbach's Alpha for teaching self-efficacy (alpha = .942), performing self-efficacy (alpha = .874), and composite measures of self-efficacy (alpha = .896). An independent sample t-test was run regarding differences in self-efficacy as a function of teachers' formal improvisational study, which did not meet assumptions. A non-parametric test (Mann-Whitney U Test) was run, showing a significant difference ($p < .05$), which indicated that those that had formal

Table 20

University General Music Methods Course Teacher Improvisation Self-Efficacy (N =45)

Statement	1-Strongly Disagree	2	3	4	5-Strongly Agree	Mean	*SD*
I could teach music educators how to teach improvisation.	2.2% (*n* = 1)	2.2% (*n* = 1)	6.7% (*n* = 3)	62.2% (*n* = 28)	26.7% (*n* = 12)	4.09	.79
Other performers on my instrument improvise better than I do.	4.4% (*n* = 2)	4.4% (*n* = 2)	20.0% (*n* = 9)	33.3% (*n* = 15)	37.8% (*n* = 17)	3.96	1.09
I could become proficient at improvising.	2.2% (*n* = 1)	4.4% (*n* = 2)	20.0% (*n* = 9)	46.7% (*n* = 21)	26.7% (*n* = 12)	3.91	.92
I could teach someone how to improvise.	2.2% (*n* = 1)	4.4% (*n* = 2)	20.0% (*n* = 9)	51.1% (*n* = 23)	22.2% (*n* = 10)	3.87	.89
Other people have more talent for improvisation than I do.	6.7% (*n* = 3)	4.4% (*n* = 2)	33.3% (*n* = 15)	22.2% (*n* = 10)	33.3% (*n* = 15)	3.71	1.18
I enjoy the challenge of improvising.	2.2% (*n* = 1)	6.7% (*n* = 3)	33.3% (*n* = 15)	35.6% (*n* = 16)	22.2% (*n* = 10)	3.69	.97
Improvising is not too difficult for me.	4.4% (*n* = 2)	8.9% (*n* = 4)	46.7% (*n* = 21)	31.1% (*n* = 14)	8.9% (*n* = 4)	3.31	.92
I am confident in my ability to improvise on my instrument.	6.7% (*n* = 3)	17.8% (*n* = 8)	33.3% (*n* = 15)	26.7% (*n* = 12)	15.6% (*n* = 7)	3.27	1.14
I have a talent for improvisation.	0.0% (*n* = 0)	20.0% (*n* = 9)	51.1% (*n* = 23)	20.0% (*n* = 9)	8.9% (*n* = 4)	3.18	.86

(table continues)

Table 20 (*continued)*

Statement	1-Strongly Disagree	2	3	4	5-Strongly Agree	Mean	*SD*
I enjoy practicing improvisation.	4.4% (*n* = 2)	24.4% (*n* = 11)	35.6% (*n* = 16)	22.2% (*n* = 10)	13.3% (*n* = 6)	3.16	1.09
I enjoy improvising on my instrument while performing.	6.7% (*n* = 3)	20.0% (*n* = 9)	40.0% (*n* = 18)	20.0% (*n* = 9)	13.3% (*n* = 6)	3.13	1.10
Other people think I have a talent for improvisation.	2.2% (*n* = 1)	22.2% (*n* = 10)	48.9% (*n* = 22)	17.8% (*n* = 8)	8.9% (*n* = 4)	3.09	.92
I believe I could learn to improvise at a professional level.	6.7% (*n* = 3)	31.1% (*n* = 14)	28.9% (*n* = 13)	22.2% (*n* = 10)	11.1% (*n* = 5)	3.00	1.13

improvisational study tended to report more teaching self-efficacy for improvisation. Although assumptions for the *t*-test were met regarding differences in performance self-efficacy as a function of teachers' formal improvisational study, no significant difference was found ($p > .05$).

Correlations were run between self-efficacy ratings and the following: formal training in improvisation, emphasis of teaching methods and strategies, and use of national improvisation standards Spearman correlations were run between self-efficacy and emphasis of teaching methods, with no significant correlations found. Spearman correlations were run between self-efficacy and emphasis of improvisational teaching strategies. Significant correlations were found between the use of group improvisation ($r = .305$, $p < .05$) and total self-efficacy, and between use of both modeling ($r = .357$, $p < .05$) and group improvisation ($r = .388$, $p < .05$) and their teaching self-efficacy. No

significant correlations were found in relation to performance self-efficacy ratings. Spearman correlations were run between self-efficacy and emphasis of the national standards for improvisation. No significant correlations were found.

When asked if they were interested in learning more about how to teach musical improvisation, a great majority (89%) stated they were very interested to moderately interested (see Table 21). Participants stated that an intensive workshop (69%) would be of interest to them, followed closely by Orff-Schulwerk training (67%), readings (62%), and a Dalcroze workshop (52%). Of least interest was participation in an instrumental jazz ensemble (see Table 22). Additional preferred activities and exercises reported by participants in open-ended responses included performing in a free improvisation group, attending the International Society for Improvised Music conferences using jazz practice books, attending concerts with primarily improvised music, and Kodály training.

Table 21

Interest in Learning to Teach Improvisation (N = 45)

Interest	*n*	%
Very Interested	18	40.0
Moderately Interested	22	48.9
Slightly Interested	3	6.7
Not at all	2	4.4

Table 22

Exercises/Activities of Interest to Learn Improvisation (n = 42)

Exercise/Activity	*f*	%
Intensive Workshop	29	69.0
Orff Schulwerk	28	66.7
Readings	26	61.9
Dalcroze	22	52.4
DVD/Video	19	45.2
Vocal Jazz Ensemble	12	28.6
College Course	10	23.8
Instrumental Jazz Ensemble	4	9.5

Discussion

The age of university general music methods course professors in this study was very diverse, with no particular age group represented more than another. A majority of the participants were women (78%). This finding is similar to Koutsoupidou's (2005) research, in which the majority of elementary general music classroom teachers are female. Although several types of educational degrees were earned, 89% of university teachers held doctoral degrees with the majority (51%) of those degrees PhDs. Regarding teaching location, 96% represented the United States with 53% teaching in the Midwest East North Central and South Atlantic divisions, which was not surprising due to the location of the Mountain Lake workshop, from which subjects were recruited, was in West Virginia. While well over half the participants (69%) held specialized teaching certifications, most of those certifications

were in Orff-Schulwerk and Kodály approaches. Also, while participants' primary and secondary instruments varied, piano and voice represented 67% of primary instruments and 63% of secondary instruments selected. In sum, the elementary general music methods professors in this study tended to hold doctoral degrees, be pianists and or vocalists, hold certification in Orff-Schulwerk and Kodály, and were women.

General music teaching experience between the university and K-12 classroom settings was found to be quite comparable. All but two university general music methods course teachers had taught general music in grades K-12 (n = 43). In both university and K-12 teaching settings, there was a predominance of elementary general music teachers over secondary general music. In K-12 settings, 40 of 43 participants had taught elementary general music, while only 32 had taught middle school general music and 15 had taught high school general music. In higher education settings, 38 of 43 participants had experience teaching university elementary general music methods courses, while only 26 had taught secondary general music methods and 13 had taught a combined elementary and secondary general music methods course. For this sample, the majority of general music methods professors had taught elementary methods and had experience teaching elementary music in the public schools. Since general music is usually required in elementary schools but not secondary schools this result is not surprising.

Data regarding personal improvisational experience revealed some interesting findings regarding instrument selection and improvisational study. Only 40% of participants had formal experience in improvisation. Of the eleven instruments represented for formal improvisational study, the majority (65%) were piano and voice. These findings coincide with primary and secondary instrument choices of participants.

35% of subjects named Orff instruments and recorder as tools for learning formal improvisation, which coincided with the finding that Orff-Schulwerk levels were the most popular choice for certifications among university general music method course teachers. Surprisingly, no one identified strings as an improvisation instrument, although six participants named strings as their secondary instrument. This might suggest that improvisation instruction may be lacking in traditional string settings. Only five of 17 selected traditional jazz band instruments, excluding piano, although six participants reported saxophone, trumpet, trombone, and percussion as their primary instrument, and 11 participants reported saxophone, percussion, trumpet, trombone, and guitar as their secondary instrument. This suggests that playing a band instrument typically found in jazz bands does not necessarily result in improvisation study. Additional comments from participants (n = 3) emphasize university teacher training courses as sources of improvisational training.

Although only a few people (n = 18) had formal training in improvisation, all but two teachers (n = 43) agreed that improvisation should be included in the general music methods course requirements. This aligns with previous research (Gruenhagen & Whitcomb, 2012; Koutsoupidou, 2005) indicating that primary general music classroom teachers agree that improvisation is a beneficial activity that should be included. Forty-two of 45 included improvisation within their curriculum; yet, 50% of teachers included it only 10% of the semester. This aligns with research of Gruenhagen, et al. (2012) in which 58% of elementary general music classroom teachers included improvisation between zero and 10% of instructional time. It appears that university teachers rarely devote more than 50% of class time to improvisation instruction. These findings support

research (Madura Ward-Steinman, 2007; Shuler, 1995) that suggests that many universities do not address improvisation in adequate depth. This also may support research (Bell, 2003; Lehman, 1995; Madura Ward-Steinman, 2007) that found that teachers may value improvisation within the classroom curriculum but lack the confidence or knowledge to implement improvisation as often as they would like.

Teachers who taught improvisation relied on some strategies and methodologies more heavily than others. Orff-Schulwerk was used by 93% of participants, followed equally (90%) by Dalcroze and Kodály. Very few other methods were used. The three dominant methods are likely the reason voice, piano, Orff instruments, and recorder were represented more frequently than others as instruments of the teachers' improvisational training. This implies that teachers had more training in these three methods and approaches and found them useful in addressing improvisation. In fact Orff, followed by Kodály, were the two most popular certifications among teachers. Dalcroze certification was not common; however, teachers reported that they attended university courses and workshops to learn more about Dalcroze techniques.

Participants found many strategies to be helpful in teaching improvisation within the university methods course. Strategies used "a great deal" by teachers included modeling, group improvisation, and Orff instruments. Strategies used "some" included singing, improvising within a form, rhythmic speech, individual improvisation, analytical listening and discussion, verbal instructions, and recorder. These results support Brophy (2005) who found that it was helpful to have students improvise in a variety of ways. Beegle (2001) also discovered that elementary general music teachers' use of rhythmic speech improved accuracy of phrase-length in improvisation. Incorporating jazz

strategies such as in improvisation lessons also were shown to improve student productivity and engagement (Coy, 1989; Parisi, 2004), with results indicating that groups receiving specific instruction in melodic and improvisatory discrimination responded with higher levels of discriminatory skill and positive affective response (Parisi, 2004). Because these research studies were based within K-12 classrooms, the results are not directly related to university methods courses, yet they show how diversity of strategies would benefit the classroom improvisational setting.

Performance based assessment tools were favored overall, with peer-teaching (81%) and class improvisation sessions (73%) preferred. The most favored written form of assessment was written lesson plans (46%). A surprising finding was that no one reported using recordings of students' improvisations for assessment, which is contrary to a research finding by Campbell & Della Pietra, 1995. Again, it is likely that performance-based assessment is used because improvisation itself is primarily a performance-based activity.

Participants addressed the National Achievement Standards for improvisation more frequently for younger age groups. For example, all four achievement standards for grades K-4 general music were addressed an average of 2-4 class meetings: (1) improvise simple rhythmic and melodic ostinato accompaniments (2) improvise short songs and instrumental pieces, using a variety of sound sources, (3) improvise answers in the same style to given rhythmic and melodic phrases, and (4) improvise simple rhythmic variations and simple melodic embellishments on familiar melodies. All teachers in at least one meeting of a typical semester addressed two of the standards. For grades 5-8, the majority of teachers spent approximately 2-4 class meetings on each of the three

improvisation standards: (1) improvise short melodies, unaccompanied and over given rhythmic accompaniments, in a consistent style, meter, and tonality, (2) improvise melodic embellishments and simple rhythmic and melodic variations on given melodies in major keys, and (3) improvise simple harmonic accompaniments. Yet, the lower means suggest that slightly less time was spent addressing the grades 5-8 than on the k-4 standards.

All of the five standards for grades 9-12 were addressed an average of one class meeting: (1) improvise original melodies over given chord progressions, in a consistent style, meter, and tonality, and (2) improvise original melodies in a variety of styles, over given chord progressions, (3) improvise rhythmic and melodic variations on melodies in major and minor keys, (4) improvise stylistically appropriate harmonizing parts, and (5) improvise stylistically appropriate harmonizing parts in a variety of styles. This is a notable change from the younger grade level standards, which might suggest that there is a lack of training in improvisation for older grade levels and that an emphasis on more sophisticated improvisation such as for secondary school music teaching needs to occur (Madura Ward-Steinman, 2007). It is also likely that, since the majority of teachers have had experience teaching elementary general music courses in both K-12 and university levels, they would be more likely to have training and experience teaching improvisation at those more basic levels as well.

Although self-efficacy ratings indicated that teachers believed others had more talent and skill for improvisation, they did feel confident in their ability to become proficient in improvisation, teach others improvisation, and teach teachers how to address improvisation, and were relatively interested in learning more about improvisation. These

findings are similar to Bell's (2003), in which university teachers felt confident in teaching others how to perform and teach improvisation. These findings also support research by Madura Ward-Steinman (2007) in which vocal jazz teachers were highly motivated to learn more about improvisation.

University teachers in the current study (69%) were interested in short intensive workshops, which have been shown to increase knowledge in teaching techniques to encourage improvisational development (Campbell & Della Pietra, 1995; Madura Ward-Steinman, 2007). Participants also stated interest in Orff-Schulwerk (67%), readings (62%), and Dalcroze (52%) for enhancing their improvisation techniques. Teachers seem to prefer those methods and approaches with which they are already familiar. Again, jazz instrumental ensemble participation was not a preferred choice by many (only 10%) to learn improvisation; and, although voice was the primary instrument of 40% of the sample, a vocal jazz ensemble was of interest to only 29% of teachers. The lack of jazz interest may be, as stated by Reimer (1996), because many university teachers are classically trained and lack opportunities for experience in improvisation in more traditional musical settings.

Correlations indicated that those with formal study in improvisation reported more self-efficacy in teaching improvisation. This finding supports Koutsoupidou's (2005) finding that teachers are more likely to use improvisation if they have more experience. This might suggest that formal training in improvisation at the university level would improve teaching confidence (Campbell et al., 1995; Madura Ward-Steinman, 2007), which would then impact the extent that improvisation is included within the K-12 classroom.

Correlations also indicated that teachers with greater teaching self-efficacy in improvisation tended to use modeling and group improvisation as improvisational teaching strategies. This would support Campbell et al.'s (1995) research, in which teachers emphasized small group improvisation and teacher modeling in university general music methods courses when addressing improvisation activities. This suggests that teachers who have had more formal improvisation training in these strategies feel comfortable using them in classroom settings.

CHAPTER V

Summary, Conclusions, Implications, and Recommendations

Summary

The purpose of this study was to investigate the improvisation experiences of university general music methods course teachers of music education majors. The study also addressed their perspectives on improvisation in the university curriculum and their approaches to teaching improvisation.

The study's population consisted of 120 participants of the Mountain Lake Colloquium for Teachers of General Music Methods that took place May 15-18, 2011 in Mountain Lake, Virginia. I contacted Mary Goetze, co-founder of the Mountain Lake Colloquium, in April 2011 to receive permission to distribute surveys to those who participated in the colloquium during or after the event. The population was chosen from the email contact list of all participants of the colloquium. Inclusion on the contact list was voluntary.

In March 2012, participants ($N = 120$) were emailed an invitation using Surveymonkey.com to participate in an online questionnaire, with two additional reminder emails sent to those who did not respond or had not completed the survey. In April 2012, responses were collected, with a total response rate of 53% ($N = 64$). One individual who did not complete the survey and 18 additional who did not meet the criteria of the study were removed, resulting in a sample of 45 university general music methods course instructors of music education majors.

This study used a researcher-created questionnaire. Various studies and sources were used to create the questions addressing improvisation within the general music

methods course (i.e., Campbell & Della Pietra, 1995; Madura Ward-Steinman, 2007) as well as k-12 school settings (i.e., Azzara, 1993; Beegle, 2001; Brophy, 2005; Parisi, 2004). Watson's (2010) self-efficacy rating scale was also adapted for this study. A 29-question survey was used to collect teacher background information, perspectives on improvisation, and approaches to teaching improvisation in the university general music methods course. All participants ($N = 45$) completed all questions related to background information and perspectives on improvisation, while only those who taught improvisation within specific grade levels ($n = 42$) completed the information regarding improvisational approaches in the classroom.

SPSS 19 software and surveymonkey.com were used to compute all quantitative results while emergent coding was used for all open response questions. The main results of the study are the following:

1. The university instructors of general music methods courses for music education majors were diverse in age and types of educational degrees earned, with 89% of instructors holding doctoral degrees.
2. The majority of general music methods course instructors were female, representing 78% of the sample.
3. The overwhelming majority of participants (96%) were from the United States, with 53% from the East North Central Midwest and South Atlantic divisions of the country.
4. The majority of participants (69%) held specialized general music certifications, with 60% of participants holding level 1 of Orff-Schulwerk

training, and many participants holding all three levels of Off-Schulwerk (31%) and Kodály (29%) certification.

5. The vast majority of university instructors had taught general music courses in a K-12 grade school setting (96%), with the most experience in the elementary school level followed by middle school and high school respectively.
6. University teachers taught university general music methods courses an average of 10 years, with the majority of teachers having had experience teaching elementary general music methods courses (84%) followed by secondary general music (58%) and, lastly, combined elementary and secondary general music methods courses (29%) respectively.
7. The majority of university general music methods course instructors reported voice and piano as their primary and secondary instruments; voice (40%) and piano (27%) were reported as primary instrument choice, and piano (35%) and voice (28%) were reported as secondary instrument choice.
8. Less than half of university instructors (40%) had ever formally studied improvisation; but for those who did, 65% studied it on piano or voice. The length of improvisational study varied greatly, from 1 week to 40 years, and a variety of specific training sources (i.e., teacher training courses, jazz performance courses, Orff certification, vocal a cappella group, Dalcroze certification) were represented.
9. The majority of participants agreed (96%) that improvisation skills should be taught in the university general music methods course for music education majors.

10. The vast majority of university instructors (93%) reported that they taught improvisation in their general music methods course. Of those that provided instruction, half addressed the topic just 10% of a typical semester class time. No one addressed improvisation 60%-100% of class time.
11. Regarding methodologies for teaching improvisation in the classroom, Orff Schulwerk was used the most (by 88% of participants), followed by Dalcroze and Kodály approaches. GIML and personal jazz background were rarely used.
12. Regarding specific strategies for teaching improvisation in the classroom, modeling, group improvisation, and Orff instruments were used "a great deal," and singing, improvising within a given form, rhythmic speech, individual improvisation, analytical listening and discussion, verbal instructions, and recorder were used "some."
13. The university instructors emphasized performance-based assessment of improvisational skills and knowledge, with peer-teaching (81%) and class improvisation sessions (73%) the most popular.
14. Regarding the national achievement standards for improvisation, the majority of university instructors addressed the elementary (K-4) and upper elementary/middle school (5-8) standards in 2-4 class meetings, while high school standards (9-12) were addressed an average of one class meeting.
15. Although the majority of participants' self-efficacy ratings showed they believed others with the same primary instrument improvised better (71%) and others had more talent for improvisation (56%), they felt confident in

their ability to teach teachers how to address improvisation (89%), teach others improvisation (73%), and become proficient in improvisation (73%). They also enjoyed the challenge of improvisation (59%).

16. Over 88% of participants stated they were moderately to very interested in learning more about teaching improvisation, and would value various types of exercises and activities to learn more. Particular interests included intensive workshops (69%), followed closely by Orff-Schulwerk study (67%), readings (62%), and Dalcroze sessions (52%).
17. Participants with formal improvisation training had significantly higher ($p < .05$) teaching self-efficacy.
18. Participants with higher composite self-efficacy were more likely to use group improvisation when teaching improvisation activities ($r = .305$, $p < .05$), and those with higher teaching self-efficacy were more likely to use group improvisation ($r = .388$, $p < .05$) and modeling ($r = .357$, $p < .05$).

In sum, the answers to the three primary research questions follow:

Research question 1: What educational experiences have university professors had to prepare them to address the teaching of improvisation to music education majors within the general music methods course? Forty percent of instructors had formally studied improvisation; and for those who did, 65% studied it on piano or voice. The length of training varied greatly and a variety of specific sources (i.e., teacher training courses, jazz performance courses, Orff certification, vocal a cappella group, Dalcroze certification) were represented.

Research question 2: What approaches and strategies are most preferred and used by university teachers when addressing improvisation in the general music methods course? The most used approaches in this study were Orff, followed by Dalcroze and Kodály. The most used strategies in this study were modeling, group improvisation, and Orff instruments, followed by singing, improvisation within a form, rhythmic speech, and individual improvisation.

Research question 3: What are the relationships between self-efficacy ratings in musical improvisation and use of improvisation methods, strategies, standards, and formal study of university general music methods course instructors? Participants who had studied improvisation formally had significantly higher ($p < .05$) teaching self-efficacy, and those with higher teaching self-efficacy were more likely to use group improvisation ($r = .388$, $p < .05$) and modeling ($r = .357$, $p < .05$). Those with higher composite self-efficacy were more likely to use group improvisation activities when teaching ($r = .305$, $p < .05$), There were no significant relationships between self-efficacy and use of individual methods or standards.

Conclusions

This study supports to some degree the previous research (Madura Ward-Steinman, 2007) regarding teacher interest in learning more about improvisation. Teachers were interested in a variety of activities to learn more about improvisation through intensive workshops, Orff Schulwerk and Dalcroze lessons, and readings. Teachers also felt confident in their abilities to teach others to teach and perform improvisation, as well as to become competent in their own improvisation skills. They also enjoyed the challenge of improvisation. But, unlike the previous research finding

that teachers lack confidence in their own improvisation abilities, this study implied that teachers only lacked confidence when comparing themselves to others (others improvise better on their primary instrument and others have more talent for improvisation). However, two different confidence measures were used.

This research also supports previous research that a variety of methodologies and strategies could be useful when teaching improvisational skills (Beegle, 2001; Brophy, 2005; Coy, 1989; Parisi, 2004). This study showed that university instructors of general music methods courses valued the methodologies of Orff-Schulwerk, Dalcroze, and Kodály when teaching improvisation and found strategies such as modeling, group improvisation, singing, Orff instruments, rhythmic speech, and improvising in a given form of particular value. Those with higher teaching self-efficacy were also more likely to favor group improvisation and modeling as teaching strategies.

These findings also support research (Madura Ward-Steinman, 2007) that reported that formal improvisation instruction, although valued by teachers, was rare in the curriculum except perhaps in methods courses geared for young children. These findings were reflected in the extent to which the National Standards improvisation benchmarks were being addressed in university methods courses. Teachers often lacked the confidence and knowledge to implement improvisation as often as they would like.

The majority of participants had earned certification levels in Orff-Schulwerk, which directly related to why Orff-Schulwerk was their most highly used method when teaching improvisation in the general music methods course. This would also explain why Orff-Schulwerk training was of interest for further study of improvisation, and why

Orff instruments were also favorite choices. Orff-Schulwerk appeared to be a useful and valuable way to teach improvisation.

Another conclusion was that very few people had experience in improvisation. Many university teachers were classically trained, as stated by Reimer (1996), and thus teach how they were trained. This also explains why vocal and instrumental jazz improvisational groups were not of interest to many of this study's participants. This finding emphasized the need for teacher training exercises and activities to inform university professors of improvisational strategies and methods. Findings also suggested that those with formal training would likely have had improved confidence in these skills. This also would help teachers address National Standards more thoroughly at all levels of education.

Implications

This research highlighted some practical implications for university general music methods course teachers. Although improvisation was valued by most of this study's participants, those university professors who taught secondary level general music methods did not address the more advanced achievement standards for improvisation; consequently, university teachers of general music methods courses should offer more improvisation instruction to specifically address the National Achievement Standards of improvisation for secondary grades (National Standards for Arts Education, 1994): (1) improvise simple harmonic accompaniments, (2) improvise melodic embellishments and simple rhythmic and melodic variations on given melodies in major keys, (3) improvise short melodies, unaccompanied and over given rhythmic accompaniments, in a consistent style, meter and tonality, (4) improvise stylistically appropriate harmonizing parts in a

variety of styles, (5) improvise rhythmic and melodic variations on melodies in major and minor keys, (6) improvise original melodies over given chord progressions, each in a consistent style, meter, and tonality, (7) improvise original melodies in a variety of styles, over given chord progressions, and (8) improvise stylistically appropriate harmonizing parts. This particular achievement level was lacking and teachers could find stimulating ways to improve instruction by finding resources such as Orff-Schulwerk, Kodály, and Dalcroze training and workshops to assist in addressing these. This would ultimately improve how standards are being met when pre-service teachers begin teaching in the K-12 school settings. University general music methods course instructors would also benefit by reading research and practitioner journals to familiarize themselves with what others in the field are doing to address improvisation within the classroom.

Recommendations

The following research recommendations can be made based on the results from this study:

1. In order to generalize to a broader population, a national sample of university general music methods course instructors should be surveyed. In this study, the population of Mountain Lake Colloquium participants was more likely to have sought extended certification in a variety of methods and approaches as compared to a national sample.
2. When replicating this study, one should consider a broader list of approaches, methods, and strategies to encompass those that teachers contributed as "other" options for teaching improvisation in the open-ended responses. Methods to consider are the Comprehensive Musicianship model,

Constructivism, and non-western based methods such as World Music Drumming. Other strategies to consider include the use of movement activities, prompts such as text and imagery, body percussion, soundscapes, free improvisation, electronics, and drums.

3. When listing possible exercises and activities to learn more about teaching improvisation, a more detailed list should be included to encompass the "other" options identified in the open-ended responses in this study. These would include Kodály, Gordon Music Learning Theory, non-jazz improvisation ensemble, conferences, and attending concerts.
4. When addressing those participants with improvisational experience, it would be helpful to specifically ask how they are formally trained in improvisation, such as through college coursework, workshops, conference training, private study, or ensemble performance.
5. Orff-Schulwerk was a prominent choice for teaching improvisation in the general music methods course. Future research could investigate why teachers choose Orff-Schulwerk for improvisation activities and what specific strategies are helpful in these Orff training levels when addressing improvisation.
6. National Achievement Standards are not being addressed thoroughly in the secondary university general music methods course. Future research could investigate specific methods and strategies in which teachers effectively learn to improvise at those higher (or more advanced) levels.

7. Females made up the majority of the participants. Future research could further investigate if gender plays a role in confidence when teaching improvisation.
8. Because the sample heavily represented the South Atlantic and East North Central Midwest, it would be of interest to further research how participants from other areas of the United States compare to this study's results regarding improvisation. Specific strategies and methods could be explored to see if some are more heavily emphasized in other areas of the country.
9. Further research could explore what Kodály and Orff-Schulwerk certification course locations teachers participate in improvisation more frequently at and what draws them to these locations. This could shed further light on what specific characteristics of these locations are drawing teachers more than others and why.
10. Because piano and voice are the most popular primary and secondary instruments of this sample, it would be interesting to further research specific improvisational strategies and methods for these instruments to see if they would help increase the level of improvisation confidence of teachers.
11. Even though improvisation is viewed to be important in the classroom, the majority of participants include it only 10% of class time. For further research, questions could help identify if this is because of personal confidence in teaching improvisation, lack of class time in the semester, because of lack of training, or preference for other activities.

12. An experimental study could test the effectiveness of specific strategies, approaches, and methods for teaching improvisation in a university methods course classroom setting.
13. Case studies of experienced teachers could be done to assist in identifying how they teach improvisation within the general music methods course.

This study provided evidence that university instructors found value in implementing improvisational activities within the general music methods course settings and were confident in their ability to educate others to teach improvisation, but that they rarely addressed the more advanced improvisation skills. With additional research, beneficial resources could be identified to improve teacher preparation in the art of improvisation.

APPENDIX A

Invitation to University General Music Methods Course Instructors

Dear General Music Methods Course Teachers,

Hello! My name is Bridget Rinehimer and I am a Master of Music Education student at the Jacobs School of Music at Indiana University. Previous to my time here, I was an elementary music teacher for six years in Ohio and Pennsylvania.

Since beginning my studies at IU, I have become very interested in how music education professors address the teaching of improvisation in their general music methods courses. I am specifically interested in general music methods courses for music education majors. As a result, I am working on a master's thesis entitled "Teaching Improvisation within the General Music Methods Course: University Teacher Experiences, Approaches, and Perspectives."

Attached to this email is a link to the survey: https://www.surveymonkey.com/s.aspx. The questionnaire will take you approximately ten minutes to complete. Your information will remain completely confidential and will be used for research purposes only. Your responses will never be associated with your name or university. Your expertise as a university professor is greatly valued for this study. Please take the time to answer these questions. Your responses and comments on this questionnaire are greatly appreciated!

If you would like further information about my research or results, I would be happy to answer any questions that you might have. You may contact me by email at brinehim@indiana.edu at any time.

Thank you very much for your time.

Sincerely,

Bridget Rinehimer
Associate Instructor
Music Education Department
Jacobs School of Music
Indiana University
1201 E. 3rd St.
Bloomington, IN 47405

Please note: If you do not wish to receive further emails from us, please click the link below, and you will be automatically removed from our mailing list.
https://www.surveymonkey.com/optout.aspx

APPENDIX B

Questionnaire

TEACHING IMPROVISATION WITHIN THE GENERAL MUSIC METHODS COURSE QUESTIONNAIRE

Thank you for your participation in this survey. Please answer the following questions to the best of your ability. All answers will remain confidential.

1. Have you ever taught a general music methods course to university music education majors? ☐ Yes ☐ No

If your answer is YES, please continue to question #2. If your answer is NO, you have completed the questionnaire. Thank you!

2. Have you ever taught a general music course in a K-12 grade school setting?

☐ Yes ☐ No

If your answer is YES, please continue to question #3. If your answer is NO, skip to question #4.

3. If you teach or have taught general music in the K-12 grade school setting, please specify how many years you teach or have taught in each level:

_____ Years teaching Elementary General Music

_____ Years teaching Middle School General Music

_____ Years teaching High School General Music

4. Your Gender: ☐ Male ☐ Female

5. Your Age: _____ Years

6. List all educational degrees you have earned: (check all that apply)

☐ BM ☐ MME ☐ EdD

☐ BS ☐ MS ☐ DM

☐ BME ☐ MA ☐ DMA

☐ BA ☐ DME

☐ MM ☐ PhD

Other: (please specify)

_____

_____

7. List any levels of certification you have earned: (check all that apply)

☐ I have not earned certification levels ☐ Orff Level 1

☐ Kodaly Level 1 ☐ Orff Level 2

☐ Kodaly Level 2 ☐ Orff Level 3

☐ Kodaly Level 3 ☐GIML Level 1

☐ Dalcroze Level 1 ☐GIML Level 2

☐ Dalcroze Level 2

Other: (please specify)

_____

_____

8. Total number of years you have taught university general music methods courses for music education majors: _____ Years

9. In the boxes below, please type in the total number of years you have taught elementary, secondary, and/or combined general music methods courses to music education majors at the university level:

_____ Elementary General Music Methods

_____ Secondary General Music Methods

_____ Elementary/Secondary Combined General Music Methods Course (K-12)

10. Part of the country in which you *currently* teach:

- ☐ Northeast: New England (CT, ME, MA, NH, RI, VT)
- ☐ Northeast: Middle Atlantic (NJ, NY, PA)
- ☐ Midwest: East North Central (IN, IL, MI, OH, WI)
- ☐ Midwest: West North Central (IA, KS, MN, MO, NE, ND, SD)
- ☐ South: South Atlantic (DE, DC, FL, GA, MD, NC, SC, VA, WV)
- ☐ South: East South Central (AL, KY, MS, TN)
- ☐ South: West South Central (AR, LA, OK, TX)
- ☐ West: Mountain (AZ, CO, ID, NM, MT, UT, NV, WY)
- ☐ West: Pacific (AK, CA, HI, OR, WA)
- ☐ Retired
- ☐ International/Other: (please specify)

_____

11. The name of your primary instrument: _____

12. The name of your secondary instrument: _____

13. Have you formally studied musical improvisation? ☐ Yes ☐ No

If your answer is YES, please continue to question #14. If your answer is NO, skip to question #15.

14. If you have studied improvisation, on what instrument(s) and for how many years?

_____

_____

_____

15. Rate the following statement: It is important to teach musical improvisational skills within the university general music methods course for music education majors.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Disagree
- ☐ Strongly Disagree

16. In your university general music methods course(s) for music education majors, do you provide instruction on how to teach musical improvisation?

☐Yes ☐No

If your answer is YES, please continue to question #17. If your answer is NO, skip to question #27.

17. What percentage of class time is devoted to addressing the topic of teaching musical improvisation across a typical semester long general music methods course for university music education majors?

- ☐ 10% of semester
- ☐ 20% of semester
- ☐ 30% of semester
- ☐ 40% of semester
- ☐ 50% of semester
- ☐ 60% of semester
- ☐ 70% of semester
- ☐ 80% of semester
- ☐ 90% of semester
- ☐ 100% of semester

18. How much emphasis do you place on each of the following methodologies when addressing the teaching of musical improvisation in your university general music methods course?

	Great Deal	Some	Not Much	None at all
Orff Schulwerk				
Dalcroze				
Kodály				
Music Learning Theory (Gordon)				
Personal Jazz Background				
Other: (Please specify)				

19. How much emphasis do you place on each of the following strategies when addressing the teaching of musical improvisation in your university general music methods course to music education majors?

	Great Deal	Some	Not much	None at all
Modeling				
Analytical listening and discussion				
Group improvisation				
Individual improvisation				
Recorded accompaniment				
Rhythmic speech				
Verbal instructions				
Improvising within a given form (rondo, 12-bar blues, ABA, etc.)				
Utilization of Blues Scale				
Utilization of Orff instruments				
Utilization of Singing				
Utilization of Recorder				
Other: (Please specify)				

20. How do you assess university music education majors' knowledge and skills regarding the teaching of improvisation in the general music methods course? (check all that apply)

☐ Performance Test ☐ Written Test

☐ Peer-teaching in class ☐ Improvisation teaching in the field

☐ Portfolio Entries ☐ Recordings

☐ Class Improvisation Sessions ☐ Written Lesson Plans

Other: (please specify)

_____

_____

21. Have you taught elementary (grades K-4) general music methods to university music educator majors? ☐Yes ☐No

If your answer is YES, please continue to question #22. If your answer is NO, skip to question #23.

22. If you teach or have taught elementary (grades K-4) general music methods, on how many class meetings per semester do you address the teaching of musical improvisation in the following ways:

	5+ Meetings	2-4 Meetings	1 Meeting	Never
Improvise answers in the same style to given rhythmic and melodic phrases				
Improvise simple rhythmic and melodic ostinato accompaniments				
Improvise simple rhythmic variations and simple melodic embellishments on familiar melodies				
Improvise short songs and instrumental pieces, using a variety of sound sources, including traditional sounds, nontraditional sounds available in the classroom, body sounds, and sounds produced by electronic means				

23. Have you taught upper elementary and/or middle school (grades 5-8) general music methods to university music educator majors? ☐Yes ☐No

If your answer is YES, please continue to question #24. If your answer is NO, skip to question #25.

24. If you teach or have taught upper elementary and/or middle school (grades 5-8) general music methods, on how many class meetings per semester do you address the teaching of musical improvisation in the following ways:

	5+ Meetings	2-4 Meetings	1 Meeting	Never
Improvise simple harmonic accompaniments				
Improvise melodic embellishments and simple rhythmic and melodic variations on given melodies in Major keys				
Improvise short melodies, unaccompanied and over given rhythmic accompaniments, in a consistent style, meter, and tonality				

25. Have you taught high school (grades 9-12) general music methods to university music educator majors? ☐Yes ☐No

If your answer is YES, please continue to question #26. If your answer is NO, skip to question #27.

26. If you teach or have taught high school (grades 9-12) general music methods, on how many class meetings per semester do you address the teaching of musical improvisation in the following ways:

	5+ Meetings	2-4 Meetings	1 Meeting	Never
Improvise stylistically appropriate harmonizing parts				
Improvise rhythmic and melodic variations on melodies in major and minor keys				
Improvise original melodies over given chord progressions, in a consistent style, meter, and tonality				
Improvise stylistically appropriate harmonizing parts in a variety of styles				
Improvise original melodies in a variety of styles, over given chord progressions				

27. Please use the following rating scale below to describe your response to the following questions:

	1- Strongly Disagree	2	3	4	5- Strongly Agree
I have a talent for Improvisation.					
Other people think I have a talent for improvisation.					
I could become proficient at Improvising.					
I enjoy the challenge of improvising.					
Other performers on my instrument improvise better than I do.					
I enjoy improvising on my instrument while performing.					
I enjoy practicing improvisation.					
Other people have more talent for improvisation than I do.					
I believe I could learn to improvise at a professional level.					
I could teach someone how to improvise.					
I could teach music educators how to teach improvisation.					
I am confident in my ability to improvise on my instrument.					
Improvising is not too difficult for me.					

28. How interested are you in learning more about how to teach musical improvisation?

☐ Very interested

☐ Moderately interested

☐ Slightly interested

☐ Not at all

If your answer is YES, please continue to question #29. If your answer is NO, skip to the end of the survey.

29. To learn more about how to teach musical improvisation, what types of exercises and/or activities would you participate in? (check all that apply)

☐ Intensive Workshop

☐ College Course

☐ DVD/Video

☐ Readings

Other: (please specify)

_____

_____

_____

Thank you for completing this questionnaire!

I would greatly value the opportunity to further discuss musical improvisation in the university general music methods course with you. If you would be willing to further discuss this topic with me, please contact me to set up an interview. Your time and expertise relating to this topic are greatly appreciated! Thank you!

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