

THE EFFECT OF THREE COMPOSITIONAL STRUCTURES ON THE
COMPOSITIONAL AND INSTRUCTIONAL SELF-EFFICACY
OF PRE-SERVICE MUSIC TEACHERS

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The purpose of this study was two-fold: 1) to compare the effects of three different composition tasks with varying degrees of structure on pre-service music teachers' creative self-efficacy as composers and their instructional self-efficacy as pedagogues of composition; and 2) to describe through pre-service music teachers' talk perceptions of composition and their experiences completing the three composition tasks. Participants ($N = 29$) were music education majors from three different sized universities in the northern-central region of the United States. At the beginning of the study, the participants answered a researcher-design self-efficacy questionnaire that measured (a) their self-efficacy as composers and (b) their self-efficacy as teachers of composition. Next, they composed three compositions of various task structures (unstructured, poem, and rhythm). Immediately after completing each task they again completed the self-efficacy questionnaire. Statistically significant mean differences between the pre-task administration of the measuring instrument and all three composition tasks were found for the pre-service teachers' compositional self-efficacy. Statistically significant mean differences were also found between the unstructured task and the rhythm task, but not between the rhythm and poem tasks or the unstructured and poem tasks. For the pre-service teachers' self-efficacy as pedagogues of composition question, the results were also statistically significant between the pre-task administration of the measuring

instrument and all three composition tasks. Statistically significant mean differences were also found between the unstructured task and the rhythm task as well as the poem and rhythm tasks, but not between the unstructured and poem tasks. Additional data were gathered through semi-structured one-on-one interviews. Through their talk the pre-service music teachers commented that they enjoyed the overall composition process. This experience also seemed to challenge the participants' assumptions about composition and appeared to make creative experiences more tenable and relevant to their future classroom experiences. The results of this study suggest that incorporating composition activities regardless of structure within a music teacher's pre-service training might impact their self-efficacy beliefs not only as composers, but also as pedagogues of composition. This study suggested that teacher educators might want to consider using a rhythmic structure as the first task to help provide an initial framework to guide and initiate their composition. Pre-service teachers engaged in similar compositional activities might also gain further insights about what it means to be a composer and into the pedagogy of composition.

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	III
LIST OF TABLES	IX
LIST OF FIGURES	X
CHAPTER 1 INTRODUCTION	1
Overview of the Study	1
Background of the Problem	2
Importance of Creativity	2
Creativity in Education	5
Benefits of Creativity in Education	6
Challenges of Creativity in Education	7
Creativity in Arts Education	9
Benefits of Creativity in Arts Education	10
Challenges of Creativity in Arts Education	12
Creativity in Music Education	14
Historical Background	14
Benefits of Teaching for Creativity in Music Education	16
Challenges of Teaching for Creativity in Music Education	17
Composition in Music Education	19
Task Structure in Composition	19
Self-Efficacy Beliefs in Teaching Composition	22
Additional Challenges to Teaching Composition	24
Statement of the Problem	25
Purpose of the Study	26
Definitions of Terms	27
Assumptions and Limitations	29

Theoretical Framework.....	30
Significance of the Study.....	31
CHAPTER 2 LITERATURE REVIEW.....	33
Creativity.....	33
Product.....	35
Process.....	38
Wallas' Theory of the Creative Process.....	38
Campbell's Theory of the Creative Process.....	39
Divergent Thinking.....	40
Creative Thinking in Music.....	42
Gestalt Theory of the Creative Process.....	44
Summary.....	45
Music Composition.....	47
Compositional Process.....	49
Kratus Process Studies.....	49
Other Process Studies.....	51
Structured and Unstructured Composition.....	54
Benefits and Challenges of Structured Composition.....	55
Benefits and Challenges of Unstructured Composition.....	56
Compositional Product.....	57
Preference and Perceived Difficulty of Composition Tasks.....	59
Composition in the Music Classroom.....	61
Composition Studies with Adults.....	64
Summary.....	66
Pre-service Music Teachers and Composition.....	68
Pedagogy of Teaching.....	68
Composition Pedagogy.....	70
Summary.....	74
Pre-service Music Teachers' Attitudes and Views of Composition.....	75
Self-Efficacy.....	78

Creative Self-Efficacy.....	80
Creative Self-Efficacy in Music.....	82
Summary.....	85
CHAPTER 3 METHODOLOGY	87
Research Participants	87
Research Design.....	91
Quantitative Measurement Instrument.....	91
Procedures.....	92
Composition Tasks.....	92
Data Analysis for the Main Study.....	94
Quantitative Measuring Instrument	94
Survey Research Interviews.....	95
Emergent Themes and Categories	96
Role of the Researcher	97
Validity	98
Measuring Instruments.....	98
Compositional and Instructional Self-Efficacy Questions.....	98
Interview Questions	100
Peer Review for Emergent Themes and Categories	101
Replicability Procedures	102
Field Test	104
Pilot Study.....	105
Additional Participants.....	107
Order Effect for Pilot Study.....	108
Summary of Pilot Study.....	110
CHAPTER 4 RESULTS	111
Reliability for the Main Study	111
Research Question 1	112
Research Question 2	115
Research Question 3	118

Interview Participants	119
Ashley	119
Bill.....	119
Jeff.....	120
Interview Categories	121
Preconceived Beliefs about Composing Music	121
Insights Gained from Composing Music	127
Impact on Teaching.....	133
Summary	139
CHAPTER 5 DISCUSSION AND RECOMMENDATIONS	142
Purpose of the Study	142
Discussion and Implications	144
Research Question 1	144
Research Question 2	146
Research Question 3	149
Preconceived Beliefs about Composing Music	149
Insights Gained from Composing Music	154
Impact on Teaching.....	159
Summary	166
Limitations	167
Future Research	171
Epilogue	172
APPENDIX A INTERNAL REVIEW BOARD APPROVAL LETTERS	175
APPENDIX B IRB INFORMED CONSENT SAMPLE	180
APPENDIX C QUANTITATIVE MEASURING INSTRUMENT.....	184
APPENDIX D REPLICATION RUBRIC (UNUSED).....	190
APPENDIX E REPLICATION QUESTIONS.....	192
APPENDIX F SURVEY RESEARCH INTERVIEW QUESTIONS	194

APPENDIX G RESULTS OF PILOT STUDY	197
APPENDIX H INTERVIEW TRANSCRIPT FOR ASHLEY	205
APPENDIX I INTERVIEW TRANSCRIPT FOR BILL	221
APPENDIX J INTERVIEW TRANSCRIPT FOR JEFF	233
REFERENCES	252

LIST OF TABLES

	Page
1. Test Re-Test Reliabilities: Two Dependent Variable Questions (Pilot Study)....	106
2. Means of Compositional Self-Efficacy Grouped in Task Order	108
3. Means of Instructional Self-Efficacy Grouped in Task Order.....	109
4. Test Re-test Reliabilities: Two Dependent Variable Questions (Main Study) ..	112
5. Skew, Kurtosis and S.E. for Compositional Self-Efficacy	113
6. Means, Standard Deviations and Ranges: Compositional Self-Efficacy.....	113
7. Results of Repeated Measures ANOVA: Compositional Self-Efficacy.....	115
8. Skew, Kurtosis and S.E. for Instructional Self-Efficacy	116
9. Means, Standard Deviations and Ranges: Instructional Self-Efficacy....	117
10. Results of Repeated Measures ANOVA: Instructional Self-Efficacy.....	117
G.1. Skew, Kurtosis and S.E. for the Pilot Study CISEQ.....	198
G.2. Means, Standard Deviations and Ranges for Compositional Self-Efficacy (Pilot)	200
G.3. Means, Standard Deviations and Ranges for Instructional Self-Efficacy (Pilot)	201

LIST OF FIGURES

	Page
1. Webster's model of the creative process	43

CHAPTER 1

INTRODUCTION

In society in the United States, values concerning the workplace have shifted from an industrial model to one that values problem-solving and creativity (Pink, 2005). Given this shift, it is crucial that public education consider the inclusion of opportunities to develop creative and divergent thinking. Exposure to and study in the arts can provide just such an environment that nurtures creativity and problem-solving skills. In the music classroom, experiences in improvisation and composition offer students avenues to develop these skills in ways that are often not emphasized in other academic areas. This study examined the issue of music composition and investigated the effect of composition tasks on pre-service music teachers' creative and pedagogical self-efficacy.

Overview of the Study

Historically, arts education has had to justify its place within the public school curriculum (Barrett, 2003; Bess & Fisher, 1993; Elliott, 1995). In times of budget crises and curricular reform, school boards and administrators have often redefined and evaluated the importance of fine arts programs. Many school districts have been shown to place high value on students' abilities to solve problems in creative and flexible ways and to communicate clearly and expressively (Abril & Gault, 2006). Fine arts programs—visual, dance, theater and music—have the potential to be ideal settings for

promoting and nurturing creativity and divergent thinking (College Entrance Examination Board, 1983; DeLorenzo, 1989; Spurgeon, 2002).

Music educators have used creativity means to advocate music's place in the public school curriculum. While many music educators have emphasized creative expression within the context of musical performance (Barrett, 2003; Elliott, 1995), music composition, considered to be one of the highest examples of creative self-expression (Goodkin, 2002; Hickey, 2003; Reimer, 1989), has tended to be neglected in the music classroom (Byo, 1999; Orman, 2002; Strand, 2006).

Music educators have cited several reasons for not incorporating composition in their classrooms. Some of these reasons might be that teachers have low self-efficacy with regard to their compositional ability (Randles, 2009). Another reason might be that teachers have not been trained in the pedagogy of composition (Bell, 2003; Morin, 2002; Strand, 2006) and might have a tendency to view composition as an individual endeavor reserved only for the musically elite (Sherman, 1991; Strand & Newberry, 2007). Research has corroborated these sentiments not only among teacher educators, but also among pre-service music teachers.

Forsythe, Kinney and Braun (2007) found that although practicing music teachers and pre-service teachers valued composition, their rankings revealed composition was the second lowest activity in importance out of a possible 48 items. Furthermore, pre-service teachers ranked composition as the most difficult activity for students to learn. Because of the possible negative perceptions concerning the teaching of composition, it has

seldom been included in public music education programs (Forsythe et. al, 2007; Strand & Newberry, 2007).

This lack of implementation deserves to be examined, particularly in the context of pre-service music teacher education curricula. It is within teacher education programs at the college and university level that future music teachers might encounter the composition process and have their perceptions challenged; therefore, it is vital to examine the perceptions pre-service music teachers hold concerning composition. Given positive experiences during their undergraduate music education, there could be a greater possibility that composition might be included in more public school music programs. It becomes necessary then to examine the self-efficacy of pre-service music teachers in the context of music composition.

Background of the Problem

Importance of Creativity

Creativity is a vital facet of our humanness that offers a means for self-expression (Csikszentmihályi, 1996; Langer, 1966). These creative expressions can be visual or audible, tangible or abstract, subtle or explicit. Through creativity we demonstrate our uniqueness and individuality, providing a voice for our aesthetic expression. According to Csikszentmihályi (1996), a recognized leader in the field of the psychology of creativity, our creative ability is what makes us uniquely human. He posited:

We share 98 percent of our genetic makeup with chimpanzees. What makes us different—our language, values, artistic expression, scientific understanding, and technology—is the result of individual ingenuity that was recognized, rewarded,

and transmitted through learning. Without creativity, it would be difficult indeed to distinguish humans from apes. (pp. 1-2)

Creativity is not limited by boundaries, but allows the individual to think of possibilities. It encourages the discovery of new ideas and creation of novel inventions. It encourages “outside the box” thinking that is not limited to “what is” or “what has been done,” but inquires “what if?” and “what can be done?” There is evidence across time and cultures of the value humans have placed upon creativity.

Archeological findings of pre-historic cultures have revealed humanity’s need for creative expression (Langer, 1966). Historians have found cave drawings, intricate sculptures, and detailed pottery, which all have an aesthetic beauty that extends far beyond their utilitarian purposes (Naumburg, 1955). In addition, many inventions and discoveries that have had a profound effect on the world are the result of creativity (Csíkszentmihályi, 1996). Through Edison’s innovation, the light bulb was invented and through Einstein’s imaginative thinking his theory of relativity was conceived. While these individuals were extremely knowledgeable, possessing superior skills in their fields of expertise and living in environments that stimulated their thinking, it was their creative imagination that helped provide a catalyst for their discoveries and inventions (Csíkszentmihályi, 1996). As Einstein remarked in an interview with Viereck, “Imagination is more important than knowledge. Knowledge is limited. Imagination encircles the world” (Viereck, 1929, p. 117).

Creative thinking is also a valued trait within business (Lapierre & Giroux, 2003; Zhou & George, 2003). Sir Ken Robinson (2001), senior advisor for education policy at the Getty Foundation, advised that creativity is the essential component for businesses to

be competitive globally in the 21st century. Pink (2005) observed that businesses are moving from an informational age dominated by logical, linear thinking, to a conceptual age where empathetic, creative and big-picture thinking is valued. Pink (2005) added that many top businesses covet and recruit employees who have a master of fine arts degree over those who have a master of business administration degree. Others have observed this trend, as “many businesses are paying for courses to promote creative abilities, to teach the skills and attitudes that are now essential for economic success” (Department of Media, Culture and Sport, 1999, p. 13). While creativity is evidenced in science and business, it is widely associated with the arts.

Painting, dancing, acting, and composing are all means of creative artistic expression. Through creativity in the arts, individuals might be able to find a sense of identity and a voice that is uniquely their own. Through the arts, not only the creator, but also the beholder has the potential to be enriched through an aesthetic experience. Langer (1966) theorized that the arts enable individuals to convey the range of human thoughts and emotions that cannot be expressed in any other way. In essence, artistic creativity is essential to our humanness. According to the College Entrance Examination Board (1983):

The arts—visual arts, theater, music and dance—challenge and extend the human experiences. They provide means of expression that go beyond ordinary speaking and writing. They can express intimate thoughts and feelings. They are a unique record of diverse cultures and how these cultures have developed over time. They provide distinctive ways of understanding human beings and nature. The arts are creative modes by which all people can enrich their lives both by self-expression and response to the expression of others. (p. 17)

There is ample evidence of the value humans place on creativity (Csikszentmihályi, 1996; Forsythe et. al, 2007; Kim, 2010a; Naumburg, 1955; Reimer, 1989). There is also substantial evidence that many educators value creativity (Abril & Gault, 2006; Forsythe et. al, 2007); however, educators have not always nurtured student creativity (Goodlad, 1994; Figlio & Getzler, 2002; Jacob, 2002; Kim, 2010a; Mickelson, 1966; Nikandrov, 1990).

Creativity in Education

Historically, creativity has not been at the forefront of teaching practice and philosophy. Teacher-centered learning or direct teaching permeated the classroom in the 1900s (Mickelson, 1966; Nikandrov, 1990). This philosophy of direct teaching can be traced back to the 17th century, as Locke introduced the concept of the *tabula rasa*. Students were viewed as blank slates whose duty was to absorb knowledge and understanding as it was spilled out from the mouths of their instructors (Henson & Borthwick, 1984). Inquiry, discovery and exploration were discouraged in favor of obedience, recitation and regurgitation.

However, in the middle of the 20th century, a paradigm shift occurred which challenged the teacher-centric classroom and focused attention on the learner (Hicks, 1996). This student-centered approach, founded on the philosophies and principles of Piaget, Dewey, Vygotsky and Bruner, emphasized a learn-by-doing approach where question, inquiry, connectivity and discovery learning were encouraged (Oxford, 1997; Windschitl, 2002). Dewey advocated that children's understanding grew more when they

were actively engaged in the learning process. Bruner (1967) emphasized the importance of discovery learning, in which exploration, experimentation and questioning were encouraged as a means for students to construct an understanding of their world. It was posited that this emphasis on inquiry, discovery and examination might promote creative thinking skills. This was a radical paradigm shift that moved away from the teacher-centric learning that emphasized convergent thinking toward a more open and divergent archetype of thinking (Deliege & Richelle, 2006).

Benefits of Creativity in Education

There are many possible benefits of fostering creativity within education. One of these benefits is that creativity can give students a voice that is uniquely their own by providing them a sense of identity and a means of self-expression. Secondly, creativity can increase learning and understanding and assist with problem solving skills (DeLorenzo, 1989). Through creative thinking, students can make connections to previous learning and produce novel ideas or products that otherwise might not be possible (Boden, 1994). Thirdly, creativity can have a positive impact on self-esteem. Through creating original thoughts, ideas or works, children can take ownership and find relevance in their learning, potentially increasing their sense of accomplishment (Department of Media, Culture and Sport, 1999). Furthermore, according to Maslow (1970), a creative individual is a fulfilled individual. Lastly, creativity might help students generate ideas without fear of making a mistake (Siegesmund, 1998). Through creative thinking, students are free to explore the range of possibilities and ideas that

allow them to envision their worlds differently (Shand, 2002). While creativity has been shown to be a valued trait in public education (Abril & Gault, 2006), there are many challenges to implementing creativity within the curriculum.

Challenges of Creativity in Education

Incorporating creative activities that promote divergent thinking has not always been at the forefront of educators' practice (Balkin, 1991). In *A Place Called School*, Goodlad (1984) reported that very few educational institutions challenged students to practice their problem-solving skills or creative reasoning. This trend seems to have continued. According to Levi (1999), "educators have been slow to recognize both how much children can learn when they create and what can be discovered about children from their original work" (p. 2). Kim (2010a) observed that for the past 20 years creativity scores have been steadily declining, particularly the scores for younger children in America from kindergarten through sixth grade. She suggested several possible reasons for this decline, some of which included the time children spend watching television and playing video games and a failure of schools to foster students' creative development.

According to several sources, the recent emphasis on accountability, academic achievement and standardized testing might account for the lack of creative initiatives within classrooms (Figlio & Getzler, 2002; Goodlad, 1994; Jacob, 2002; Kim, 2010a). In 2002, the United States Congress passed the No Child Left Behind Act of 2001 (Public Law 107-110) mandating state student achievement tests. The federal government then

evaluated the data to determine teaching effectiveness of not only the school, but also the classroom teacher (Booher-Jennings, 2005; Figlio & Getzler, 2002; Jacob, 2002).

According to Stiggins (1990), an emphasis on academic achievement and accountability has strongly influenced student pedagogy and student learning. In an effort to promote student success, teachers have felt compelled to teach information specific to the mandated assessments (Stiggins, 1990). Some educators have also offered instruction on test-taking strategies (Booher-Jennings, 2005) and consequently, some students have learned at an early age to look for a single solution to each problem posed by their teachers (Campbell & Scott-Kassner, 2010; Goodlad, 1994). This emphasis on standardized testing might reinforce convergent thinking—the ability to narrow all possible options down to one, single, correct answer; however, according to Guilford, a pioneer in the field of creative psychology (1950), creative individuals tend to employ a greater amount of divergent thinking as opposed to convergent thinking.

Gilford proposed that divergent thinking encompassed four principle categories: fluency, flexibility, originality and elaboration. Fluency was the ability of an individual to produce rapidly a large number of ideas or solutions to a problem; flexibility involved the capacity to consider a variety of approaches to a problem simultaneously; originality referred to one's tendency to produce ideas different from those of most other people; and elaboration was the ability to think through the details of an idea and carry it out. Thus, divergent thinkers, according to Guilford (1950), might be at a disadvantage when taking standardized tests. In addition to the perceived testing challenges, creative thinkers might also face other challenges within the classroom.

Though teachers claim to value creativity, students' creative personality traits might be discouraged and repressed due to a teacher's desire to maintain control (Kim, 2010b). According to Hargreaves, Earl, and Schmidt (2002):

Many of the affective attributes that teachers assessed seemed to be synonyms for student compliance with the behavioral norms of schooling, not behavior such as questioning, risk-taking, assertiveness, initiative, or creativity that might serve students better in the world beyond school (despite raising management problems for the teachers who taught them). (p. 85)

While teachers might assert they value creativity, Kim (2010a) found that teachers tend to show preference for non-creative attributes over creative personality traits within their classroom.

Creativity in Arts Education

According to Reimer (1989), "the history of aesthetic education is as old as humankind, because art has existed as long as humans have, and it has been passed on to every new generation" (p. 24). Within many public school settings, the opportunity for aesthetic education is manifested within fine arts departments. According to Elliot (1995), creative expression offers a tangible means of gaining a deeper appreciation for the arts. Creativity in arts education is evident through performance and original works of art: for example, dance, theater, music, the visual arts, choreography, script writing, music composition and improvisation, among others. For students, the arts might offer an experience in which they can explore, dream and create. Within the arts students might have the opportunity to thrive within a climate of creative self-expression (Kim, 2010b; Siegesmund, 1989) and, according to Green (2008), participation in the arts can produce

an active imagination that gives students “authentic appreciation” for the discipline (p. 17).

Benefits of Creativity in Arts Education

There are many possible benefits that exist within education in the arts, but perhaps one of the most important is allowing students to be self-expressive. According to aesthetic philosopher Eisner (1998), the arts might enable students to experience “what it means to transform their ideas, images, feelings into an art form” (p. 13). Through creativity, one has the means to convey the vastness and complexity of human feeling. Lindström, Juslin, Bresin, and Williamon (2003) noted that students defined expressivity in the arts as “communicating an emotion” or “playing with feeling” (p. 38). Langer (1966) theorized the arts could express the general form of feelings that words might fail to express:

The primary function of art is to objectify feeling so we can contemplate and understand it. It is the formulation of so-called inward experience, the "inner life," that is impossible to achieve by discursive thought, because its forms are incommensurable with the forms of language and all its derivatives. (pp. 9-10)

Others have supported this supposition. Green (2007) added the arts “ought to inform, infuse everything that we do, be the glow of imagination” (p. 5); and Dewey (1934) believed the arts, “touch the deeper levels of life” (p. 46). According to Csíkszentmihályi (1996), creativity is not only part of our humanness, but it is at the core of who we are and fundamental to our existence.

Through the act of creating, students can gain a more pronounced aesthetic appreciation for other works of art. For example, students who attempt to replicate the

pointillistic style of Seurat's *A Sunday Afternoon on the Island of La Grande Jatte* or compose a three-part fugue might garner a deeper understanding of the artistic genius of Seurat or Bach. The more educated students are in the arts, the more meaningful future experiences with the arts will possibly become (Reimer, 1989).

Through creativity in arts education, students might discover “a willingness to imagine possibilities that are not now, but which might become” (Eisner, 1998, p. 14). Creativity is contagious; the act of being creative can stimulate further and deeper levels of creativity that could yield remarkable results (Stauffer, 2003; Sternberg, 1999). According to Greene (2007), fostering creativity in arts education has the potential to “help children get past the absolute, past the unchanging, to realize that they can do something to change their lives” (p. 5). In *Imagination and Creativity in Childhood*, Vygotsky (1930) emphasized the role of imagination on creativity as a natural outpouring of children's play. He proposed that through play, children create novel forms of identity and behavior that free them from the constraints of their reality; thus imaginative play is an essential competent of a child's creative development. Greene (1995), advocated that the power of imagination was an important aspect of learning that extended well beyond factual knowledge:

Aesthetic experiences require conscious participation in the work, a going out of energy, an ability to notice what is there to be noticed in the play, the poem, the quartet. Knowing “about,” even in the most formal academic manner, is entirely different from constituting a fictive world imaginatively and entering it perceptually, affectively, and cognitively. (p. 125)

While these benefits for having arts experiences in the public schools are powerful and

certainly valued, multiple challenges exist when including curricula that might be viewed as subjective, abstract and intangible.

Challenges of Creativity in Arts Education

While assumptions might be made about the subjective nature of creative activities in arts programs, these programs have the potential to be assessed and evaluated as in any other academic area (Baltzer, 1988; Hickey, 1999); however, it is often difficult to assess arts programs in the same quantitative ways as other subjects. The issue of assessment in the arts is complex even though assessment is considered by many to be fundamental to teaching and learning.

A report by the National Endowment of the Arts (1988), *Toward Civilization: A Report on Arts Education*, suggested that “as in other subjects, students should be tested in the arts and their art work evaluated in order to determine what they have learned, and arts education programs should be evaluated to determine their effectiveness” (p. 36).

Furthermore, according to the College Entrance Examination Board (1985):

Arts teachers have to deal with the fact that assessments are an important tool for helping students to see when work in the arts is successful. Moreover, high schools that regard the arts as Basic Academic Subjects expect their arts teachers to develop objective assessment procedures in the courses that translate to numerical scores and grades. (p. 77)

While the goal of arts-based assessment has been cited to provide a quantifiable result of instruction and learning as well as a formal assessment of student creativity, it has been and still is a problematic issue (Baltzer, 1988; Hickey, 2001; Priest, 2006; Rohwer, 1997;). First, creative activities are not only hard to quantify (Baltzer, 1988),

but also the interpretations and value judgments of creative products tend to be highly subjective (Hickey, 2001). Furthermore, there has been criticism of using adult adjudicators who operate from different paradigms to critique children's creative output (Hickey, 2001; Priest, 2006). Critical evaluation of students' work might also encumber their self-expressive ability and intrinsic motivation for the task (Kohn, 1993). When students know their creative output will be subjected to assessment, this has the potential to inhibit their creativity (Nachmanovitch, 1990). Furthermore, arts educators who know these assessments will be used to "determine their effectiveness" as a teacher might alter their instruction so that it would be more academic in nature rather than creative (National Endowment of the Arts, 1988, p. 36). To this end, researchers have cautioned the focus of arts-based assessment should never be at the expense of creativity (Hickey, 1991; Loane, 1984; Rohwer, 1997).

An additional challenge to incorporating creative activities within the arts classroom is a lack of instructional time. Educators have cited time constraints, not only in the visual arts (Stokrocki, 1990), but also in music (Byo, 1999; Morin, 2002; Orman, 2002; Strand, 2006). Arts teachers might see their students only once a week for an hour or less which leaves little room for instructional modeling and student projects (Stokrocki, 1990; Strand & Newberry, 2007). Time for student creativity can be impeded through various interruptions throughout the school year such as school assemblies, snow days, and block scheduling (Stokrocki, 1990).

Lack of funding and materials have also been cited as a common complaint of arts educators (Stokrocki, 1990; Strand & Newberry, 2007). Stokrocki (1990) found that

visual art teachers instructed with inferior supplies—such as broken crayons, newsprint, and “manila paper, which ripped when students pressed too hard or erased” (Stokrocki, 1990, p. 112)—that adversely affected student creativity. In music, Strand and Newberry (2007) found that educators cited a lack of materials—Orff instruments, instructional supplies and technology—to fully implement improvisatory or compositional lessons. Despite these challenges, educators and researchers have nevertheless cited the value of creative activities within arts education (Eisner, 1998; Green, 1995) and particularly within the music classroom (Elliot, 1995; Reimer, 1989).

Creativity in Music Education

Historical Background

Within the history of music education in America there have been many publications, initiatives and programs designed to promote and foster creativity. In 1922, Coleman published a book titled, *Creative Music for Children*, advocating for an increased emphasis on exploration, improvisation and composition within music education. This focus on student creativity was a novel idea that offered a stark contrast to the typical teacher-centered methods of instruction in the 1920s (Mickelson, 1966; Nikandrov, 1990).

In the late 1950s through the 1960s, many programs, symposia and projects were initiated to reform and redefine music education. In 1959, the Ford Foundation sponsored the Young Composers Project whose aim was to increase awareness of contemporary music and bring composers into the schools to write music and, at times,

work collaboratively with students. In 1965, the Comprehensive Musicianship Project also argued for creativity as a part of a well-rounded music education. According to Chosky, Abramson, Gillespie, and Woods (1986):

It is an approach to musical study in which the source of all music learning is the literature of music. [Comprehensive Musicianship] encourages students to grow in musical knowledge and skill at all levels of instruction by synthesizing the musical materials they are working with and by making conceptual connections through performance, analysis and composition. (p. 104)

Similarly, the Tanglewood Symposium in 1976 advocated for music's place in the curriculum because of its aesthetic and creative benefits:

We believe that education must have as major goals the art of living, the building of personal identity, and nurturing creativity. Since the study of music can contribute much to these ends, WE NOW CALL FOR MUSIC TO BE PLACED IN THE CORE OF THE SCHOOL CURRICULUM. (Mark, 1986, p. 312)

In 1994, MENC (the National Association of Music Education) published *The School Music Program: A New Vision* that introduced the nine National Standards for Music Education giving music teaching and learning more focus and direction (Reimer, 2004). Standards 3 and 4 specifically cited creativity within the classroom: Improvising melodies, variations, and accompaniments and Composing and arranging music within specified guidelines. Though the standards were designed to be strictly voluntary, studies have shown that music specialists in schools have implemented the standards within their curricula (Byo, 1999; Fallis, 1994; Orman, 2002). In light of these reforms, successful music educators could no longer ignore their students' creative development and musical independence.

Most recently, the MENC-sponsored publication *Vision 2020: The Housewright Symposium on Music Education* (Madsen, 2000) called for an increased emphasis on

creative activities within music education. Lehman (2000) envisioned, “Because of their fundamental importance in music learning, improvisation and composition will be an important part of the curriculum for every student” (p. 97).

Benefits of Teaching for Creativity in Music Education

Researchers have cited benefits for creative activities in the music classroom; most notably, it can foster self-expression (Loane, 1984; Shand, 2002). Musical self-expression has been identified through creative performance, improvisation and composition (Barrett, 2003; Kratus, 1990). According to Hevner (1935), a researcher on emotional expression in music, “If the great artist could speak to the audience verbally as effectively as he does musically, [his] efforts would be unnecessary, but seldom he expresses himself except through the medium of his art” (p. 204). Similarly, researchers have documented that students who participate in creative music activities might develop a deep personal connection and vested interest to their creative task (Burnard, 2006; Glover, 1990). According to Burnard (2006), this connection involves a “certain giving of oneself” where there becomes little distinction between the creator and what is being created (p. 114).

Researchers have also documented that fostering creativity in music classrooms has the potential to increase problem-solving skills and non-linear thinking (Burnard & Younker, 2004; DeLorenzo, 1989; Shand, 2002). Shand (2002) found that students who engaged in composition tasks challenged the boundaries of their musical experience by exploring possibilities without the limitations of being right or wrong. They were

“encouraged to take risks as they developed their creative abilities... and were willing to take chances and follow their ears and intuition” (p. 123). DeLorenzo (1989) observed students’ problem solving skills were challenged and enhanced when they participated in structured composition activities. According to Bunting (1988), musically creative activities have been found to expand students’ musical understanding as they draw upon their previous musical experience and learning. Researchers have also noted students’ understanding of music theory and syntax increased when they were engaged in various composition tasks (Hickey, 2003; Strand & Newberry, 2007). Despite these possible benefits of fostering creativity in the music classroom, researchers and educators have cited several challenges.

Challenges of Teaching for Creativity in Music Education

In music education, student creativity can be exhibited through performance, improvisation and composition. While there has been evidence that educators value musical creativity (Shand, 2002; Strand & Newberry, 2007), these values might not always be put into practice. Wang and Sogin (1997) reported that even teachers who incorporated the Orff Schulwerk method, which promotes improvisational activities, were observed to include creative activities in only 1.33% of the students’ music experiences.

According to Webster (1988):

It is ironic that arts educators, particularly music educators, are the most guilty of avoiding and even discouraging creative thinking. Often it is assumed that because music, art, dance, drama, or creative writing are taught in the schools, these activities naturally allow self-expression, imagination, and creative thinking. Is this not where one learns to be ‘creative’? Maybe. It depends on just how the arts educator engages the child in arts education. If the end result seems to be

only the acquisition of facts, the ability to read music, an increase in the number of public performances and the first prizes at solo and ensemble contests, then the process of understanding music as an art, and, in turn, the ability to think creatively about sound and its meaning as art, may be lost. (p. 33)

Other researchers have agreed with Webster that music specialists tend to emphasize student performance (Abril & Gault, 2008; L’Roy, 1983; Reid, 2002; Roberts, 1991, 1995) and information retrieval (Sherman, 1991). While many music educators have argued that musical creativity is highly evident in performance (Barrett, 2003; Elliot, 1995), others have maintained that performing other people’s work is not necessarily showcasing individual creativity, but more the identity of the composer (Cones, 1974; Stauffer, 2003). Cone (1974) noted that the performer is a “living personification” of the composer (p. 5). In this view, the performer has the responsibility to convey the feelings, expressiveness and musicality the composer intended for the listener to hear. This dichotomy was evidenced in a clash between conductor Toscanini and composer Ravel. During a 1929 performance of *Bolero*, Toscanini took creative license and conducted the piece at a faster tempo and added an *accelerando* at the conclusion. Ravel was irate, and remarked that his music should not be interpreted, but should be performed as written (Goss, 1940).

Spurgeon (2002) cautioned that fine-arts teachers who encourage their students to merely replicate a piece of visual art, or imitate a choreographer’s moves, or reproduce a work in the musical canon might be “denying students the opportunity to be creative and intuitive” and “are in danger of encouraging perfect technicians who have nothing to say” (p. 147). If music performance is more about transmitting the composer’s musical intentions than the individual expressivity (Cone, 1974; Spurgeon, 2002), then music

educators might want to consider nurturing student creativity that allows for more self-expression (Orff, 1995; Stauffer, 2003; Webster, 1988).

Composition in Music Education

Music educators have reported several reasons for incorporating composition within their classroom. They have cited it enhances their students' musical understanding (Hickey, 2003; Strand, 2006; Strand & Newberry, 2007) and fosters creativity (Kratus, 1989; Mark, 1986; Strand, 2006). Some have used it to assess student learning (Hickey, 1999; Rohwer, 1997; Strand, 2006) and others cited they included composition as a means to cover all of the nine National Standards in music education (Strand, 2006). While music educators have employed various methods to teach (Strand & Newberry, 2007), their instructional approach could be segregated into two categories: the use of structured and unstructured tasks.

Task Structure in Composition

Smith (2004) defined a structured composition task as, “any directions for a composition that specify some parameters for that composition and at the same time establish how much of the composition students can decide for themselves” (p. 10). An unstructured task, on the other hand, does not consist of any imposed boundaries or limitations imposed by the teacher or researcher. Strand and Newberry (2007) cited three levels of structure: heavily structured, moderately structured and unstructured.

Examples of a heavily structured composition task might ask students to write a melody to a given chord structure (Hamilton, 1999), finish a phrase or motive (Laczo, 1981; Smith, 2004) or compose pitches for a given rhythm (Smith, 2004). A moderately structured task might ask students to compose in a certain meter (Priest, 2002), or write music to a poem (Kaschub, 1999; Kennedy, 2002; Priest, 2001; Smith, 2004), or to describe an emotion (Smith, 2004).

An unstructured task is free from teacher/researcher imposed boundaries or restrictions (Hickey, 2003; Wiggins, 1990). In these tasks, students may be encouraged to explore musical ideas freely, allowing their individual creativity to guide their work. This might include composing on a keyboard (Kratus, 1989, 1994; Nelson, 2007), inputting notes on a computer (Hickey, 1997; Jennings, 2005), or freely composing on recorder (Priest, 2001; Smith, 2008) or xylophone (Auh, 1995; Levi, 1999).

The use of structure has been valued by educators as a means of providing students direction and a framework for initial success (Hamilton, 1999; Kratus, 1989; Strand & Newberry, 2007). Advocates of a structured approach have also argued that structure fits within our innate need as humans to organize and associate with patterns (Stephens, 2003). DeLorenzo (1989) argued that structured composition might assist students to reach deeper levels of creativity and new ways to approach composition that can assist their problem solving abilities.

There have been several studies that have examined the effect of various task structures on the compositional product (Hickey, 1997; Smith, 1994, 2004). For example, Smith (2004) compared structured and unstructured composition activities on the product

rating of independent judges. In this study, Smith asked 12 sixth-grade children to complete six compositions. Two of the compositions were unstructured and four were structured: poem, motive phrase and a mood. Smith found that the poem task was more highly rated than the unstructured tasks. Smith surmised that the fewer researcher constraints, the lower rated the composition.

However, researchers have cautioned that relying on only a structured approach might limit students' self-expression. Hickey (1997) found that students' compositions were more creative when they were given no parameters over those who were given task conditions. Wiggins (1999) similarly noted that, "compositional assignments with restrictive parameters can cause students to focus on the extramusical, nonexpressive aspects of a project, and this can hamper rather than enable or promote the creative process" (p. 31).

Children tend to prefer to compose music without researcher imposed guidelines. For example, Kaschub (1999) conducted a study that involved an unstructured prompt and a structured poem task with 39 sixth grade-students. The researcher found that two-thirds of the participants preferred the unstructured task over a structured poem-setting task. Similarly, in an earlier study, Smith (1994) asked children to compose songs using three different conditions: (1) unprompted, (2) using a five note motive, and (3) using a four-measure phrase. Smith found that while students also preferred the unstructured task, their compositions, however, were not as highly rated musically as the structured prompts.

Researchers have observed that when children were engaged in even the most

unstructured composition tasks, they displayed the ability to organize sounds into meaningful patterns (Campbell, 1991; Dunn, 1992; Kratus, 1989, 1994; Pond, 1981; Smith, 2004). With the use of a structured or unstructured approach, teachers (Strand, 2006; Strand & Newberry, 2007) and researchers (Kaschub, 1999; Kratus, 1989, 1994; Smith, 2004) have found that students can succeed composing meaningful and creative music. Furthermore, the sole reliance of one method—structure or unstructured composition tasks—might not be appropriate for all students. Strand and Newberry (2007) noted:

The classroom context, teachers' learning goals for their students, and student needs all contribute to the teachers' choices for composition project organization and structure. These teachers did not consider composition an all-or-nothing experience. Rather, their examples demonstrate that composition projects can be shaped to meet the challenges of time, materials, space, and student needs. (p. 16)

A review of literature has revealed that most of the composition studies using task structure have focused on children as composers. Few studies have been conducted which demonstrate the effect of task structure on adults. Even fewer studies have measured the effect of task structure on pre-service teachers, but this can be found in research by Jeannerat and Cantwell (2002), Kennedy (2004), and Thornton et al. (2004). The study by Jeannerat and Cantwell (2002) was of particular interest to this current study because the researchers focused on the instructional and compositional self-efficacy of undergraduate music majors.

Self-Efficacy Beliefs in Teaching Composition

Researchers have observed that teachers have low self-efficacy beliefs regarding

not only their ability to compose (Jeannerat & Cantwell, 2002; Peddell, 2005) but also in their ability to teach composition (Bell, 2003; Morin, 2002; Peddell, 2005; Strand, 2006). For example, Peddell (2005) found that teachers' instructional self-efficacy was a determining factor in influencing what activities were included in their classrooms. It has been stated that teachers tend to teach as they were taught (Reid, 2003) and, according to Byo (1999), teachers tend to emphasize the music standards in which they are most comfortable. Hence, if teachers have not received meaningful creative experiences with composition, they might be unsure of their ability to compose and teach composition (Peddell, 2005).

Jeannerat and Cantwell (2002) conducted a qualitative study that measured compositional and instructional self-efficacy of 13 undergraduate music students. The students composed three compositions based upon three prompts of increasing difficulty. The first task was based upon a rhythmic guide. The second task asked the participants to compose a song that was based upon a listening motif. The third task asked the participants to write a significant composition in groups. Data were collected through the students' self-reflections. The participants noted several important facets of composing and teaching composition. For example, they realized: (a) the importance of giving prompts to provide a starting point for composition, (b) they did not need to be composers to help others compose, (c) they did not need to use notation to write music, and (d) being engaged in compositional activities was more effective to developing their skills than talking about composition. The researchers remarked that the composition

activities “effected some change in the students’ attitudes to their approach to teaching composition” (p. 39).

Additional Challenges to Teaching Composition

Other researchers have also documented preconceived attitudes towards teaching composition. For example Sherman (1991) and Strand and Newberry (2007) have documented that teachers had a tendency to view composition as an endeavor for the musically elite. Other challenges to teaching composition included instructional time constraints (Byo, 1999; Morin, 2002; Orman, 2002; Strand, 2006), large class size (Strand, 2006), a lack of materials to teach composition (Strand, 2006) and the lack of sufficient strategies to assess students’ compositional products (Morin, 2002).

Researchers have also found that teachers might not possess sufficient understanding of the creative process (Morin, 2002; Strand, 2006) and they might not have received training in composition (Bell, 2003; Morin, 2002; Strand, 2006).

These concerns raise a number of questions concerning the inclusion of composition in music programs. How can music specialists encourage creative experiences if they are unclear about the creative process? How can music teachers be expected to offer instruction in composition if they have not had the opportunity to compose and lack a basic understanding of composition pedagogy? Why is it that “untrained musicians, such as garage band guitarists, are more comfortable creating music than we who are trained musicians” (Strand & Newberry, 2007, p. 15)?

Clearly, this represents a problem in music education. As mentioned previously, one of the widely used justifications for including music in the schools has been the ability of music to foster children's creative abilities (Edwards, 1997; Morin, 2001); however, how can we as music educators apply this argument if we fail to incorporate creative activities in our classrooms? Little can be done through research to change a music teacher's class size or increase the amount of time that is allotted for their instruction; however, research could possibly provide teachers and pre-service teachers information that might influence their compositional and instructional self-efficacy.

Researchers have proposed that if music specialists are to become more comfortable including composition activities in their classroom, they might need to be informed of the creative process and also become creators themselves (Dogani 2004; Randles, 2010; Webster, 2009). According to Webster (2009), "If we expect our students to be creative professionals in their own teaching, scholarship and music making, we should try to model this sort of behavior" (p. 1). An ideal place to address the issues of skill and comfort in compositional activities might be in music teacher education programs at the undergraduate level. As Randles remarked (2010):

If music teacher preparation programs are going to prepare teachers to help students actualize their potential as composers and improvisers, teachers should first be composers and/or improvisers themselves; they should see themselves as people who can create before they can teach children to believe similarly and consequently do the same. (p. 7)

Statement of the Problem

Our creative ability is what makes us unique, gives us a voice and ultimately is

part of our humanness. Though many educators value creativity, many fail to fully implement activities that develop and nurture students' creative and divergent thinking skills. Their instruction might be also focus on creative performance oriented, rather than creative self-expression. Composition, though viewed by many to be a highly creative activity, seems to be neglected within the music curriculum. Music educators have cited lack of time, training and experience as the primary hindrances to implementing composition in their classroom. In order to offer effective models of composition to their students, teachers need to be given opportunities to compose. Experience with composition has the potential to not only improve teachers' self-perception as composers, but also provide contextual understanding of the pedagogy of composition. Undergraduate music education programs provide an ideal context for such compositional training and for addressing questions such as: Can engaging pre-service music educators in various composition tasks improve their self-efficacy as composers? Through experiencing various composition tasks, is their self-efficacy affected in leading their future students through compositional activities? Using Strand and Newberry's (2007) three levels of composition structure—unstructured, moderately structured and heavily structured—would one composition task have a greater effect on their compositional and instructional self-efficacy over other tasks?

Purpose of the Study

The purpose of this study was two-fold: 1) to compare the effects of three different composition tasks with varying degrees of structure on pre-service music

teachers' creative self-efficacy as composers and their instructional self-efficacy as pedagogues of composition; and 2) to describe through pre-service music teachers' talk perceptions of composition and their experiences completing the three composition tasks.

The study was guided by the following research questions:

1. What was the effect of compositional structure on pre-service music teachers' compositional self-efficacy?
2. What was the effect of compositional structure on pre-service music teachers' self-efficacy to teach composition?
3. How did pre-service teachers talk about composition and their experiences with compositional activities?

Definitions of Terms

Creative thinking. Creativity is a confounding topic of study due to ambiguity in its definition and application (Mayer, 1999; Sternberg, 1999; Webster, 2002); for the purposes of this study, creative thinking refers to how individuals engage an existing problem and arrive at a prospective solution (Amabile, 1996, 1998). In this study, participants were engaged in several music composition tasks. They were asked to draw upon their creativity in order to explore, develop and perform their pieces of music, thus involving their creative process in order to develop a product that was original.

Creative thinking in music. Webster (2009), a leader in the field of creative thinking in music, defined the term as:

the engagement of the mind in the active, structured process of thinking in sound for the purpose of producing some product that is new for the creator. Creative

thinking is a dynamic process of alternation between convergent and divergent thinking, moving in stages over time, enabled by certain skills (both innate and learned), and by certain conditions, all resulting in a final product. (p. 1)

For the purposes of this study, participants were engaged in several composition tasks, employing their ability to think creatively in music.

Composition. According to Kratus (1989), a recognized leader of composition research in music education:

the word “composition” refers to both process (the activity of composing music) and product (the resulting music). A composition, when referring to a product, is a unique sequence of pitches and durations that its composer can replicate. . . . When referring to a process, composition is the act leading to the production of a unique, replicable sequence of pitches and durations. (pp. 7-8)

Structured composition task. A structured composition task involves “any directions for a composition that specify some parameters for that composition and at the same time establish how much of the composition students can decide for themselves” (Smith, 2004, p. 10). In this study, participants were engaged in three composition tasks of various structures. In all levels of structured tasks students were invited to express themselves freely within the parameters as defined by the researcher.

Pre-service music educator. A pre-service music educator is an undergraduate student enrolled in a “teacher preparation program prior to employment as a music teacher in the public or private school system” (Emmanuel, 2002, p. 16). Though this definition could possibly encompass undergraduate and graduate students, only undergraduate pre-service music educators were used in this study.

Self-efficacy. Self-efficacy refers to an individual’s set of beliefs of his/her capability to “...organize and execute courses of action required to attain designated

types of performances” (Bandura, 1986, p. 391).

Compositional self-efficacy is defined as participants’ self-perceived capability to write a piece of music.

Instructional self-efficacy is participants’ self-perceived capability to teach their future students how to compose a piece of music.

Assumptions and Limitations

The overlying assumption in this study was that all individuals have the capacity to be creative (Csíkszentmihályi, 1996; Gardner, 1993). It was also assumed that creativity can be taught and is vital to human development (Balkin, 1990). It was also assumed that pre-service teachers, based upon their experience and background, have beliefs regarding their compositional ability and opinions regarding incorporating composition within their future classroom.

There were several limitations within this study. First, it consisted of a moderately small sample size ($N = 29$). Second, the study was not generalizable as it consisted of participants from three teacher preparation programs in the north-central region of the United States. Though the study included participants from three different sized universities, the number of participants was disproportionate from each institution. Another limitation was in the study’s design in having the participants’ play a bass xylophone. A majority of the pre-service teachers in the study were secondary band instructors or choral directors and might have preconceived perceptions of participating in activities that might be found within a general elementary school setting.

Theoretical Framework

This study was framed within the context of Dewey's theory of experience as outlined as a basis for understanding and learning. In his book, *Experience and Education*, Dewey advocated that any meaningful educational experience consisted of *continuity* and *interaction* between the learner and what is learned. Dewey (1938) stated that the term *continuity* highlights that any previous experience the learner brings to a new environment has the potential to impact the learner's future learning. *Interaction* is the idea that any new learning experience is a function of the interaction between one's past experience and present learning condition. For Dewey (1938), knowledge and learning is best attained by *doing* rather than passively absorbing; students formulate new ideas by making connections to previous learning only through participating in learning experiences. Dewey further advocated the importance of expression, free activity and play as essential ways of knowing (Dewey, 1933).

Dewey's theory of learning through experience has received support by researchers (e.g. Mickelson, 1966; Nikandrov, 1990; Reichling, 1997; Wiggins, 2007). According to Wiggins (2007), "If people learn by constructing their own understanding of their experiences, then teaching is essentially a process of designing experiences and providing support for learners as they actively and interactively engage in those experiences" (p. 36). The notion of connecting the learner with specific and novel learning experiences is at the heart of Dewey's experiential theory: "In a certain sense every experience should do something to prepare a person for later experiences of a deeper and more expansive quality. That is the very meaning of growth, continuity,

reconstruction of experience” (Dewey, 1938, p. 19).

According to Dewey (1938), offering students an experience to stimulate their learning requires the teacher to be more of a facilitator and less of a lecturer:

When education is based upon experience and educative experience is seen to be a social process, the situation changes radically. The teacher loses the position of external boss or dictator but takes on that of leader of group activities. (p. 25)

Using his philosophy as a framework, the present study linked pre-service music teachers with three compositional experiences. The study did not offer any specific pedagogical sequence of instruction on music composition, but merely presented pre-service music teachers with composition tasks that might be found in a typical elementary music classroom setting. This study sought to determine if the composition activities had any effect on pre-service teacher’s compositional and instructional self-efficacy beliefs.

Significance of the Study

Examining the compositional and instructional self-efficacy of pre-service music teachers might inform our practice in teacher preparation programs. It might inform our practice in understanding how pre-service music teachers perceive themselves as composers and as pedagogues of composition. Additionally, this study might determine if a learning by doing approach (Dewey, 1938)—by engaging pre-service teachers in selected composition tasks—might be useful in measuring their creative self-efficacy and self-confidence to teach composition.

A review of literature revealed limited research investigating pre-service teachers as composers. There also seemed to be a lack of information regarding pre-service

teachers' self-efficacy as composers and even fewer studies regarding the pre-service teachers' ability to teach composition. This study sought to fill these gaps in the research literature.

CHAPTER 2

LITERATURE REVIEW

The purpose of this study was two-fold: 1) to compare the effects of three different composition tasks with varying degrees of structure on pre-service music teachers' creative self-efficacy as composers and their instructional self-efficacy as pedagogues of composition; and 2) to describe through pre-service music teachers' talk perceptions of composition and their experiences completing the three composition tasks. A review of literature provided background and context for this study. The following review is organized into four primary categories: creativity, music composition, pre-service teachers and self-efficacy. An overview of each major section is provided along with its relevance to the current study.

Creativity

To better understand the effect of music composition tasks on pre-service music teachers' compositional and instructional self-efficacy, it was necessary to understand the theories and philosophies of creativity. This helped provide a framework for not only understanding the creative process, but also providing insight into attitudes, perceptions and views pre-service teachers might have regarding creativity.

Creativity has been a confounding topic of study. According to Treffinger (1986), "Creativity is one of the most complex of human functions" (p. 16) and Balkin (1990) added the term creativity was "overused, misused, confused, abused and generally

misunderstood” (p. 29). Discrepancies have existed not only within its definition (McLennon, 2002; Plucker, Beghetto, & Dow, 2004; Sass, 2001; Sternberg, 1999; Webster, 1992), but also its application (Mayer, 1999; Sternberg, 1999) and measurement (Amabile, 1996; Kim, 2006; McLennon, 2002; Rohwer, 1997).

According to several writers (Csíkszentmihályi, 1996; Gardner, 1993; Simonton, 1999; Sternberg, 2006), creativity involves the process of originating something new that a cultural group has recognized and valued. Research investigating creativity has tended to focus on one of two dimensions: big-C creativity and small c creativity (Barrett, 2003; Csíkszentmihályi, 1996; Gardner, 1993; Kaufman & Beghetto, 2000). The first category of creativity, or big-C creativity, has focused on eminent creativity. Csíkszentmihályi (1996) stated that creativity with a big-C involves three elements: “1) a culture that contains symbolic rules 2) a person who brings novelty into the symbolic domain and 3) a field of experts who recognize and validate the innovation” (p. 6). For example, works from the artistic masters such as Mozart, Da Vinci, and Plath would be considered as big-C creativity because their work fulfilled each of these three requirements. In contrast, research investigating little-c creativity has focused on “everyday activities, such as those creative actions in which the nonexpert may participate each day” (Kaufman & Beghetto, 2009, p. 2). For example, the drawings, paintings and songs written by elementary children might be classified as little-c creativity. Barrett (2003) cautioned that work created by children—though considered little-c creativity—did not invalidate their creative products. According to Barrett (2003):

While children’s composition endeavors may not always yield a product that would be judged as a worthy addition to a society’s culture capital (a big-C

contribution), through the notion of little-c creativity, children may be viewed as capable of producing creative compositions. (p. 5)

More recently, Kaufman and Beghetto (2009) proposed a four C model of creativity. The authors cited the big-C and little-c dichotomy, but argued these two categorizations were too narrow. Thus, they added two additional levels to the spectrum of creativity in their theory: mini-c and Pro-c. Mini-c creativity was defined as, “the novel and personally meaningful interpretation of experiences, actions, and events” (Kaufman & Beghetto, 2009, p. 3). The authors theorized that the little-c creativity was too broad and did not include students’ creative reasoning and insight through the learning process. Pro-c creativity, according to Kaufman and Beghetto (2009), encompassed individuals who were “professional creators, but have not reached eminent status” (p. 4). Other scholars, however, have not discriminated specific categorizations of creativity, but have viewed it holistically.

According to Amabile’s consensual assessment technique (1996), a student’s composition might be deemed highly creative if it were determined to be so by the student’s peers. Thus, Amabile drew little distinction between big-C creativity and little-c creativity, but argued works were creative if deemed so by “appropriate observers” specific to that domain (1996, p. 33). Hasse (2001), who similarly drew no distinction between big-C and little-c, argued “the ability to create is defined as the bringing into existence of something new” (p. 200). The novel outcome results in the creative product.

Product

The creative product represents the realized work of one’s creative endeavors: the

work of art, the invention, the discovery, the poem, the composition or performance. As mentioned previously, a big-C creative product involves three facets: (a) it is original, (b) it has value (c) and it has been recognized within a cultural group (Csíkszentmihályi, 1996). Clearly, the creative product must be novel, otherwise it would merely be a replication of someone else's creative accomplishment. The product must also have value to the creator.

Finally, the third facet of a big-C creative product is that the creative product needs "a field of experts who recognize and validate the innovation" (Csíkszentmihályi, 1996, p. 6). The field of experts, as defined by Csíkszentmihályi, includes those who have specific knowledge, understanding or skills in the domain they were asked to evaluate. Sternberg (2006) noted that creative products might not readily be recognized by society:

Creative ideas are both novel and valuable, but they are often rejected because the creative innovator stands up to the vested interest and defies the crowd. . . . Society generally perceives opposition to the status quo as annoying, offensive, and as reason enough to ignore innovative ideas. (p. 7)

However, some theorists have commented that over time, truly novel works persevere and overcome rejection and eventually receive recognition, validation and value (Csíkszentmihályi, 1996; Sternberg, 2006).

Amabile (1996) developed a creative consensual agreement technique which recognized the need for external evaluation of the creative work:

A product or response is creative to the extent that appropriate observers independently agree it is creative. Appropriate observers are those familiar with the domain in which the product was created or the response articulated. Thus, creativity can be regarded as the quality of products or responses judged to be

creative by appropriate observers, and it can also be regarded as the process by which something so judged is produced. (p. 33)

Contrary to the views of Csíkszentmihályi (1996) and Gardner (1993), appropriate observers might not be limited to experts in the field. According to Priest (2001):

Appropriate observers are those familiar with the discipline in which the product was created. . . . These observers, however, need not be true experts in order to be considered appropriate. Researchers, practitioners, and students may all be considered appropriate observers. (p. 246)

Other researchers have applied Amabile's (1982) creative consensual agreement technique utilizing student or other non-expert adjudicators in their evaluation of creative products (Bangs, 1992; Hickey, 2001; Priest, 2001). In these studies, the researchers gave credence to and have evaluated the students' artistic endeavors, albeit little-c creativity, thus recognizing their creative accomplishments.

For example, Priest (2001) examined the effect of students' assessment of musical creativity on the ability to compose. The researcher applied Amabile's (1982) consensual agreement technique by having 54 non-music education majors rate compositions created by their peers in a previous semester for creativity and craftsmanship. Priest (2001) defined craftsmanship as, "the degree to which the composition is technically good and well organized" (p. 250). However, the researcher did not define the term creativity: "Using your own definition of creativity, indicate the degree to which the composition is creative" (Priest, 2001, p. 250). Next, the participants composed three little-c compositions of different task structure on soprano recorder: composing without any parameters, using the rhythm of a poem, and writing a song in e minor. In-service music

educators, acting as independent judges, rated these compositions and categorized them into high, medium and low-creativity groups. Priest (2001) found that students whose compositions were ranked lower tended to focus on the specific performance attributes of their peers' compositions and did not have a Gestalt view in their assessments.

Conversely, the participants whose compositions were deemed highly creative tended to have a more global perspective in their assessment of creativity; furthermore, they tended to be more critical of their compositional efforts and seemed to "have more confidence in affirming or refuting their work" (Priest, 2001, p. 255).

Process

The creative person needs to be engaged in a creative activity before producing anything novel; one must engage in and progress through a creative process (Kratus, 1989; Smith, 2004; Wallas, 1926; Webster, 1990). Like many aspects of creativity, the creative process is enigmatic. Stravinsky remarked, "The study of the creative process is an extremely delicate one. In truth, it is impossible to observe the inner workings of this process from the outside" (1970, p. 49). Previous literature has revealed multiple perspectives when approaching the creative process. The following section focuses on several of these studies.

Wallas' Theory of the Creative Process

Wallas (1926) offered one of the first models conceptualizing the creative process. Though his model was not based upon a formalized study, he theorized that

individuals tend to engage in a creative endeavor travel through a four-staged process: preparation, incubation, illumination and verification. During the *preparation* stage the problem is presented and assimilated. For Wallas, this assimilation involves a combination of a person's experience and background as well as an integration of problem-specific resources. The *incubation* stage occurs when the problem has settled in the sub-conscious and is processed. During *illumination* the creative idea emerges to conscious awareness and a solution to the problem is realized. Finally, during the *verification* stage the solution to the problem is applied and verified. Wallas (1926) believed the creative process was not linear, but fluid in that the creative individual would most likely visit and revisit various stages as one progressed through deeper levels of creative involvement.

While some researchers have questioned Wallas' theory (Guilford 1950; Weisberg, 1986), it has served as an important contribution to creativity research as others have referenced his model (Burnard & Younker, 2002; Collins, 2005; Kratus, 1994; Webster, 1987). Details of these studies will be reviewed later in the literature review through investigation of how Wallas' theory has been applied to the compositional process.

Campbell's Theory of the Creative Process

Campbell's model of the creative process (1960) suggested that individuals engaged in a creative activity display an interplay between *variation* and *selective retention*. Campbell (1960) stated that *variation* is a process where the mind conjures a

vast number of ideas formulated from the individual's background, intellect and experience. The next stage in Campbell's creative process is *retention*, which involves a careful evaluation of these ideas against certain criterion such as originality, value, and appropriateness. Through *artificial selection*, only the ideas deemed worthy are retained, modified, adapted and then applied to the creative product (Campbell, 1960). Threads of Campbell's theory can be found in other models of creativity, including Basadur, Graen, and Green's (1982) ideation-evaluation theory of creative problem solving; Amabile's (1988) model of creativity; Webster's (1990) creative thinking in music; and Simonton's (1999) theory of the creative process.

For example, Webster (1990) developed a model of creative thinking in music that explored the "dynamic mental process that alternates between divergent (imaginative) and convergent (factual) thinking, moving in stages over time" (p. 28). This fluid movement between divergent and convergent thinking during the creative process mirrored Campbell's theory of *variation* (divergent thinking) and *artificial selection* (convergent thinking). Details of Webster's theory (1990) are described later in a subsection of this review.

Divergent Thinking

Guilford (1950), a pioneer in the field of creative psychology, believed that highly creative individuals display a strong capacity for divergent thinking. He stated that divergent thinking involves the capacity to provide multiple solutions to a single problem. For Guilford (1950), divergent thinking encompasses four principle categories:

fluency, flexibility, originality and elaboration. He proposed that fluency is the ability of an individual to rapidly produce a large number of ideas or solutions to a problem; flexibility involves the capacity to consider a variety of approaches to a problem simultaneously; originality refers to one's tendency to produce ideas different from those of most other people; and elaboration is the ability to think through the details of an idea and carry it out. Guilford's work has informed others, including Torrance, who built upon Guilford's theories of creativity in his development of the Torrance Test of Creative Thinking (1966).

According to Torrance (1963), creative behavior encompasses the individuals' "way" or process of thinking through a solution to a given problem (p. 3). Torrance developed the Torrance Test of Creative Thinking, which later received four subsequent revisions (1974, 1984, 1990, 1998). The test measures Guilford's four categories of divergent thinking: fluency, flexibility, originality and elaboration. It consists of several verbal and figural tasks, some of which include: picture construction, picture completion, asking questions and making guesses, improvement of a product, and repeated figures of line or circles. Participants have 10-minutes to complete each activity. The most recent version of the TTCT (1998) measures six sub-scores: fluency, originality, elaboration, abstractness of titles, resistance to premature closure and creative strengths. The scores for each category are norm-referenced and averaged to produce an overall measurement of creative potential. The test has been documented as being reliable; the internal consistency reliability from the Kuder-Richardson 21 estimates ranged from .89 to .94. The test has been used as a reference for divergent thinking assessment (Gorder, 1980;

Kim, 2010b) and for Webster's (1990) theory of creative behaviors in music.

Creative Thinking in Music

Webster (1990) drew upon the work of Guilford's (1950) concept of divergent and convergent thinking and Wallas' theory (1926) of the creative process to conceptualize his theory of creative thinking in music (Webster 1987, 1988, 2002, 2009).

According to Webster (2009):

Creative thinking in music is the engagement of the mind in the active, structured process of thinking in sound for the purpose of producing some product that is new for the creator. Creative thinking is a dynamic process of alternation between convergent and divergent thinking, moving in stages over time, enabled by certain skills (both innate and learned), and by certain conditions, all resulting in a final product. (p. 1)

Webster (2002) defined *thinking in sound* as one's ability to "hear musical possibilities without the actual presence of the sound" (p. 19). Thus, creative thinking in music involves critical judgments and decisions of these "musical possibilities" to produce a product that is musically novel (Webster, 2002, p. 19). Creative thinking in music might involve several facets of musical activities: composition, performing/improvisation, (Barrett, 2003; Kratus, 1990; Webster, 2002), and listening/analyzing (Webster, 2002). According to Webster, to *think in sound* composers need to "imagine sound combinations," performers/improvisers must "have a target performance in mind" and listeners/evaluators "need to hold musical structures in memory as a work unfolds" (Webster, 2002, pp. 19-20). Webster's (1990) model of this process can be seen in Figure 1.

According to Webster, the creative individual goes through several steps. First,

they conceptualize what they want to create; this is the *product intention*.

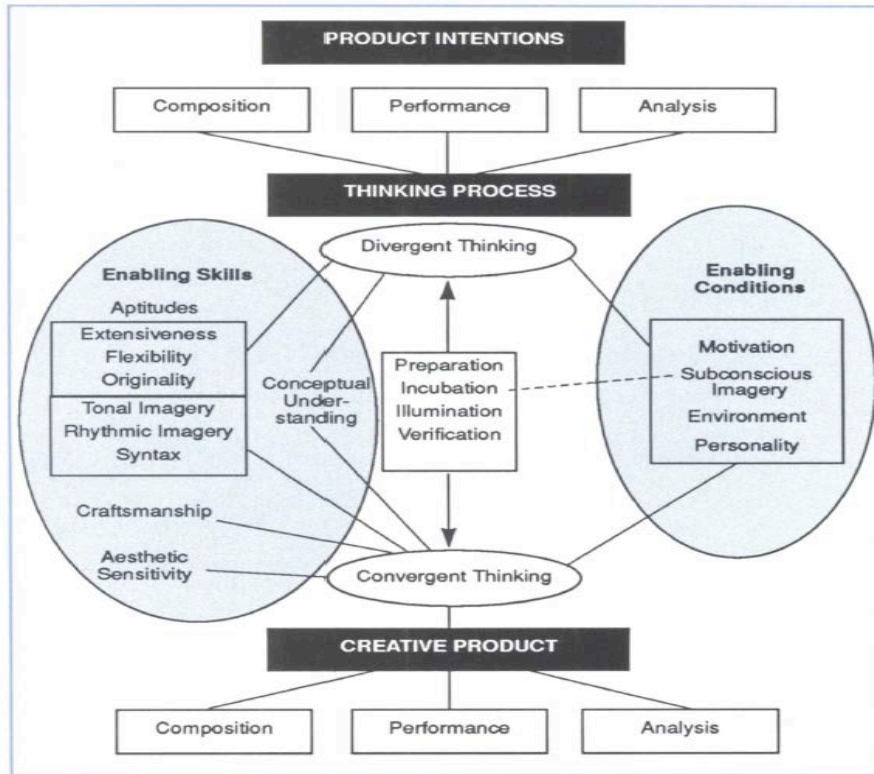


Figure 1. Webster’s model of the creative process (1990).

According to Webster, the creative individual goes through several steps. First, they conceptualize what they want to create; this is the *product intention*. Next the individual draws upon their *enabling skills* that encompass a mix of convergent as well as divergent thinking skills. The convergent thinking skills might include music aptitude, musical syntax, knowledge of facts and tonal pattern recognition.

The divergent thinking skills in music might include: “musical extensiveness (the amount of time invested in creative imaging), flexibility (the range of musical expression in terms of dynamics, tempo and pitch), and originality (unusualness of expression)” (Webster, 1990, p. 24).

Certain non-musical *enabling conditions* can influence the creative process. These conditions include motivation, subconscious imagery, and environment and personality. At the heart of Webster's creative process is "the *thinking process in the central core*" (p. 24). Here creative individuals progress through each of Wallas' four stages of the creative process of preparation, incubation, verification and illumination in a fluid manner, utilizing their convergent and divergent thinking skills as they make choices to refine and develop their creative product.

Gestalt Theory of the Creative Process

Unlike the previous theories, the Gestalt theory of creativity does not divide the process into separate stages, but rather views it as a synergistic approach (Wertheimer, 1945). To the Gestalt theorists, the creative process is a means of organizing new and old information into a holistic structure. Through "messaging around" (Wiegold, 2002, p. 240) the creator would receive a burst of insight when an unforeseen solution to the problem was realized (Collins, 2005, p. 195). Support for the Gestalt view of the creative process has been evidenced in research in the fields of music composition (Collins, 2005); music perception (Tenney & Polansky, 1980); and the visual arts (Arnheim, 1974; Wertheimer, 2007).

In a case study by Collins (2005), the researcher examined the compositional process of a composer over a three-year period. Data were collected through MIDI files, audio files, interviews and reflective accounts between composer and researcher. Collins (2005) found the creative process was both linear and fluid. The researcher suggested

that creativity involves a synthesis of the sequential process theory of Wallace (1926) and the Gestalt theory. The findings showed the composer recursively stepped through various stages of the creative process to solve musical problems: (a) germinal ideas and themes, (b) general/functional solutions, and (c) specific solutions. Unlike Wallas' theory (1926), Collins (2005) remarked that the composer was continuously reformulating goals and receiving bursts of insight:

These data seem to suggest that the composer was not unconsciously incubating ideas, but consciously aware of concurrent problem-solving issues; certainly, close scrutiny of the verbal protocol indicates an overlap of Gestalt moments of awareness or insight (or 'musical inspiration'). (p. 208)

Summary

Creativity is and has been considered a confounding topic of study. While many researchers have offered differing definitions of the term, many agree that it involves something original, has value and involves a creative process. Several researchers have recognized the dichotomy between big-C creativity, works conceived by eminent innovators and little-c creativity, works created by the non-expert or average individual. Webster (2002) applied his creative thinking in music as a means of "thinking in sound" (p. 19), thus viewing creativity through the lens of music and offered a model of the creative process which mixed the divergent and convergent thinking skills referenced by Guilford and Wallas' four staged theory of the creative process.

In the context of this study, the process and product model as suggested by Amabile (1986, 1989) had a direct application. Pre-service music teachers were engaged in the creative process as they produced their compositions. The participants exercised

their ability to think creatively in music (Webster, 2002) by completing three different composition tasks, thus impacting their ability to apply their musical understanding in a creative fashion.

Webster's theory of the creative process in music was an important construct for the current study. First, pre-service music teachers had to think in sound in order to compose. To do this, they drew upon their previous musical experiences and backgrounds as performers, listeners and creators. Next, they traveled through a creative process of divergent and convergent thinking in which they explored options, refined musical patterns and made aesthetic choices based upon what sounded pleasing to their ears. Webster (1990) cautioned that time should be allowed for the creative process to incubate: "A very important implication for music teaching is that we must allow enough time for creative thinking to occur" (p. 24); however, in this study, only 10-minutes was given to complete each task. Therefore, pre-service teachers might have needed to rely on a "flash of insight" (Collins, 2005, p. 194) to compose their pieces; thus the Gestalt model might better explain their creative process.

In the current study, the dichotomy between big-C creativity and little-c creativity might have played a role in the pre-service music teachers' perceptions of their compositions. Since many pre-service teachers are trained musicians who are familiar with the works of eminent composers such as Mozart, Bach and Sousa, they might have an elevated notion of creativity or big-C creativity. Works created by children or even produced by themselves, though significant and valuable, might be perceived as inconsequential, or little-c creativity. The pre-service teachers in this study might have

viewed themselves as possessing Pro-c creativity (Kaufman & Beghetto, 2009), in that they might have considered themselves creative, but recognized they lacked the expertise to reach “eminent status” (p. 4).

Yet if the pre-service teachers viewed their compositions through the lens of music education, they might have valued the creative experience. If they considered presenting these composition tasks to their future students, they might have valued their students’ creative contributions. Therefore, they might not have invalidated their personal creative output but rather considered it as a necessary step in the process of big-C creativity. According to Ford (1996), “It is hard to imagine a journey leading to the development of an innovation that did not incorporate several creative leaps along the way” (p. 1112).

Music Composition

Music composition has been considered by several scholars to be one of the highest examples of creative self-expression (Goodkin, 2002; Hickey, 2003; Reimer, 1989). In the context of this study, composition was defined as a product and process.

According to Kratus (1989):

The word “composition” refers to both process (the activity of composing) and product (the resulting music). A composition, when referring to a product, is a unique sequence of pitches and durations that its composer can replicate. . . . When referring to a process, composition is the act leading to the production of a unique, replicable sequence of pitches and durations. (p. 7-8)

Though improvisation is also a creative activity involving process and product,

composition is unique in that it involves revision and replication (Kratus, 1989; Tafuri, 2006).

Comparatively, research in music composition is an emerging field in music education. While composition and improvisation have received very little attention in academic research compared to the other National Standards in Music Education (Kruse, Oare, & Norman, 2008), research focusing on music composition is a growing line of inquiry due to the contributions of Auh (1995), DeLorenzo (1989), Gromko (1996), Hickey (2003), Kratus (1994), Priest (2001), Smith (2004), Strand (2006), Swanwick and Tillman (1986), Webster (2003) and Wiggins (2003), among others.

Many of the studies in composition within the field of music education have examined children as composers. For example, researchers such as Christiansen (1993), DeLorenzo (1989), Gromko (1996), Kratus (1989), and Levi (1991) have studied the processes of children's compositions while others have examined the products (Doig, 1942; Laczo, 1982; Loane, 1984; Scripp, Meyaard & Davidon, 1988). Hickey (1995), Kaschub (1999), Kratus (1993), Kaschub (1999) and Smith (2004) examined both the compositional processes and products of children's creative work. Student perception and preference for composing have been investigated in the works of Kaschub (1999), McCoy (1999) and Smith (2004). Most research in composition has focused on the individual student composer; however, several researchers have also explored student composition as the students worked in groups (Christiansen, 1993; Hamilton, 1999; Kaschub 1997; Loane, 1984; McCoy, 1999).

Compositional Process

The compositional process refers to the approach or method students use to accomplish a composition task. According to Kratus (1994), “the *way* children compose affects *what* they compose” (p. 128). Therefore it was important to investigate the process students utilized when engaged in composition activities.

Many models of the compositional process have referenced Wallas’ (1926) theory of the creative process. As mentioned previously, Wallas (1926) suggested individuals involved in a creative endeavor travel through a four-staged process: *preparation*, *incubation*, *illumination* and *verification*. Webster (1987, 1989b, 1990) applied Wallas’ theory to his conceptual model of creative thinking in music. Researchers have observed that children progress through similar stages, or variations thereof, in their compositional process of structured and unstructured tasks (Kratus, 1989, 1994; Smith, 2004; Wiggins, 2003). Examples of such similarities were found in the research by Kratus (1989, 1994).

Kratus Process Studies

Kratus has become a recognized leader in the field of music composition research in music education. In Kratus’ 1989 study, he sought to determine the compositional processes of 60 seven-, nine- and eleven-year old children. Each age group consisted of 10 boys and 10 girls. The participants were free to compose whatever they wanted, but had to do so on a 17-note keyboard using only white notes. They were instructed to begin and end their composition on middle C, which was marked with an “X.” They had 10-minutes to compose the piece and the children were asked not to use notation. The

composition processes were recorded and analyzed by independent judges at five-second intervals. The judges grouped the composition processes into four categories: (1) *exploration stage*—where new material was played, (2) *development stage*—where clear references to music played earlier could be heard, (3) *repetition stage*—where the music sounded the same as music previously played, and (4) *silence*—where no music was heard for a 5 second interval. While statistical differences were not found between nine- and eleven-year-old children, Kratus (1989) reported that the seven-year-old children spent more time in the exploration stage than their older peers who spent more time on the development and repetition stages. Furthermore, the older children were able to replicate their composition better than the younger group, whose creative work seemed to resemble improvisation more so than composition.

In a similar study, Kratus (1994) explored the relationships of children's compositional processes and their musical audiation. First he administered Gordon's (1982) Intermediate Measures of Audiation to 40 nine-year-old children. Next, the researcher asked the participants to compose a song on a 17-note electronic keyboard; before they began their composition they were invited to explore the instrument to limit a novelty effect. Like Kratus' previous study (1989) the children were given a full 10 minutes to compose their pieces. After 8 minutes they were told that only 2 minutes remained. Kratus recorded each participants' entire composition process and observed that all the subjects were able to complete the task. Four music educators acting as independent judges analyzed the student recordings. Two judges evaluated the product and the other two categorized the compositional processes into four phases: exploration,

development, repetition and silence. Kratus noted a statistically significant positive correlation between children's audiation and silence. Kratus surmised:

The positive relationship between audiation (rhythm and composite) and silence is also a logical one, because children who can "hear" the music inwardly can compose without the sound being physically present. I observed some of the subjects stop composing and sit thinking quietly for periods of up to 45 seconds. Occasionally, they would move their fingers over the keyboard without pressing the keys, as if reviewing their songs silently. (p. 127)

Kratus found a positive correlation between audiation and the development stage and a negative correlation between audiation and the exploration stage. Kratus (1994) also noticed that students who spent more time in the exploration stage tended to produce a product that was not as musical; "Too much exploration without sufficient time to develop and repeat ideas results in poorly structured songs that their composers cannot replicate" (p. 127). Also implicit in Kratus' findings was the connection between children's composition processes and Wallas' theory. While Kratus (1989, 1994) defined four categories, exploration, development, repetition and silence, these could resemble Wallas' creative process model of exploration, incubation, inspiration and revision. Though Kratus noticed silence, Wallas might have viewed this as an incubation period. Webster might have interpreted the silence as an example of the participants' thinking creatively in music in light of Kratus' (1994) observation, "they would move their fingers over the keyboard without pressing the keys, as if reviewing their songs silently" (p. 127).

Other Process Studies

Smith (2004) conducted an extensive literature review of the compositional

processes of structured and unstructured tasks. Smith (2004) found that most of the studies documented students progressing through three phases as they composed: (1) idea generation and selection, (2) development, and (3) practicing and polishing (2004). These three phases were similar to Kratus' finding of exploration, development, repetition and silence (1994).

Wiggins (1989) conducted a study investigating the compositional processes of children composing in groups from five different schools. Though each group varied in size, task setting, time, instruments and music instruction, Wiggins nevertheless observed the students traveled through three phases of composition process. The first phase was *initial planning*, where students discussed the problem and envisioned what the final product should sound like. The next phase Wiggins labeled *initiation and development*. The students worked independently, gradually developed musical ideas and then added them to the context of the group. The last phase was *reassembly and practice* in which the students practiced the composition as a whole and made minor revisions while adding tempo, dynamics and other expressive elements.

Wiggins (2003) later synthesized this and other studies in children's composition processes (1989, 1990, 1994, 1999, 2005) and theorized a five-staged recursive frame that students might undertake when creating music. According to Wiggins (2003), composers first *invent, select and decide* on musical material, then they *set material in context*, next they *organize, evaluate, refine and revise* their work, then they *rehearse* their material, and finally the processes culminate in *performance and feedback*—which

could initiate the entire process again. Wiggins (2003) made no differentiation between the compositional processes of structured and non-structured activities.

Levi (1999) similarly documented a five-stage compositional process. In the study, he observed the compositional processes of second grade children composing on an Orff xylophone. The students were free to compose whatever they wanted and were given no time parameters. After they had completed their compositions, the participants notated the melodies. Levi observed that the students progressed through five stages: *exploration, focus, rehearsal, composition* and *written score*. Through the *exploration* stage students improvised and generated ideas. During the *focus* stage the students narrowed their decision-making and the composition began to emerge. In the next stage, *rehearsal*, students refined their piece while new ideas were sought and expanded. The fourth stage, *composition*, encompassed the sequencing of the musical ideas and intentional practice of their composition in preparation for performance. *Written score* was the final stage in Levi's study (1999). In this stage, students notated their compositions, only making slight edits that reflected their creative intent.

While several studies have revealed common themes that closely resemble Wallas' theory of the creative process (Kratus, 1989, 1994, 2001; Smith, 2004; Wiggins, 2003), Paynter (1992) observed the method students used to compose could be directly related to the structured rules or parameters of the composition condition. Therefore it was necessary in the context of this study to review the influence of structure within composition research.

Structured and Unstructured Composition

Researchers have measured the effects of composition task structure within the music classroom. (Kaschub, 1999; Priest, 2002; Smith, 2004; Strand, 2006). According to Smith (2004) a structured composition task involves “any directions for a composition that specify some parameters for that composition and at the same time establish how much of the composition students can decide for themselves” (p. 10). Strand and Newberry (2007) cited three levels of structure: heavily structured, moderately structured and unstructured.

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

An unstructured task can be defined as a compositional exercise that is free from teacher/researcher imposed boundaries or restrictions (Hickey, 2003; Wiggins, 1990). Students writing unstructured compositions are not given a form, meter, tonality, text, or subject matter. They are encouraged to explore musical ideas freely, allowing their individual creativity to guide their work. Some examples of unstructured tasks might include composing on a keyboard (Kratus, 1989, 1994; Nelson, 2007), inputting notes on

a computer (Hickey, 1997; Jennings, 2005; Kennedy, 2002; Nelson, 2007; Wilson & Wales, 1995; Younker, 2000), inventing songs on the playground (Campbell, 1991), or composing on recorder (Priest, 2001; Smith, 2008) or xylophone (Auh, 1995; Levi, 1999 Pond, 1981).

Benefits and Challenges of Structured Composition

Researchers have advocated for structured composition activities because they can help students progress in their creative development. Dunn (1992) observed that beginning composers who used words and poems as a basis for their composition became more secure in their ability to create new music. Similarly, researchers have found that structured tasks not only gave students an entry point to undertake a task and help provide initial success (Brophy, 1996; Burnard, 1995; Hamilton, 1999; Kratus, 1989), but can also offer students a step-by-step sequence of instruction that provides a framework to guide and assess their work (Brophy, 1996). According to Goodkin (2002), “Often, the tighter the focus, the more satisfying the result” (p. 12). Additionally, DeLorenzo (1989) discovered that structured exploratory activities helped students reach higher levels of creativity and presented students with new ways to approach composition that might enhance their problem solving skills. Stephens (2003) argued for a structured approach because we as humans gravitate toward and associate with organized patterns and routines. Stephens (2003) stated, “Freedom does not come from the absence of guidelines or rules, but through the establishment of clear parameters within which

decisions can be made” (p. 129). However, structured activities might not be appropriate for all students.

Benefits and Challenges of Unstructured Composition

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

Music teachers who ask students to compose a piece that is twenty notes long should remember what it was like to write a hundred-word essay and spend more time counting words than thinking about its content. . . . Composing a piece using only sol, mi, and la is as limited in its own way as making up a story that uses ten spelling words. While these kinds of writing assignments may present certain challenges, they are not creative challenges and are unlikely to result in fine literary works. Students focus on the “game-like” parameters of the assignment instead of the quality of the product or what it will express. In the same way, compositional assignments with restrictive parameters can cause students to focus on the extramusical, nonexpressive aspects of a project, and this can hamper rather than enable or promote the creative process. (1999, p. 31)

Structured activities might also limit the creativity of the individual student. Amabile (1996) remarked that constraint tends to impede creativity, but a “freedom in deciding what to do or how to accomplish the task stimulates creativity” (p. 231). Furthermore, Wiggins (1999) noticed that some music educators had a propensity to take children’s creative abilities for granted and would impose structured parameters on their students in an effort to promote compositional success. Csikszentmihalyi (1996) and Webster (1989) emphasized the need to find a balance between one’s ability and the degree of difficulty of the task to facilitate creativity. The compositional task—structured or unstructured—

should be aligned with the students' cognitive and musical abilities. Though an advocate for unstructured composition, Wiggins (1990) cautioned, "Free composition is the most difficult type of student composition and it should be attempted only after students have worked as a class and in small groups. It is not necessarily appropriate for all students" (p. 38).

Compositional Product

The compositional product is the original work that arises from the creative process. In many studies the product was written down (e.g. Gromko, 1996; Jennings, 2005; Levi, 1991; Priest, 2001), and in others it was replicated (e.g. Auh, 1995; Kratus, 1994, 2001; Smith, 2004). In the studies, the compositional product was often evaluated by researchers for the purposes of quantitative data and analysis (Auh, 1995; Levi, 1991; Kratus, 1994, 2001; Priest, 2001; Smith, 2004; Wiggins, 2003); however, it should be noted that evaluating a creative product produced by children has been and can be a problematic issue (Baltzer, 1988; Hickey, 2001; Priest, 2006; Rohwer, 1997). Creative activities are not only hard to quantify (Baltzer, 1988), but also the interpretations and value judgments of creative products are highly subjective (Hickey, 2001). There has been criticism of using adult adjudicators who operate from different paradigms to critique children's creative output (Hickey, 2001; Priest, 2006). Yet many researchers have evaluated the compositional product with the use of external judges (e.g. Auh, 1995; Kratus, 1994, 2001; Priest, 2001; Smith, 2004) and other researchers have evaluated

products through student self-assessment (e.g. Levi, 1991; Priest, 2001; Smith, 2004; Wiggins, 2003).

Product of Unstructured Composition Tasks

Research that has evaluated children's unstructured compositions has found mixed results. Campbell (1991) collected and analyzed songs composed and sung by children on the playground, observing that many of the songs were more rhythmically complex than those found in children's songbooks. Additionally, Hickey (1997) found that students' compositions were more creative when they were given no parameters over those who were given task conditions. Conversely, studies by Smith (1994, 2008) reported that the unstructured compositions were judged to be lower in overall musicality than the structured products.

According to Stephens (2003), humans have an innate need to create organized patterns and routines. Many researchers have observed that when children were engaged in even the most unstructured composition tasks, they displayed the ability to organize sounds into meaningful patterns (Campbell, 1991; Dunn, 1992; Kratus, 1989, 1994; Pond, 1981; Smith, 2004). In these studies children, in essence, naturally imbued a sense of structure within their unstructured composition task.

Product of Structured Composition Tasks

Several product studies involving structured composition have suggested that children could create quality music under a wide range of task structures (Doig, 1942;

Loane, 1984; Smith 2004; Swanwick & Tillman, 1986). For example, Smith (2004) compared structured and unstructured composition activities on the product rating of independent judges. In this study, Smith asked 12 sixth-grade children to complete six compositions. Two of the compositions were unstructured, and the other four were structured—composing to a *motive*, *phrase*, *poem* and *mood*. Smith found that the structured *poem* task was more highly rated than the unstructured tasks. Smith surmised that the poem contained an inherent rhythm and meter that provided a successful framework for the composition.

Loane (1984), using a teacher-researcher study design, examined the compositional product of 11 to 14-year old students who worked in groups. The students were given five different task structures as a basis for their compositions: (1) using story, (2) using two different ostinati; (3) incorporating two minor chords; (4) writing a song about animals; and (5) using an emotion. Loane (1984) surmised that students were more motivated to learn about music with the less structured tasks.

Preference and Perceived Difficulty of Composition Tasks

Student preference can be an important element when evaluating structured and unstructured composition activities. Appraising preference might provide insight into students' creativity. It should be noted that student preference might be highly affected by the degree of difficulty; therefore preference and difficulty of the creative task need to be discussed congruently. Few composition studies have documented student preference

and only a small number of these studies have asked students to rate the difficulty of the task.

Studies have revealed that student preference in composition activities were idiosyncratic. In Smith's (2004) study with 12 sixth-grade children, the students completed two unstructured and four structured compositions—*motive*, *phrase*, *poem* and *mood*. Smith reported the *phrase* task was perceived as the most difficult and was the least preferred. Smith surmised the phrase given to the students might have been too long and difficult as it contained a harmonic modulation. Students preferred the unstructured tasks over the structured even though these compositions were ranked by external judges to be lower in musicality. The structured *poem* was the second most preferred activity by the participants and was ranked as the second easiest work to compose.

This study contradicted the findings reported in Smith's earlier research (1994). In the earlier study, Smith (1994) asked 18 children between six and twelve to compose under three different conditions: (1) unprompted, (2) using a five note motive, and (3) using a four-measure phrase. All these students had piano training. Adult adjudicators who had experience with composition rated the student compositions. Smith found that students preferred to compose without researcher-imposed guidelines even though they rated the unprompted activity as being more difficult than the structured activities; however, these pieces were not as highly rated musically as the structured composition tasks.

Kaschub (1999) conducted a study that involved an unstructured and a structured poem task with 39 sixth grade-students. The researcher found that two-thirds of the

participants preferred the unstructured task over a structured poem-setting task. She attributed the findings to the constraints of the poem used in the study as the poem did not have regular phrases or a rhyme scheme.

McCoy (1997) reported that beginning sixth-grade composition students ($N = 53$) who participated in the most structured tasks remarked that they would not enjoy additional composing opportunities; however, those who participated in the less structured activities indicated a continued interest in creating new music. Conversely, in a study involving secondary school students who had previous musical experience, Burnard (1995) and Van Ernst (1993) found that students preferred compositional tasks that were more structured. Thus, student evaluations of preference and perceived degree of difficulty in these structured and unstructured composition studies seemed to be contradictory; however, it might be surmised that student preference mirrored their degree of freedom in making creative decisions (McCoy, 1999). Students' perceived creative control positively affected their intrinsic motivation and perception of the composition task (Smith, 2004; Stephens, 2003).

Substantial research has been conducted on structured and unstructured composition tasks. However, research has not informed practice. Reimer, 2004). Composition has tended to be neglected in the music classroom (Byo, 1999; Orman, 2002).

Composition in the Music Classroom

Orff, a major figure in the history of music education, emphasized creative

expression through improvisation. Orff feared that through publication of his pedagogy, teachers would favor performance over creative expression (Orff, 1976, 1978). Studies have shown that music educators have indeed emphasized performance and have tended to neglect creative activities such as composition and improvisation (Byo, 1999; Orman, 2002; Reimer, 2004). According to Reimer, (1989) “while some progress has been made in recent years toward effective methods of involving students in musical composition, this aspect of music education, along with teaching for creative listening, remains a major piece of unfinished business for the profession” (p. 71). Research has tended to support Reimer’s statement.

Wang and Sogin (1997) studied elementary music teachers’ self-reported versus observed classroom activities in a general music class. The study revealed that though teachers ($N = 67$) self-reported incorporating creative activities in their classroom 5 – 35% of the time, a sampled observation revealed that only 1.33% of class time was spent creating. In a similar study, Orman (2002) examined the inclusion of the National Standards in Music Education with elementary music teachers’ use of class time. The teachers ($N = 30$) were videotaped two times over an 18-month period as they taught music to children, grades 1 through 6. The videotape was analyzed and categorized. The results showed that although most music teachers taught all nine of the National Standards, they tended to spend less time on the standards that required “creative decision making” such as improvisation, composition and evaluating music (p. 162). Orman (2002) reported that improvisation received 3.09% of the class time, composition

received only 1.03% and evaluating music and music performances received merely .29%.

Byo (1999) surveyed music specialists ($n = 122$) and general elementary classroom teachers ($n = 122$) and inquired their degree of comfort in implementing the National Standards in Music Education. Byo reported that music educators rated the importance of implementing the National Standards higher than the general elementary classroom teachers, but “both music teachers and generalists rated the composing and improvising standards most difficult to implement” (1999, p. 177). Byo noted that teachers tended to teach to the standards in which they felt most comfortable.

More recently, Strand (2006) surveyed music teachers in Indiana ($N = 334$) and asked the degree to which they incorporated composition in their classrooms. She also sought to achieve an “operational definition for composition” (p. 154). The study revealed that 54% of the respondents rarely or never used composition in their classes. Only 5.9% of the teachers used composition often and 39.8% used composition on occasion. Strand also reported that, “the respondents did not share a unified definition of composition. Rather, the variety of task goals and examples indicated that some respondents defined composition as anything that involved students in some form of decision-making in the music classroom” (p. 163). Strand (2006) found that generalists, including elementary and theory music teachers, taught music composition significantly more than ensemble directors.

Composition Studies with Adults

Several studies have been conducted at the university level using the eminence model of teaching (Barrett, 2006; Barrett & Gromko, 2007), which investigated the one-to-one instruction between the novice student composer and an expert teacher composer. Other studies involving adult composers can be found in the works of Bowles (1991), Draves, (2008), Scripp, et. al (1988), Strand (2006) and Younker and Smith (1996).

Younker and Smith (1996) conducted a composition study that involved two adult composers (one expert and one novice) and two teenage composers (one expert and one novice). The researcher used a think aloud method of data collection while the participants composed a 14-measure piece on a keyboard. The task structure required the participants to compose using a rhythmic shell that began in C major, modulated to A minor, then back to C major. The purpose of the study was to investigate the musical thought processes of the participants. The researchers synthesized the novice and expert thought processes and found the participants initiated their compositions with tactile, visual or aural input. The tactile participants gravitated toward playing, the visual person by examining and thinking through the task structure, the aural participants by thinking in sound through humming softly or audiating.

Scripp et al. (1988) investigated the impact of musical development and age on the creative process of musically and non-musically trained adults and teenagers. The participants used computers as a tool to aid their composition tasks and were asked to provide a harmony to the melody “Twinkle Twinkle Little Star.” The first two measures of harmony were provided. The researchers found that the adults with musical training

wrote similar solutions to those who had no musical experience. However, the authors noticed that the trained musicians were more internal in their composition processes and used less of the computer's audio playback capabilities than those who had no musical training.

In another adult composition study involving novice composers, Draves (2008) conducted a mixed-methods study examining the relationship between musical self-esteem and music aptitude of college students ($N = 20$) enrolled in an undergraduate songwriting class. The non-music majors completed two tests, one that measured their music aptitude, Advanced Measures of Musical Audiation (Gordon 1989), and one that measured their musical self-esteem, Self-Esteem of Musical Ability or SEMA (Schmitt, 1979). As part of the class requirements, the participants wrote seven songs that were recorded and critiqued by two expert judges using a Likert scale. The products were judged based upon the songs' construction (melodic and rhythmic interest, clarity, expressiveness, originality and complexity) and performance (tonal and rhythmic consistency and expressive delivery). Data were also gathered through students' reflective journals that were coded into three major themes: personal desire/interest, support/recognition from others, and perceived music ability. The researcher found recognition from others strongly influenced their perceived musical ability as indicated in their journals and through the SEMA. The participants indicated through the SEMA that they had a high perception of their musical self-esteem despite the fact their songs were rated low by the judges. Many students expressed a strong level of personal

desire/interest in their journals, emphasizing their passion and love for writing and playing music.

As mentioned previously, most of the composition studies in the field of music education have focused on children. Only a small body of work has examined the processes of pre-service music teachers engaged in several composition tasks designed specifically to reflect teaching composition within the classroom (Byrne et al., 2003; Hewitt, 2002; Kennedy, 2004; Thornton, Murphy & Hamilton, 2004). These studies will be discussed in more detail later in this chapter.

Summary

Music composition entails a process and a product. While practicing music educators might value composition, they have not tended to include it within their classroom activities (Byo, 1999; Orman, 2002). Most of the composition studies within the field of music education have centered on children as composers and have evaluated their creative processes and products. Most students have been documented to travel through a compositional process that involves, but is not limited to, exploration, development and repetition. The way students compose can have an influence on what they compose.

Researchers have studied children composing under various amounts of structure. They cited perceived advantages and disadvantages of structured or unstructured composition. For some students, structure provided them with an entry point into the compositional process; for others, it inhibited their creativity. Nevertheless, researchers

have observed children who have had success within any amount of structure. Children, however, have been documented to prefer unstructured over structured composition tasks, even though their compositions tended to be rated lower in musicality.

The related literature informed the current investigation of pre-service teachers' compositional and instructional self-efficacy. Since task structure has appeared to offer several benefits and challenges, it was necessary to include all three levels of structure as cited by Strand and Newberry (2007): highly structured, moderately structured and no structure. The tasks in this study were selected to emulate similar tasks that might be found within an elementary or intermediate general music classroom: 1) compose a piece of music to a given rhythm, 2) compose a piece of music based upon a poem and 3) compose a piece of music without any constraints. Previous literature helped inform the parameters and procedures of the current study. Since Kratus (1989, 1994) observed that students could successfully compose within 10-minutes, it served as a model for the duration. Kratus (2001) also recognized the need for replication and required participants to play their piece two times to verify their creative product was indeed a composition. This would help differentiate works that were composed from those that were merely improvised. Therefore, in this study, external verification was needed to confirm the replicated performances were identical in order to avoid researcher bias. The xylophone was used to align with previous studies (Auh, 1995; Levi, 1999 Pond, 1981) and because it was an instrument commonly found in the elementary or intermediate general music classroom. While previous composition research has predominantly focused on children, this study sought to add to the growing field of pre-service teachers as composers.

Pre-service Music Teachers and Composition

According to Reid (2003), music teachers have been documented to teach as they were taught. Byo (1999) further noted that teachers tended to teach to the music standards in which they felt most comfortable. Since many teachers have been trained in the large ensemble model, their instruction tends to center on performance-based musical experiences (Barrett, 2003, 2006; Elliott, 1995; Gohlke, 1993). If music educators have never received creative experiences such as composition within their K-12 music program or in their teacher preparatory institution, it might be assumed they would not include it in their instruction (Thornton et al., 2004). Research seems to corroborate the assumption that teachers would not include composition in their curricula (Bell, 2003; Morin, 2002; Strand, 2006). Since music teachers tend to avoid composition within their instruction, this presents a need to examine pre-service music teachers' undergraduate curricula as it pertained to composition and the pedagogy of composition.

Pedagogy of Teaching

Studies have shown that pre-service teacher preparation has had an effect on the quality of instruction in schools (Darling-Hammond, 2000; Temmerman, 1997). Shulman (1986) documented that teacher educator programs tend to emphasize three components: 1) understanding of the subject matter, 2) understanding how students learn and 3) understanding the pedagogical content or how students learn a subject matter. Framed from a music perspective, Wiggins (2007) remarked, "To become a music teacher, an individual must understand (1) music, (2) learning and teaching, and (3)

music learning and teaching” (p. 36). Music education students enroll in domain specific courses such as music history, theory, conducting, aural skills, private lessons and ensembles. Students also take classes that pertain to teaching and learning, some of which might include: educational psychology, diverse learners, legal and professional issues, and current issues in education. Pre-service teachers also tend to take courses that pertain to the pedagogy of music instruction; some of these courses might include methods courses, music for children, philosophy of music education, and student teaching. Of these three categories of instruction, researchers have cited that the pedagogy of music teaching is lacking (Ballantyne, 2006; Ballantyne & Packer, 2004; Conway, 2002).

For example, in a qualitative study by Conway (2002), the researcher interviewed and surveyed beginning music teachers ($N = 14$) and evaluated their perceptions of their music teacher preparation program at a large mid-western university. The participants remarked that the most valuable experience they had was student teaching. They also noted that while their instrumental methods courses taught them how to play various instruments, they lacked the pedagogical knowledge to teach their students how to play.

In a quantitative study by Ballantyne and Parker (2004), the researchers investigated the effectiveness of four strands of pre-service training: (a) pedagogical content knowledge and skills, (b) non-pedagogical professional knowledge and skills, (c) music knowledge and skills, and (d) general pedagogical knowledge and skills. The researchers surveyed 126 music teachers in Queensland, Australia and asked them to rank on a Likert scale the importance of 24 selected items that related to the four strands.

Some of these items included aural skills, conducting skills, composition skills, adapting to students' needs, addressing legal issues, and understanding of music teaching techniques. The participants also ranked the effectiveness of their teacher training institution's ability to address these items. The results of the study showed that pre-service music teachers felt they lacked instruction regarding the pedagogical content knowledge and skills of music teaching. These skills included, "knowledge of music teaching techniques, engaging students with music in a meaningful way, implementing the music curriculum effectively, assessing students' abilities in the various aspects of music, explaining and demonstrating musical concepts" (p. 302). The authors also cited several musical skills that needed to be addressed. Among these skills were musical creativity and composition:

As many people conceive of musical creativity as being somewhat innate, it is also difficult to address within the preservice program. Further research needs to be conducted to determine how best to respond to teachers' desire for musical creativity to be addressed more effectively in the preservice course. (p. 307)

Composition Pedagogy

The amount of composition instruction pre-service music educators receive is varied. In a review of teacher education programs from around the world, Royse, Addo, Klinger, Dunbar-Hall, and Campbell (1999) found that several music education curricula placed a high value on creativity and composition. For example, in Ghana, music education students were required to complete a final composition project before graduation (Royse et al., 1999). Music education students enrolled at the Sydney Conservatorium of Music needed to study one semester of composition as part of their

degree plan (Royse et al., 1999). Additionally, students composed and arranged music as part of the regular course work in their technology classes.

In the United States, pre-service music teachers might receive composition instruction as part of their assignments in theory class (Karpinski, 2000; McGaughey, 1974; Thornton et al., 2004). Some examples might include part-writing exercises, composing a counterpoint melody (Karpinski, 2000), or writing a composition in a particular style they are studying (Karpinski, 2000; McGaughey, 1974). On the other hand, not all theory professors use composition as part of their instruction. Some of their arguments against incorporating composition seem to mirror the reservations of in-service music specialists: insufficient class time, difficulty in assessing creativity and viewing composition as a subjective experience (Thornton et al., 2004).

Regardless of the amount of composition experience pre-service teachers have received, they might lack instruction centering on the pedagogy of composition (Bell, 2003; Morin, 2002; Strand, 2006; Thornton et al., 2004). Lehman (2000) highlighted the need for not only tangible experiences in composition and improvisation, but also pedagogical training in the field. He envisioned that “every prospective teacher will be expected to demonstrate not only the skills and knowledge called for in the [music] standards, including skills and knowledge in improvisation and composition, but also the ability to teach those skills and that knowledge” (p. 98).

To address this need for practical experience and pedagogical instruction in composition, several faculty members from the State University of New York at Fredonia

teamed together to teach a class that engaged pre-service music teachers in the act of composing (Thornton et al., 2004):

The overall goal of the project was to guide music education students to be better prepared to use and teach composition and improvisation in their future classrooms. We noticed that while composition and improvisation are clearly addressed in both the MENC National Standards and in the National Association for Schools of Music guidelines, only a small number of students seemed confident in their own abilities in these areas. Without confidence in their skills, the chances of these students encouraging improvisation and composition in their future students seemed remote. (p. 35)

The collaborative effort involved three faculty members: one music education and two music theory professors. Two sections of the class were offered during the 2001-2002 school year. Though the composition tasks were not specified, the curriculum asked students to write compositions that students might find in a typical elementary or middle school music classroom. As the course neared completion, students were required to submit a composition/improvisation portfolio that showcased their creative efforts. This included a taped recording of their improvisations, notated compositions complete with harmonic analysis, and pedagogical instructions to teach improvisation to their future students. All the assignments were completed on secondary instruments, as Thornton, the music education faculty member observed, “I found that in teaching composition and improvisation strategies students were far more willing to experiment on secondary instruments rather than on their primary instruments” (p. 37).

The authors considered the project a learning experience for not only the students, but also the faculty members. The theory professors gained insight into the expectations of music education students. Thornton gained insight from her colleagues regarding the theory curriculum and was challenged to apply pedagogically sound parameters that

engaged music education students who were enrolled in upper division theory courses. While the outcome of the project did not comment on pre-service teachers' instructional or compositional self-efficacy, the teacher-researchers deemed the collaborative project a success for the students. Thornton et al. (2004) observed, "The separation among music theory and music education classes has not been lost on our students, nor has it been lost in affecting how they learn" (p. 43). The results also suggested that when pre-service music teachers were given the opportunity they could apply their theory knowledge and creativity in meaningful ways. The authors surmised, "If the future students of these music education majors completed similar assignments, it would definitely enhance the musical offerings of the instrumental curriculum" (p. 42).

In an informal study by Reese and Hickey (1999), the researchers exposed pre-service music teachers and school students to internet-based composition experiences. The study utilized NETCOMM and MICNet, two online programs designed to enable music teachers to teach composition through technology. The programs had the capability of allowing an instructor to listen to students' work, offer feedback, and offer suggestions for revision. The researchers wanted not only to give pre-service teachers the opportunity to compose, but also to provide composition assistance to students. Through informal interviews and questionnaires the pre-service teachers remarked that they enjoyed composing and became better composers through the experience. Though the pre-service teachers offered comments and suggestions on students' compositions, the classroom students did not apply their instructors' suggestions or refine their products.

Kennedy (2004) investigated the compositional process of nine pre-service music

teachers enrolled in a Creativity in the Music Classroom course. Though the students had created simple pieces for their theory courses, the participants had not received any formal composition training prior to the study. The pre-service teachers were asked to complete three different tasks. The first task asked the students to compose music to a poem for voice and an acoustic instrument. The second required the participants to compose a variation of the melody “America,” using computer-based software. The last task invited the participants to write a programmatic composition, also using a computer. Qualitative data were collected through teacher-researcher observations, student journals, video, and student peer process evaluations. The results revealed that participants’ compositional processes seemed to reflect Wallas’ (1926) theory of the creative process: exploration, incubation, inspiration and revision. Though the participants’ musical training and compositional experience were varied, they “all demonstrated growth in the compositional craft and self-knowledge as a result of taking this course” (p. 39). This growth impacted their self-confidence to teach music to their future students. According to Kennedy (2004), “students who had had no previous formal exposure to composition left the course with the confidence that they could take what they had learned into the classroom” (p. 39).

Summary

The related literature in pre-service preparation documents a need for greater understanding of teaching teachers how to teach (Ballantyne, 2006; Ballantyne & Packer, 2004; Conway, 2002) and might be particularly true in the pedagogy of music

composition (Morin, 2002; Strand, 2006; Thornton et al., 2004). Though pre-service music teachers might write short pieces as part of their theory assignments (Karpinski, 2000; Kennedy, 2004; McGaughey, 1974; Thornton et al., 2004), students might lack tangible experiences composing (Bell, 2003; Morin, 2002; Strand, 2006). Researchers who have implemented composition within their coursework to pre-service teachers have found the pre-service teachers grow in their composition ability (Kennedy, 2004; Thornton et al., 2004; Reese & Hickey, 1999) and gain greater self-confidence in teaching composing to their future students (Kennedy, 2004). While the findings of Kennedy (2004) and Thornton et al. (2004) were qualitative in nature, the current study sought to measure participants' degree of confidence as composers and pedagogues of composition through both quantitative and qualitative analyses. Thornton et al. (2004) recommended using secondary instruments as a means of encouraging greater experimentation; similarly this study avoided primary instruments, favoring bass xylophones as the instrument choice. Furthermore, to help establish the connection between the composing experience and the pedagogy of composition, the tasks were based on structured activities that might be used within the elementary-intermediate classroom setting (Auh, 1995; Kaschub, 1999; Kennedy, 2002; Smith, 2004).

Pre-service Music Teachers' Attitudes and Views of Composition

Examining pre-service teachers' attitudes was important because it might influence how they learn to teach. Researchers have documented not only the impact of attitudes with non-music pre-service educators (Feiman-Nemser, 2001), but also those

aspiring to be music educators (Schmidt, 1998). A review of literature revealed that pre-service music teachers valued composition (Austin & Reinhardt, 1999), but like their in-service counterparts they felt it was not as important as other areas of music instruction and it was difficult to implement (Forsythe et al., 2007).

Austin and Reinhardt (1999) surveyed undergraduate pre-service music teachers ($N = 137$) and investigated their beliefs and values regarding various music education philosophy statements. Participants indicated on a Likert scale the degree to which each statement was true or valid and also whether the statement was effective in advocating for music in the public school curriculum. Of the 75 statements, pre-service teachers indicated that music's ability to *promote creativity* was the highest rated advocacy statement. Of the top statements that were deemed valid or truthful by the participants, *means of self-expression* was the third highest rated item and *promotes creativity* and *encourages imagination* had the same mean and were rated 7th out of 75 items. According to Austin and Reinhardt's (1999) study pre-service teachers seemed to value the importance of creativity and self-expression. However, in a more recent study Forsythe et al. (2007) found other facets of music education were deemed more important than composition and improvisation.

Forsythe et al. (2007) surveyed pre-service ($N = 52$) and teacher educators ($N = 27$) and had them rate several National Association of Schools of Music standards according to their perceived importance and learnability. The authors found that although participants valued musically creative activities, both pre-service and teacher educators rated composition and improvisation as the second lowest in importance out of

a possible 38 categories, and pre-service teachers ranked composition as the most difficult competency in terms of learnability (Forsythe et al., 2007).

Teachout (1997) asked pre-service ($N = 35$) and experienced teachers ($N = 35$) to evaluate the skills and behaviors required for successful music teaching. In a questionnaire 40 items related to effective teaching were grouped into three categories: Personal Skills (e.g. *self-control, leadership, confidence, sense of humor*), Teaching Skills (e.g. *maintaining student behavior, eye contact, student motivation*) and Music Skills (e.g. *piano skills, singing skills, conducting gestures, sight-reading ability*). The study revealed that pre-service and experienced music teachers believed behavior and personal skills to be more important than musicianship skills for successful teaching. Both groups ranked *piano skills* and *singing ability* low despite the emphasis placed on these skills within the undergraduate curricula (ranked 39 and 40 respectively out of 40). The category *creativity and imagination* was classified not as a musicianship skill, but as a personal skill and was ranked 19th out of 40 for pre-service teachers and much lower for practicing teachers, 30th out of 40. Creative music making skills such as composing or improvising were not listed as a category in the study.

Pre-service music teachers have been cited as having certain values and attitudes towards music composition that might affect their ability to learn to teach composition. In some studies, teachers valued creativity and self-expression (Austin & Reinhardt, 1999; Forsythe et al., 2007), but did not think composition and improvisation were as important as other facets of music education (Forsythe et al., 2007). Pre-service teachers have been found to perceive composition as being difficult to learn, not only for themselves, but

also for their future students (Forsythe et al., 2007). In the context of this study, examining these pre-conceived values toward composition might clarify pre-service teachers' preferences and perceptions of various composition tasks.

Self-Efficacy

According to Bandura (1997), self-efficacy refers to the “beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments” (p. 3). These beliefs could influence behaviors, self-concept, cognitive functions, emotional health, and ability to persevere through difficulties. Having a high degree of self-efficacy has also been shown to be essential to an individual's motivation to learn as well as to an individual's self-confidence (Bandura, 1997; Zimmerman, 2000). Having a low self-efficacy, however, might lead to negative thoughts about accomplishments, decreased self-esteem and even depression.

According to Bandura (1977), there are four major sources that can help shape efficacy beliefs: mastery experiences, vicarious learning, social persuasion and emotional arousal. Of these four categories, the most influential has been documented as mastery experiences (Usher & Pajares, 2008). Mastery experiences involve not only a synthesis of past successes and accomplishments, but also failures and disappointments. Success and achievement tend to bolster self-efficacy, while failure and disappointment tend to diminish self-efficacy beliefs.

Though not as influential as mastery experiences, vicarious learning also can have an influence on self-efficacy. Observing the success of others can have a positive effect

on self-efficacy; similarly, noticing the failures of others might hinder personal efficacy beliefs. According to Bandura (1977), “Seeing others perform threatening activities without adverse consequences can generate expectations in observers that they too will improve if they intensify and persist in their efforts” (p. 197). Examples of vicarious learning can occur through observation of both peer and adult models (Usher & Pajares, 2008).

Social persuasion is the third source of efficacy beliefs. According to Bandura (1977), “People are led, through suggestion, into believing they can cope successfully with what has overwhelmed them in the past” (p. 198). Self-efficacy beliefs might be strengthened through positive social persuasion in the form of verbal praise and encouragement; however, negative feedback might diminish self-efficacy. According to Pajares (2002), “it is usually easier to weaken self-efficacy beliefs through negative appraisals than to strengthen such beliefs through positive encouragement” (¶ 30). Social persuasion, however, might not be as influential as mastery experiences because typically no amount of encouragement will supersede past repeated failures (Bandura, 1977).

The fourth source of efficacy beliefs stems from emotional arousal. According to Bandura (1977):

Stressful and taxing situations generally elicit emotional arousal that, depending on the circumstances, might have informative value concerning personal competency. Because high arousal usually debilitates performance, individuals are more likely to expect success when they are not beset by aversive arousal than if they are tense and viscerally agitated. (p. 198)

Highly self-efficacious individuals, however, tend to approach problems which they believe they can solve with a sense of confidence and serenity; therefore, they might not

be inhibited by the anxiety, fear and worry that might otherwise plague someone with low self-efficacy.

General self-efficacy refers to overall confidence when encountering different challenging situations. Self-efficacy, however, can be compartmentalized into specific categories (Pajares, 1996). Such examples include creative self-efficacy and musical self-efficacy.

Creative Self-Efficacy

According to Beghetto (2006), “Creative expression, like other forms of behavior, seems to be influenced by self-judgments of one’s ability to generate novel and useful outcomes” (p. 447). Other researchers have also found a link between self-efficacy and creativity. For example, Ford (1996) theorized that having a strong sense of one’s perceived capability for performing a task is a vital component of fostering creativity. Furthermore, Tierney and Farmer (2002) found a link between self-efficacy and creativity, thus establishing creative self-efficacy as a unique construct.

Tierney and Farmer (2002) measured the creative self-efficacy of employees from two different firms. The participants in the first firm consisted of 584 full time employees who were considered blue-collar workers, such as machinists, technicians and line operators. The second sample involved 158 full time employees from a high tech firm that included accountants, program managers and business analysts. The purpose of the study was to determine what factors, such as job tenure, job complexity, education level and supervisor behavior, were the best predictors of creative self-efficacy. The

researchers developed a creative self-efficacy measure, which examined the participants' creative self-efficacy and job self-efficacy. The measuring instrument was rated on a seven-point Likert scale. The researchers discovered creative self-efficacy was a "distinct construct" (p. 1144) and thereby defined creative self-efficacy operationally as, "the belief one has the ability to produce creative outcomes" (p. 1138). The results of the study found that job tenure was negatively correlated with creative self-efficacy for the blue-collar workers, but there was little-correlation for the white-collar workers. The researchers surmised that working a routine job might reduce one's creativity. Another finding of the study indicated that an employee's job self-efficacy had an effect on one's creative self-efficacy; hence "multiple efficacies come into play for creative work" (p. 2002). This supported Bandura's (1997) notion that multiple efficacies may have an effect on creative performance.

Beghetto (2006) also researched the construct of creative self-efficacy, but examined it through the lens of education. The purpose of the study was to determine what factors influenced the creative self-efficacy of middle ($n = 697$) and high school students ($n = 625$). Most of the students were boys ($n = 668$; 51%) and were labeled as English language learners ($n = 825$; 62%) in which English was their second language. The researcher used a five-point Likert scale measuring creative efficacy. The efficacy items included such statements as: "(a) I am good at coming up with new ideas, (b) I have a lot of good ideas, and (c) I have a good imagination" (p. 450). The researcher also measured motivational beliefs, classroom experience, academic beliefs and participation in after-school activities. The results documented that students who had high creative

self-efficacy also had positive beliefs regarding their academic abilities and were significantly more likely to participate in after-school activities. Boys who were English speakers and who were older held higher perceptions of their creative self-efficacy than girls, English language learners and younger students. The results also documented that teachers could boost creative self-efficacy in students through positive feedback, which mirrored the value of social persuasion on one's efficacy beliefs (Bandura 1977). Yet, the study found that those students who had a high creative self-efficacy felt unheard by their teachers and that their teachers had "given up on them" (p. 454). The researcher surmised that dissatisfying experiences proved to be a motivational factor for students who were highly efficacious in their creative ability.

Creative Self-Efficacy in Music

Creative behaviors may require a high degree of self-efficacy. According to Bandura (1997):

Creativity constitutes one of the highest forms of human expression. Innovativeness largely involves restructuring and synthesizing knowledge into new ways of thinking and of doing things. . . . But above all, innovativeness requires an unshakeable sense of efficacy to persist in creative endeavors. (p. 239)

Such creative self-efficacy beliefs in music have been studied in the field of music improvisation (Davison, 2006; Wehr-Flowers, 2006) and the pedagogy of composition (Jeanneret & Cantwell, 2002; Peddell, 2005).

Davidson (2006) investigated the effect of improvisation instruction on students' self-efficacy and instrumental music. The study measured the improvisational self-efficacy of junior high children ($N = 76$) using two researcher-designed measurements.

The measurement instruments were given before and after 10 treatment interventions of theory-based improvisation instruction. After each session, the participants' improvisatory abilities were recorded and evaluated by experienced educators. The results indicated there were significant gains in the participants' improvisational self-efficacy as well as their performance ability.

In another improvisation study, Wehr-Flowers (2006) examined gender differences as it pertained to students' self-efficacy, anxiety and attitudes toward learning jazz improvisation. The participants ($N = 137$) included middle school, junior high, high school and college students as well as adults. They were all contributing members of various jazz programs. The participants completed a questionnaire that measured their degrees of confidence, anxiety and attitude as the dependent variables; the independent variables were gender, school level and instrument. The results were analyzed using a MANVOA, and a main effect was found for gender, finding that men had a higher self-efficacy for jazz improvisation than females.

The self-efficacy of improvisation is an emerging line of research. Studies documenting the compositional self-efficacy of students are limited, but can be found in the work of Peddell (2005) and Jeannerat and Cantwell (2002). For example, Peddell (2005) surveyed general elementary music classroom teachers ($N = 102$) in the state of Pennsylvania and investigated what activities they incorporated in their classroom and what influenced their opinions. Peddell (2005) found that teachers' instructional self-efficacy was a determining factor in influencing what activities teachers included in their classroom. Singing, beat competency and listening were the activities rated the highest

importance, but improvisation, composing and dictation ranked at the low end of the spectrum. Peddell (2005) cited that teachers lacked the confidence to teach composition because they lacked tangible experiences in creativity during their pre-service training:

Before preservice teachers develop strategies to teach activities, they need to experience the activities as they would be presented in an elementary general music setting. They need to understand what activities such as improvising, composing and dictation mean to elementary children. . . . They need to experience activities in a non-threatening environment where they feel safe to experiment. (pp. 100-101)

Jeannerat and Cantwell (2002) studied the compositional and instructional self-efficacy of students learning to teach composition. The sample included undergraduate music students ($N = 13$). Two students indicated they felt confident about their ability to teach composition due to their previous coursework in composition study. The remaining 11 students indicated they were not confident in their ability to teach composition because they did not feel confident as composers. The study engaged the students in three composition tasks that progressively increased in difficulty level. The first task had students compose a short piece on non-melodic percussion instruments using a rhythmic shell as their guide. The second task also involved a listening component. The participants first listened to a simple rhythmic motif and then were asked to expound upon it using two melodic and three non-melodic instruments in a group composition activity. After completing their piece, they listened to a composition by Beethoven that used the same rhythmic motif. The students discussed how they developed the motif and compared and contrasted it to Beethoven's elaboration. The third composition task petitioned students write a "substantial work" (p. 37). Each group was given several task parameters: meter, rhythm patterns, and a limited number of melodic and non-melodic

instruments. The groups were given one-and-a-half hours to complete their compositions and were pleased with their products. The researchers gathered data qualitatively through interviews and class discussions. When the researchers asked the participants to comment on what helped them gain confidence to compose and teach composition, the responses were varied:

- Actually, doing the activities rather than talking about them – I can see how I could develop my composition skills
- Being presented with a range of starting points
- You need to give students specific guidelines
- Learning about the use of parameters and how setting parameters helps students do the exercise
- It's now very obvious how you can integrate composition with performing and listening: it doesn't have to be separate
- I can see the relationship between developing the concepts and using composition. I have more of an idea of how composition can fit into the whole music program
- You don't have to use notation – students don't have to be able to use traditional notation to compose (p. 39)

The participants' responses revealed a change in their attitudes toward teaching composition (Jeannerat & Cantwell, 2002) and suggested the importance of learning through experience; the composition experience benefited not only their compositional self-efficacy, but also the participants' self-efficacy as pedagogues of composition.

Summary

Self-efficacy beliefs have been theorized to rest at the core of one's ability to

complete a task. Someone who has high self-efficacy may be more confident, determined, and up to the challenge; however, individuals with low self-efficacy might approach a difficult task with uncertainty, anxiety, and fear. Bandura's four sources of self-efficacy include mastery experiences, vicarious learning, social persuasion and emotional arousal. An individual's previous experiences may be influential in forming efficacy beliefs. While general self-efficacy refers to one's overall confidence when encountering various situations, self-efficacy can be observed in various fields of research including, but not limited to, creative self-efficacy and musical self-efficacy.

The current study measured two efficacy beliefs of pre-service music teachers: their self-efficacy as they viewed themselves as composers and their instructional self-efficacy as teachers of composition. Bandura (1997) noted that mastery experiences were the highest source of influencing one's efficacy beliefs. This study offered several compositional experiences and sought to measure which task experience best influenced their efficacy beliefs as composers and pedagogues of composition. According to Greenberg (1970):

People develop their self-concepts in music from the kinds of experiences they have had in dealing with music. It is logical to infer that to produce a positive self-concept in music, it is necessary to provide experiences that show individuals they are doing well in music. (p. 58)

Research by Jeannerat and Cantwell (2002) and Peddell (2005) corroborated the importance of meaningful and contextual learning experiences as a means of impacting creative self-efficacy beliefs. The current study adopted and employed this "learn by doing" approach.

CHAPTER 3

METHODOLOGY

The purpose of this study was two-fold: 1) to compare the effects of three different composition tasks with varying degrees of structure on pre-service music teachers' creative self-efficacy as composers and their instructional self-efficacy as pedagogues of composition; and 2) to describe through pre-service music teachers' talk perceptions of composition and their experiences completing the three composition tasks. The study was guided by the following research questions:

1. What was the effect of compositional structure on pre-service music teachers' compositional self-efficacy?
2. What was the effect of compositional structure on pre-service music teachers' self-efficacy to teach composition?
3. How did pre-service teachers talk about composition and their experiences with compositional activities?

This chapter reviews the study's methodology. It includes a discussion of the participants, research design, measurement tools and procedures for both the pilot and the main study.

Research Participants

The participants in this study ($N = 29$) were all undergraduate pre-service music educators. Originally, 37 pre-service teachers volunteered to participate in the study, but

only 29 fit the criteria. The criteria parameters for the study are defined later in this chapter. The participants were enrolled at three different university/college institutions in northwestern United States. The three institutions varied in size: small, medium and large. As of 2011-12, the small university consisted of 1451 total undergraduate students, of which 46 were registered as music majors. Of these music majors, 36 were registered as music education majors, and 23 participated in the study, but only 19 fit the criteria of the current study. The medium sized college consisted of 3,153 total undergraduate students of which 220 were registered as music majors. Of these music majors, 85 were registered as music education majors, and three indicated interest in participating, but only two students fit the criteria for the study. The large university consisted of 8,367 total undergraduate students, of which 409 were registered as music majors. Of these music majors, 40 were registered as music education majors. The participants at this university were taken from a convenience sample from an intact classroom, Introduction to Music Education. The reason these students were taken from an intact classroom was because these students specifically met the criteria for the study. There were 14 students in the class of which 11 students chose to participate in the current study. However, three participants' compositions were not replicated, thus a total of 8 participants' data contributed to the study's population.

The total population in the study consisted of 29 undergraduate music education majors: 12 freshmen, 8 sophomores, 7 juniors and 2 seniors. The participants had completed an average of two semesters at their schools. Sixteen of the students were female, and 13 were male. Their average age ranged from 19 - 23 ($M = 19.21$, $SD =$

1.21). Ten participants indicated their primary instrument was voice. Piano was the primary instrument for five students. Two participants indicated French horn was their primary instrument, and two were saxophonists. There were two euphonium players, and two flautists. The last six participants indicated their primary instrument was either percussion, clarinet, guitar, oboe, trumpet or trombone. Thirteen of the students indicated they wished to be secondary band instructors. Eight of the students were declared choral majors. Two participants were general music education majors. Three participants indicated a double emphasis of choral and instrumental music, two students indicated a double emphasis of choral and general music education, and one pursued a double major in band and general music education.

The participants had varying degrees of composition experience. Eight of the pre-service teachers indicated they had no composition experience at all. Ten others mentioned that they had minimal composition experience, stemming from theory assignments either in high school or college. Six participants wrote that they also had minimal composition experience through writing, “a song on a computer,” or “a simple piano song for a flash video” or “for an English/honors class,” or “I write for emotional reasons.” Three students indicated they had had composition lessons at the collegiate level. One student mentioned he liked to compose for fun and said he composed several chamber pieces and a clarinet concerto. One student mentioned that he had experience writing songs on acoustic guitar.

All of the participants were currently enrolled in, or had previously taken an introduction to music education course. They had not received formal structured lesson

plan sequencing and had not completed any music education class beyond the introductory course. Since compositional structure was one of the independent variables it was assumed that students who had structured lesson-planning instruction might possibility skew the results of the study. Any students who had formal lesson plan instruction or had taken a music education class beyond the introduction to music education class were still allowed to complete the composition tasks, but their data were not recorded. Four students—three from the small university and one from the medium-sized college—completed the tasks in the study, but their data were not included in the study. All four of these students had previously taken advanced methods classes and did not fit the parameters of this study.

The study was submitted and approved by the Internal Review Board at each university (see Appendix A). Each participant signed a consent form (see Appendix B). Students were recruited at the small university on October 6, 2011 at the university's student sponsored NAFME (National Association of Music Educators) meeting. Students at the medium-sized college were recruited on October, 27, 2011 at their NAFME meeting. Students at the large university were a convenience sample recruited from an intact classroom—Introduction to Music Education—on November 3, 2011. Participation in the study was voluntary and had no impact on the participants' grades. The participants were told they could drop out at any time, but all elected to participate throughout the duration of the study.

Research Design

According to several researchers, the use of qualitative research methodology is the preferred means of understanding the phenomenology of creativity (Henderson, 2004; Nelson, 2005; Nelson & Rawlings, 2009); however, qualitative research might not provide the descriptive synthesis of data that is available through quantitative measures. Data were collected via a measurement instrument that quantitatively measured participants' compositional and instructional self-efficacy. Additional data were gathered through a survey research interview structured to capture how pre-service teachers talked about composition and their perceptions about engaging in compositional activities. The data from the quantitative portion of the study were analyzed with two repeated-measures ANOVAs using IBM SPSS (version 20), and the survey research data were obtained through one-on-one semi-structured interviews with three randomly chosen participants.

Quantitative Measurement Instrument

One week after the students were told about the study, the informed consent forms were collected, and participants answered demographic questions comprised of gender, age, rank in school, major degree emphasis, and primary musical instrument. They were also asked if they had composed music before and, if so, to describe their experience. Next, participants answered two dependent variable questions to measure their degree of confidence as composers and their degree of confidence teaching their future students how to compose. The Compositional and Instructional Self-Efficacy Questions (CISEQ) were researcher-designed measurement tools in which participants rated the degree to

which they agreed or disagreed with the following statements: 1) I feel confident I can compose music, and 2) I feel confident I can teach my future students how to compose a piece of music (see Appendix C). A 10-point Likert scale was used, and participants circled their responses ranging from 1 (*strongly disagree*) to 10 (*strongly agree*).

Procedures

Participants engaged in three composition tasks, composing their pieces on a Peripole-Bergerault bass xylophone with two mallets. The bass xylophone was diatonic and had a 1.5 octave range: C0 to A1. Each task was conducted at the university in which the students were enrolled. It was hoped that the interval between each composition task was to be seven days; however, this proved to be impossible due to students' schedules and holidays. Twenty-one students were able, however, to complete one task per week, with a seven day interval between tasks. The other eight students completed each task with an average of 8 days between tasks (range = 5 - 14 days, $SD = 2.17$ days). Before each composition task began, participants were invited to explore the bass xylophone in an improvisatory fashion to establish familiarity and comfort with the instrument to eliminate a novelty effect. The three composition tasks varied in the amount of structure as referenced by Strand and Newberry (2007): unstructured, moderately structured and heavily structured.

Composition Tasks

The first composition task invited the participants to compose a piece of music on

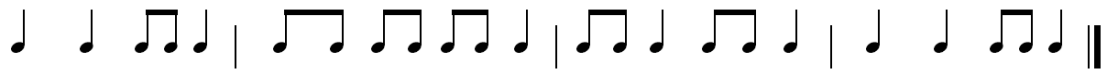
a bass xylophone without any guidelines or structure (see Appendix C for composition task structures). The participants had 10 minutes to complete each composition, as previous research has indicated this would allow sufficient time to compose each piece (Kratus, 1994; Smith, 2004). Similar to Kratus' (1989) study, the participants were reminded after 8-minutes that they had 2 minutes to finish their compositions. For consistency, all participants were asked to use the entire 10 minutes. If they were finished before the 10 minutes, they were asked to continue working on their composition. All the tasks were completed at the students' respective universities.

The second composition task was moderately structured. It required students to compose music to a poem:

See the stars up in the sky
Shining brightly through the night
Light falls down—upon me
Giving life for all to see

In an effort to encourage their creativity, participants were specifically not told to “put music to the words” or “describe the poem with music” but were merely instructed to compose a short piece of music on a bass xylophone using the poem. Before starting the poem composition, the researcher asked the participants to recite the poem aloud to verify their basic reading ability. All participants could read the poem without any difficulty.

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



Participants could use any pitches (or sounds) they deemed appropriate, but were confined to the given rhythm pattern. Before starting the composition, the researcher asked the participants to clap the passage to verify they could read the rhythm. Each participant clapped the rhythm correctly.

After 10 minutes, the participants played their composition two times to ensure it could be replicated (Kratus, 1989). Details on the replicability procedures are explained later in this chapter. The compositions were videotaped with a Sony DCR-HC52 digital video camera. After each composition, participants answered the same two dependent variable questions (CISEQ) that were administered pre-treatment. Hence, the participants completed the Compositional and Instructional Self-Efficacy Questions a total of four times: once before they began the composition tasks, and once immediately after they completed each of the three composition tasks. Lastly, three participants were randomly selected by drawing names out of a hat to participate in a semi-structured one-on-one interview.

Data Analysis for the Main Study

Quantitative Measuring Instrument

The data from the participants' responses from the two Compositional and Instructional Self-Efficacy Questions were entered into IBM SPSS for Windows (version 20) and analyzed through two repeated-measures ANOVAs. The results provided the

context to answer research questions one and two: “What was the effect of compositional structure on pre-service music teachers’ compositional self-efficacy?” and “What was the effect of compositional structure on pre-service music teachers’ self-efficacy to teach composition?”

Survey Research Interviews

Three participants were randomly selected to participate in semi-structured one-on-one interviews. They were randomly selected by drawing names out of a hat. Participants were told the interview was strictly voluntary, but each participant agreed to be interviewed. The one-on-one interviews were conducted in an attempt to answer the third research question, “How did pre-service teachers talk about composition and their experiences with compositional activities?”

All the interviews were conducted face-to-face and were recorded with a Sony DCR-HC52 digital video camera. The interviews took place immediately after the participants finished the third composition task and on the university campus at which the participant was enrolled. All three interviews were held in the same room in which they completed their composition tasks. The interviews lasted 25-30 minutes.

The interviews started with what Brunner (2006) labeled “grand-tour” questions which consisted of general and open-ended inquiry (p. 358). These were subsequently followed by “minitour” questions (see Appendix F the interview questions) that stemmed off themes and topics that arose from the grand tour questions (p. 358). Each interview started with the following broad questions to understand the participants’ past musical

experiences: “Tell me about your musical background.” and “What drew you to consider a degree in music education?” Then the interview questions sought to reveal their thoughts on composition: “What do you think about composition? What does it mean to be a composer?” and “Have you ever tried to make up a piece of music before? If so, tell me about it.” The questions then focused on the composition tasks they completed: “Talk about the experience” as well as their perception: “Which composition task was hardest? Easiest? Which task allowed you to be the most creative?” Finally, the questions focused on the participants’ self-efficacy as composers and their degree of confidence teaching composition in the future: “Did this experience change the way you think about composing music?” “Did this experience make you think anything differently about teaching composition to your future students? If so, talk about it.” The interview questions are listed in Appendix E.

Emergent Themes and Categories

The interviews were transcribed and member checked with each participant. They all ensured the transcript reflected what they intended to say during the interview. Next, the transcripts were analyzed and coded for emergent themes. The coding process was based upon the work of Bogdan and Biklen (1998):

As you read through your data, certain words, phrases, patterns of behavior, subjects’ way of thinking, and events stand out. Developing a coding system involves several steps: You search through your data for regularities and patterns as well as for topics your data cover, and then you write down words and phrases to represent these topics and patterns. These words and phrases are coding categories. (p. 171)

The transcripts were printed, and during the analysis, key words and phrases were underlined. These words and phrases from each transcript were then combined and categorized. Next, each transcript was marked with several colored highlighters to delineate the major trends. These trends were grouped and summarized into three major themes with several sub-categories: (a) preconceived beliefs about composing music, (b) insights gained about composing music, and (c) impact on teaching.

Role of the Researcher

Inherent in any interview-based study there is the possibility of researcher biases and prejudices. This study was no different. I researched music composition because it was and still is an area of significant interest to me. I have been composing music since second grade and have been writing and improvising ever since. I was a composer before I became a music educator, thus my creativity has impacted and informed my teaching. As a music educator, I have sought to imbue creative experiences within my classroom, but I have also encouraged others to do so as well. While this might have aided my scholarly research and helped me understand compositional tools and methods, it also might unintentionally have skewed my findings. Due to my inherent interest to see others be creative, I might have unconsciously biased my questioning, interpreting and summarizing of the participants' responses. Steps were taken to try to avoid such bias by having my interview questions, transcripts, and coding checked by a peer review panel. While this might have helped eliminate some bias, it could never eliminate it completely.

As with any new experience we might have, it can only be viewed through the lens of our own understanding.

Validity

Measuring Instruments

Compositional and Instructional Self-Efficacy Questions

A copy of the demographic form, the Compositional and Instructional Self-Efficacy Questions (CISEQ), and the procedures of the study were sent to three experts to establish content validity. The panel included an expert in Orff methodology, an expert in the field of creativity and teacher preparation, and an expert in the field of music composition research. The expert in Orff methodology had over five years of experience teaching in the field of music education at the collegiate level. He had completed his Orff certification and had presented at numerous workshops and conferences. He also held a D.M.A. in piano performance as well as a Ph.D. in music education. The expert in the field of teacher preparation had taught at higher educational institutions since 1994. Her research focused on children as composers and she has been an active clinician in the field of children's creativity. Her dissertation examined the qualitative and quantitative relationships of children's creative musical thinking. Additionally, she had written articles on curricular reform in music education and teacher preparation. The expert in the field of composition research in music education had served as the director of music education for a large university for over 10 years. He had been an active clinician,

performer and composer. He had many publications and articles focusing on creative assessment, composition and fostering creative thinking.

The experts were petitioned to evaluate the study's design, measuring instrument, and procedures (see Appendix C). They answered 10 content validity questions to determine: (a) the appropriateness of the composition tasks, (b) the clarity of the questions and study procedures, and (c) the capability of the study to capture the compositional and instructional self-efficacy of the participants. The feedback from the experts' responses was synthesized and several changes were made to the measuring instrument and study design.

The content validity panel first suggested that changes be made to the demographic questions. The experts suggested that asking participants how many full semesters they had been enrolled in their undergraduate program was a better way of capturing their educational progress than asking, "How many years have you been enrolled as an undergraduate student?" Additionally, the content validity panel suggested asking the participants if they had composed before and to have them describe their experience. In an effort to improve the layout of the Compositional and Instructional Self-Efficacy Questions (CISEQ), it was recommended that additional space needed to be added between the question and answer on each item. Next, it was suggested that the procedures for each task should be clearly written on the measuring instrument to eliminate any confusion across tasks. Also, the wording on the Compositional and Instructional Self-Efficacy Questions (CISEQ) originally read, "I feel confident I can

compose a simple piece of music,” but it was suggested that the word “simple” be removed as it might devalue their creative work.

Interview Questions

Three experts within the field of music composition in music education served as a content validity panel for the interview questions and the replication questions. Two of the professors were the same experts in composition who evaluated the measuring instrument. Both of these professors had conducted numerous presentations and written many articles on creativity, creative thinking and music composition within the context of music education. A third expert was petitioned to serve on the validity panel and had a substantial background in music composition. Her dissertation focused on elementary children as they completed six music composition tasks. She had been an active educator, clinician, scholar and author, focusing on musical creativity and women’s studies.

The content validity panel reviewed the questions to help: (a) eliminate any researcher bias, (b) determine the appropriateness of the questions, (c) clarify the questions, and (d) verify the capability of the questions to capture the participants’ thoughts and perceptions of composition and experiences with composition activities. The panel’s comments were considered, and several changes were made to the interview questions. First, several questions were removed because of lack of clarity. For example, one question stated, “What kinds of assumptions might you have about composing music?” This question was too vague and was rephrased, “I am really curious to know

what you think about composition. For example, what skills does it take to write music?” Other questions were rephrased because they were leading and suggested researcher bias. For example, the question, “Did one of the three, more than the others, change your thinking about being able to compose?” was removed due because it was a biased and leading question. Finally, some of the questions were rearranged to keep the interview flowing and in a sequential order (see Appendix F interview questions).

Peer Review for Emergent Themes and Categories

A peer review panel reviewed the themes and codes from the transcriptions from the interviews. The panel consisted of two professors who were experts in the field of qualitative research in music education and had substantial background working with participants in an interview setting. Her dissertation focused on music education within urban settings. Her research interests included intercultural competence training, elementary music and liminality. The second expert was an assistant professor at a large university in the southwestern United States. He taught undergraduate courses on instrumental music education and graduate classes on qualitative research and sociology. His dissertation focused on gerontology and adult music education and he was an active clinician and scholar.

The content validity panel reviewed the interview transcripts to determine if the themes and codes emerged from the interviews were valid. The three themes were: (a) preconceived beliefs about composing music, (b) insights gained from composing music, and (c) impact on teaching. Responses from the panel were, considered, and several

changes were made to coding categories. Under the theme of “preconceived beliefs about composing music,” the category of confidence was changed to confidence and lack of confidence. Embedded within this category were two sub-categories, lack of confidence composing music and lack of mastery skills. The theme of “insights gained creating music” contained the subcategories of enjoying composing music, finding a process, and assumptions that were challenged. The theme of “impact on teaching” contained the following categories; value of teaching composition, beliefs about creativity, and insights about teaching.

Replicability Procedures

A review of literature indicated the need for a composition to be replicated to differentiate it from improvisation; however, information regarding replication procedures seemed to be lacking. Replication procedures were used during the pilot study in which three graduate students reviewed a video tape of each composition and verified that each performance was replicated. However, the procedures were informal and not well documented. Thus to this end, the researcher designed a rubric with three questions aimed at establishing replicability for the main study. The first question asked external judges to document how many pitch differences there were between each performance. The second question asked the judge to discern how many rhythmic differences there were between the two performances. The last question asked if the judge thought the two performances were representative of the same composition (See Appendix D for the first replication rubric).

The rubric was submitted to a content validity panel which consisted of three experts within the field of music composition in music education. These three experts were the same individuals who served on the content validity panel for the interview questions. Each expert thought the first two questions—focusing on the pitch and rhythm errors—would ultimately be distracting for the judges. Instead, they all favored a Gestalt or holistic approach and suggested asking only one question, “Were the two performances representative of the same composition?” Next, the content validity panel advised finding consensual agreement between three graduate students in music education through inter-judge reliability. Thus, the final version of the replication questions had one question, “Were the two performances representative of the same composition?”, that was used for each of the three composition tasks (see Appendix E for the final version of the replication questions).

A DVD of all the composition tasks was sent to three music education graduate students to verify the replication procedures. Two students were Ph.D. students and one was a Masters student. They were enrolled at a large university in the southwestern region of the United States. The three graduate students listened to each composition independently to verify replication of each task and to verify whether each participant used the rhythmic pattern specified in the rhythmic task. The graduate students listened to no more than seven participants per day to avoid listener fatigue. Only compositions that received unanimous agreement (100%) between the three judges were accepted. Originally, 33 participants had participated in the main study; however, through

replication procedures four students were eliminated. The judges also verified that the rhythmic pattern as dictated by the rhythmic task was applied.

Field Test

Before the pilot or main study was initiated, a field test was conducted to determine the clarity of the procedures, script, demographic form and Compositional and Instructional Self-Efficacy Questions. Four undergraduate pre-service music students from a large southwestern university reviewed the materials. These students were enrolled in a similar class as the participants in the main study. The field test individuals did not participate in the pilot or the main study. The students found no problems with the layout, procedures, or wording. They all surmised they could accomplish each composition task and could accurately answer the dependent variable question. The participants of the field test were asked if they felt that 10 minutes was sufficient time to compose a piece of music on bass xylophone. The pre-service teachers said they felt they could compose a piece in the allotted time. Particular attention was drawn to the wording of the self-efficacy questions: “I feel confident I can compose a piece of music” and “I feel confident I can teach my future students how to compose a piece of music.” The field test participants did not ask for a definition of the word “compose” and seemed to understand the term’s meaning and context. Since no objections were raised, changes were not made to the measuring instrument or study protocol.

Pilot Study

A pilot study was conducted to help guide and inform the main study. The pilot study occurred during the 2010 fall semester at a large southwestern university. The pilot study was reviewed and accepted by the IRB at the university. A convenience sample was taken from an intact music education class. There were 31 students enrolled in the class, but due to absenteeism only 22 or 68% of the students participated in the reliability portion of the study ($N = 22$). All the participants signed a consent form indicating their participation in the pilot study. The sample consisted of 2 freshmen, 12 sophomores, 4 juniors and 4 seniors. The average number of semesters completed by the participants was five. Nine of the students were female, and 13 were male. Their average age was 21.04 (range from 19-32, $SD = 3.06$ years). All the students declared music education as their major. Twelve of the participants indicated they were secondary choral majors, 9 were secondary instrumental and one was undecided. Eleven participants indicated that voice was their primary instrument. Percussion was the primary instrument for two participants. The other 9 participants comprised one of the following primary instruments: viola, violin, cello, trombone, clarinet, oboe, trumpet, tuba, or trumpet.

Reliability of the measuring instrument was established through test-retest procedures. Upon consent gathering, the participants completed the demographic form and answered the two dependent variable self-efficacy questions (CISEQ). A week later, the same Compositional and Instructional Self-Efficacy Questions (CISEQ) were administered and the results were input into SPSS to estimate reliability across the two administrations using IBM SPSS (Windows version 20).

Table 1

Test-Retest Reliabilities for the two Dependent Variable Questions for the Pilot Study

Question Item	<i>Pearson r</i>
1. I feel confident I can compose a piece of music	.83
2. I feel confident I can teach my future students how to compose a piece of music.	.88

* Note: $N = 22$.

The test-retest reliability for the first item, “I feel confident I can compose a piece of music,” was $r = .83$. This was an acceptable level of consistency. For the second item, “I feel confident I can teach my future students how to compose a piece of music,” the test-retest reliability was slightly higher, $r = .88$ (see Table 1).

Of the 22 students who participated in the test-retest pilot study, four students were randomly selected to complete the three composition tasks. Of these four students, three volunteered to participate in the semi-structured case study interviews. The participants completed the composition tasks in a counter-balanced order. They worked independently and had 10 minutes to complete each composition. Each piece was played two times and videotaped. Upon completing all three of the tasks, the participants were asked if they perceived the task structure of the rhythm and poem activities to influence their creative decision making within the unstructured task. The participants did not perceive any transfer. Later, three graduate students viewed the video to ensure the participants replicated their composition and that the composition matched the task

design. After completing each task, the participants answered the two self-efficacy measuring instrument questions. The three students were interviewed in December, 2010. The interviews lasted approximately 22 minutes and were video recorded. The interviews were transcribed and the transcripts were member checked. Major themes and categories that emerged from the interviews were grouped and analyzed.

Additional Participants

Having only four participants proved to be an insufficient sample size for statistical analyses, therefore, additional subjects were recruited in February, 2011. These additional participants had not yet received formal structured lesson plan training. Three of the participants were taken from the first recruitment pool and had already completed the demographic questionnaire and the first administration of the CISEQ, but had not participated in any composition task. An additional 8 participants were recruited for the study. Thus, the total population for the quantitative analysis portion of the pilot study was 15 participants. There were 7 males and 8 females. The average age was 19.93 ($SD = 2.22$ years, range = 19-25). The participants consisted of one freshman, 11 sophomores and 3 juniors. They had completed an average of 3.06 ($SD = .85$, range = 1-5 semesters) full semesters toward their undergraduate degree in music education.

The participants in the pilot study had varying degrees of composition experience. Ten of the participants indicated they had composed before. Four had only minor composing experience through theory classes or songwriting; only one participant remarked that s/he had substantial composing experience. These participants completed

all three composition tasks in a counter-balanced order, while being tape-recorded and filled out the CISEQ after each task. The participants, however, completed their tasks in different rooms and at different times than the previous subjects, thus increasing the risk for history and implementation threats. Steps were taken to ensure this was corrected for the main study. The results for the pilot study can be found in Appendix G.

Order Effect for Pilot Study

Even though the participants in the pilot study completed the tasks in a counter-balanced order, the order in which each participant completed each task was investigated to monitor a possible order effect. The means for each grouped task order were calculated for each dependent variable question and analyzed descriptively.

Table 2

Means of Compositional Self-Efficacy Grouped in Task Order

Group Task Order	Task 1	Task 2	Task 3
Rhythm, Poem, Unstructured	9.00	9.33	9.67
Rhythm, Unstructured, Poem	4.00	4.50	6.50
Poem, Rhythm, Unstructured	5.50	6.50	8.00
Poem, Unstructured, Rhythm	8.00	8.67	9.00
Unstructured, Rhythm, Poem	6.67	7.33	7.67
Unstructured, Poem, Rhythm ⁺	9.00	9.00	9.00

Note: N = 15. +No order effect.

Table 3

Means of Instructional Self-Efficacy Grouped in Task Order

Group Task Order	Task 1	Task 2	Task 3
Rhythm, Poem, Unstructured	7.33	7.33	8.33
Rhythm, Unstructured, Poem ⁺	5.00	4.00	6.00
Poem, Rhythm, Unstructured	4.50	6.00	7.50
Poem, Unstructured, Rhythm	5.33	6.00	6.67
Unstructured, Rhythm, Poem	4.00	5.67	6.00
Unstructured, Poem, Rhythm ⁺	7.50	7.00	7.50

Note: $N = 15$. ⁺No order effect.

Regarding the compositional self-efficacy question, an order effect seemed most pronounced for the poem, unstructured, and rhythm group. Only one task group order appeared to have no order effect: unstructured, poem and rhythm (see Table 2).

Regarding the instructional self-efficacy item, no clear order effect was observed with the rhythm, unstructured, poem group or the unstructured, rhythm, and poem group. An order effect was deemed possible for the other groups (see Table 3). Since an order effect was not evident with the unstructured, poem, rhythm group for both dependent variable questions, it was determined that this should be the order used to guide the main study.

Summary of Pilot Study

The pilot study informed the procedures and data collection for the main study. First, the presence of an order effect of the composition conditions was problematic and violated the parameters of a repeated-measures ANOVA. Since no order effect was observed for the *unstructured*, *poem*, and *rhythm* task sequence, this order was chosen for the main study. Second, the pilot study revealed that more formal replication procedures were needed. During the pilot study graduate students listened to the compositions, but did not complete a form or rubric indicating their responses; they informally verified that all the compositions were replicated. Finally, the pilot study provided insight and practice which helped guide my ability to interview the participants. I became more confident as an interviewer and learned how to ask questions more clearly, read body language and interpret their response. I also learned that I should be more conversational during the interview, which in turn might enable the participants to feel comfortable and talk freely.

CHAPTER 4

RESULTS

The purpose of this study was two-fold: 1) to compare the effects of three different composition tasks with varying degrees of structure on pre-service music teachers' creative self-efficacy as composers and their instructional self-efficacy as pedagogues of composition; and 2) to describe, through their talk, the participants' perceptions of composition and their experiences after completing the three composition tasks. This chapter describes the findings of the study. It is organized into four sections. The first section reestablishes reliability for the main study and the next three sections answer the research questions that guided the study.

For the first two research questions, "What was the effect of compositional structure on pre-service music teachers' compositional self-efficacy?" and "What was the effect of compositional structure on pre-service music teachers' self-efficacy to teach composition?" data were analyzed using descriptive statistics and tested for mean differences with repeated-measures ANOVAs. For the third research question, "How did pre-service teachers talk about composition and their experiences with compositional activities?" results were analyzed through themes and codes from the transcriptions of the interviews.

Reliability for the Main Study

Though reliability for the measuring instrument was established in the pilot study,

the student population of the main study consisted of a different demographic and was located in a different region in the United States. Thus, test-retest reliability was reestablished. One week after the participants completed the first administration of the CISEQ the participants answered the two dependent variable questions again and the results were inputted into IBM SPSS (Windows version 20). Reliability was checked across the two administrations.

Table 4

Test-Retest Reliabilities for the two Dependent Variable Questions for the Main Study

Question Item	<i>Pearson r</i>
1. I feel confident I can compose a piece of music	.94
2. I feel confident I can teach my future students how to compose a piece of music.	.89

* *Note:* $N = 29$.

The test-retest reliability for the first item, “I feel confident I can compose a piece of music,” was $r = .94$. This was an acceptable level of consistency. The second item, “I feel confident I can teach my future students how to compose a piece of music,” the test-retest reliability was slightly lower, $r = .89$ (see Table 4), but it was still an acceptable level of consistency.

Research Question 1

The first research question, “What was the effect of compositional structure on

pre-service music teachers' compositional self-efficacy?", was answered through descriptive analysis and use of a repeated-measures ANOVA. The data were first checked for statistical assumptions. The assumption of normality was met for each dependent variable question using the 95% confidence interval multiplied by the standard error of skewness and kurtosis (See Table 5).

Table 5

Skew, Kurtosis and Standard Error for Compositional Self-Efficacy

Question Item	<i>Skew</i>	<i>S.E.</i>	<i>Kurtosis</i>	<i>S.E.</i>
No_task administration	.28	.43	-.96	.85
Unstructured Task	.31	.43	-.27	.85
Poem Task	.01	.43	-.29	.85
Rhythm Task	-.02	.43	-.81	.85

Note: N = 29

Table 6

Means, Standard Deviations and Range for Question #1: Compositional Self-Efficacy

Task Item	<i>M</i>	<i>SD</i>	Min.	Max
1. No task administration	5.40	2.51	2.00	10.00
2. Unstructured task	6.69	1.83	3.00	10.00
3. Poem task	6.95	1.68	3.00	10.00
4. Rhythm task	7.34	1.76	4.00	10.00

Note: N = 29.

The data met the assumption of independence because each participant completed each task alone. Data were analyzed descriptively through means, standard deviations and ranges, and comparisons were made with a repeated-measures ANOVA.

For the compositional self-efficacy question, the rhythm task was rated highest ($M = 7.34$, $SD = 1.76$, range = 4-19). Second highest were the poem task ($M = 6.95$, $SD = 1.83$, range = 3-10) followed by the unstructured task ($M = 7.69$, $SD = 1.76$, range = 3-10). The lowest mean was the initial pre-task administration of the measuring instrument ($M = 5.40$, $SD = 2.51$, range = 2-10) (see Table 6 for the means, standard deviations and range for Research Question 1: Compositional self-efficacy). It should be noted that the means progressively increased as the participants completed each composition task.

The data for the compositional self-efficacy dependent variable question failed Mauchly's test of sphericity, $W = .53$ $\chi^2(5) = 16.92$, $p < .01$. The Greenhouse-Geisser correction was made to adjust the degrees of freedom (see Table 7). Using an alpha level at $p < .05$, significant mean differences were found that had a moderately strong effect size $F(2.11, 59.10) = 22.19$, $p < .000001$, $\eta_p^2 = .44$ (Ferguson, 2009). Post hoc tests using a Bonferroni correction found statistically significant mean differences between the pre-task administration of the measuring instrument ($M = 5.40$, $SD = 2.51$, range = 2-10) and all three composition tasks: rhythm task ($M = 7.34$, $SD = 1.76$, range = 4-10, $p < .01$), poem task, ($M = 6.95$, $SD = 1.68$, range = 3-10, $p < .01$) and unstructured task ($M = 6.69$, $SD = 1.83$, range = 3-10, $p < .01$) (See Table 7 for the results of the repeated measures ANOVA for Research Question 2: Compositional self-efficacy).

Table 7

Results of Repeated Measures ANOVA for Question #1: Compositional Self-Efficacy

Source	<i>df</i>	SS	MS	<i>F</i>	<i>p</i> <	η_p^2
<u>Condition</u>						
Sphericity Assumed	3	61.84	20.61	22.19	.000001	.44
Greenhouse-Geisser	2.11	61.84	29.30	22.19	.000001	.44
<u>Error</u>						
Sphericity Assumed	84	78.04	.93			
Greenhouse-Geisser	59.10	78.04	1.32			

Note: N = 29.

Statistically significant mean differences were also found between the unstructured task and the rhythm task ($p < .05$). Mean differences were not found between the poem task and the rhythm task ($p = .18$) and between the unstructured and poem tasks ($p = 1.00$).

Research Question 2

The second research question, “What is the effect of compositional structure on pre-service music teachers’ self-efficacy to teach composition?” ,was answered through descriptive analysis and the use of a repeated-measure ANOVA. The data were first checked for statistical assumptions. The assumption of normality was met for each dependent variable question using the 95% confidence interval multiplied by the standard error of skewness and kurtosis (See Table 8). The data met the assumption of

independence because each participant completed each task alone. Data were analyzed descriptively through means, standard deviations and ranges and comparisons were made with a repeated-measures ANOVA.

Table 8

Skew, Kurtosis and Standard Error for Question #2: Instructional Self-Efficacy

Question Item	Skew	S.E.	Kurtosis	S.E.
No task administration	-.19	.43	-.99	.85
Unstructured Task	-.14	.43	-.67	.85
Poem Task	-.59	.43	-.18	.85
Rhythm Task	-.37	.43	-.14	.85

Note: N = 29

The data revealed that the participants rated the rhythm task as having the highest effect on their self-efficacy to teach composition ($M = 6.58$, $SD = 2.00$, range = 2-8). Second highest were the poem task ($M = 6.10$, $SD = 1.92$, range = 2-9) followed by the unstructured task ($M = 6.00$, $SD = 2.04$, range = 2-10). The lowest mean was the initial pre-task administration ($M = 5.00$, $SD = 1.98$, range = 1-7) (see Table 9 for the means, standard deviations and range for Research Question 2: Instructional self-efficacy). It should be noted that, like the first research question, the means progressively increased as the participants completed each composition task.

A repeated-measures ANOVA was computed to measure mean differences. The data for the instructional self-efficacy dependent variable question failed Mauchly's test of sphericity, $W = .51$ $\chi^2(5) = 17.94$, $p = .003043$. The Greenhouse-Geisser correction

was made to the degrees of freedom of the F statistic (see Table 10 for the results of the repeated measures ANOVA for Research Question 2: Instructional self-efficacy).

Table 9

Means, Standard Deviations and Range for Question #2: Instructional Self-Efficacy

Task Item	M	SD	Min.	Max
1. No task administration	5.00	1.98	1.00	8.00
2. Unstructured task	6.00	2.04	2.00	10.00
3. Poem task	6.10	1.92	2.00	9.00
4. Rhythm task	6.58	2.00	2.00	10.00

Note: $N = 29$.

Table 10

Results of Repeated Measures ANOVA for Question #2: Instructional Self-Efficacy

Source	df	SS	MS	F	$p <$	η_p^2	
Condition	Sphericity Assumed	3	42.79	14.26	23.17	.000001	.45
	Greenhouse-Geisser	2.07	42.79	20.70	23.17	.000001	.45
Error	Sphericity Assumed	84	51.71	.62			
	Greenhouse-Geisser	41.71	51.71	.89			

Note: $N = 29$.

Using an alpha level at $p < .05$, statistically significant mean differences were found that had a moderately strong effect size $F(2.07, 41.71) = 23.17, p < .000001, \eta_p^2 = .45$ (Ferguson, 2009).

Post hoc tests using a Bonferroni correction showed statistically significant mean differences between the pre-task administration of the measuring instrument ($M = 5.00, SD = 1.98, \text{range} = 1-8$) and all three composition tasks: rhythm task ($M = 6.58, SD = 2.00, \text{range} = 2-10, p < .01$), poem task, ($M = 6.10, SD = 1.92, \text{range} = 2-9, p < .01$) and unstructured task ($M = 6.00, SD = 2.04, \text{range} = 2-10, p < .01$). Statistically significant mean differences were also revealed between the unstructured task and the rhythm task ($p < .01$) and the poem and rhythm tasks ($p < .01$). Mean differences were not found between the unstructured and poem tasks ($p = 1.00$).

Research Question 3

To answer the third research question, “How did pre-service teachers talk about composition and their experiences with compositional activities?” data were gathered through semi-structured interviews. Three participants were randomly chosen from the population ($N = 29$) by drawing names out of a hat. Each interview was held at the respective university in which each pre-service teacher attended. All the interviews started with general, broad questions and were subsequently followed by inquiries that stemmed off of themes and topics that arose from the general questions (see Appendix H, I and J). Each participant was given a pseudonym to protect their identity. Their given names were Ashley, Bill and Jeff.

Interview Participants

Ashley

Ashley was 19 years old and attended a small university. This was her first semester at the university. For the interview, she was dressed stylishly. She wore jeans and a purple sweater and had a scarf around her neck. She had long hair and was quick to smile. She stated that she grew up in a Lutheran Church and “as a Lutheran, you sing a bunch of hymns.” Her parents were close friends with her high school choral director, and she was involved in the school’s concert choir, women’s choir and show choir. During her senior year in high school, she decided to pursue music education; “I like music and my whole family are teachers and so I thought, ‘why not put the two together.’” Her major was choral education and her principle instrument was voice. When asked about her previous composition experience she said, “Never [shakes head], to be honest. No, that was the thing, that I never...I’ve never really done any, like, improvisation or composition.” However, she did acknowledge through the course of the interview that she “makes up little tunes” in her head and frequently harmonizes to songs on the radio.

Bill

Bill was a 20-year old sophomore and attended a medium sized college. He was an easy going, laid back young man. During the interview, he wore jeans and a short sleeve shirt which advertised several guitars entwined in a non-symmetrical pattern. His had long hair and a beard and was quick to smile and laugh. Although he played piano in

middle school, he remarked that his musical career started at the end of his freshman year in high school when he learned to play guitar. He surmised that he “couldn’t be a rock star” so he chose to pursue music education. He did not show a preference or track of study within the field of music education, “I don’t just want to teach guitar, but I want to teach anything I can...even band and choir.” He indicated that he received no composition instruction in elementary or high school. He did, however, have minimal composition experience; “I wrote a two part piano song when I was in high school. I was not following any music theory but just experimenting with the music software on the computer.”

Jeff

Jeff was a 19-year old sophomore at the large university. During the interview he seemed comfortable and engaging. He wore jeans and a zipped up sports sweatshirt. He looked as if he were an athlete, tall and fit. He mentioned he played football during his freshman year in high school, but became seriously interested with music during his sophomore year. While he played tuba since fifth grade and was involved in marching band, he rigorously pursued music in tenth grade, singing for the A cappella madrigal choir and musical theater. He played guitar for four to five years and two years ago he started playing piano. He auditioned for the school of music at a large university his freshmen year, but was not admitted and chose to major in theater. After his freshman year, he reapplied to the college of music and was accepted:

Yeah, I initially wanted to perform. I wanted to do music performance. When I was doing theater, I realized that I didn’t really want to do performance. I guess?

I mean, I enjoy performing, but I think that it's so much [more] to it than just performing. There's so much more about music and I feel like the impact was so much greater in education than...than, um, performance. The appeal for music education was...[2 second pause] the idea that I could really help and influence kids in a very important time in their lives through a medium that was very different than any other subject in school.

Jeff's primary instrument was voice. He initially enrolled in music education thinking he would be a secondary choral director, but he had been recently reconsidering his options. He indicated on his demographic form that he had some composition experience through writing songs on acoustic guitar. He said he never received any composition training before taking theory at the university. When asked during the interview if he has made up music before, he responded, "Uh, yeah. A lot actually. A lot of times...I mean...probably 80% of what I do on piano is sit down and...[shrugs shoulders]...play."

Interview Categories

The transcripts were analyzed and categorized for major themes as guided by the pilot study. Three primary themes emerged: (a) preconceived beliefs about composing music; (b) insights gained from composing music; and (c) impact on teaching. These are discussed below.

Preconceived Beliefs about Composing Music

The first emergent theme from the interviews focused on the pre-service teachers' beliefs they had about composition. These perceptions were themes that were revealed *before* they engaged in these compositional experiences. From their talk, three

subcategories emerged: (a) confidence composing music, (b) lack of confidence composing music, and (c) their perceptions of composition.

Confidence Composing Music

During her interview, Ashley at first said she had never tried making up a piece of music before. “Never, to be honest. No, that was the thing, that I never... I’ve never really done any, like, improvisation or composition... it’s something totally new to me.” However, later in the interview she made contradictory statements. “I always harmonize with the songs or something. I’m always making up little tunes to myself or whatever... it’s more in my head... I just never notate it.” While Ashley did not call herself a composer, she could see herself in that role if she received instruction. “Yeah... I’m more into the singing... but if I had lessons or something, then I’m sure I could do it [compose], but it’s just not where I see myself going right now.” Bill and Jeff indicated some degree of confidence composing. Jeff said, “I like to compose. I enjoy composing. It’s...[looks away] a lot of fun.” When asked if this composition experience was easy, Jeff referenced his previous experience writing music on piano:

I thought it was pretty easy. Just...sit down and write it. I don’t know. I mean it’s kind of the same way when I play piano...like you’re just hitting keys. I don’t know. It’s just...[shrugs shoulders nonchalantly]...just sitting down and making music out of nothing.

Bill also expressed a degree of confidence in his ability, “I think I’m a composer in the making [smiles], maybe.” Later Bill added, “I think I can compose a piece. I can kinda just sit there in my own little approach, you know, and work around a melody...”

Lack of Confidence Composing Music

Ashley and Jeff indicated degrees of lack of confidence. For example, when asked if she could write music, Ashley replied: “I don’t want to say I’m totally uncomfortable with it, but people say, like, ‘Compose this.’ And I’m just like, ‘ooooaoa’ [motions as if scared of something].” Later, she added:

I think I could [compose]... if I put myself into it and, like, make myself more aware about it [motions with hands—spinning], but it’s not a place where I really...I don’t know...it’s just not a place where I’m comfortable.

Ashley referenced her lack of confidence writing music was attributed to a fear of failing:

I have a fear of failing. I don’t like to fail at things at all. So, I guess when you compose things, there are no...you know, sometimes there aren’t any guidelines. So it’s not failing it’s just your perception of failing, I guess...or my perception of failing.

Furthermore, she expressed that other people’s perceptions or judgments influenced this fear: “ [They might say] ‘It’s not good.’ or, ‘Oh, you need to do this...you need to make these, you know, edits or need to fix these parts, or...’ I don’t know...I don’t like that.”

Though Jeff indicated that he had some degree of confidence composing, he also expressed uncertainty about calling himself a composer; “I mean there’s just a natural talent to it that...that separates the really good composers from the really great composers.”

The participants expressed a lack of confidence in composing partially due to a lack of mastery of the necessary skills. All three of the interviewed participants expressed they lacked a certain degree of skills they perceived were necessary for music composition. Their talk referenced the need to have background knowledge in theory, orchestration or musicianship skills. For example, Ashley mentioned that a composer

needed to be an accomplished musician. “I think before this experience I thought being a composer you had to be this big, professional, accomplished musician to do it.” She also mentioned the particular types of skills she envisioned a composer needing:

Ashley: Um... I think it takes the skill of knowing how to play the instrument. Knowing about the range of the instrument [motions with hands indicating length]. And being able to see it in front of you and how you interact with it...I don't know, knowing, like, having a singing background or an instrumental background would definitely help you with that...so...

Hauser: So, musicality?

Ashley: [Nods] Uh-huh.

Ashley also indicated that she could probably learn how to compose if she were given composition lessons, but she also added that it was not an area she was interested in pursuing, “Yeah...I'm more into the singing...but if I had [composition] lessons or something, then I'm sure I could do it, but it's just not where I see myself going.”

When Bill was asked if he felt confident composing, he also seemed a bit uncertain in the context of a perceived necessary set of skills.

Uh, yeah, to a certain extent. I mean, before this [points to xylophone] when I composed, I was not too sure [motions with hands], like I kinda have a gist of it, but kinda like with orchestration and everything...there's a theory side of composing which, you know, can be kinda scary.

Bill also indicated he perceived certain skills to be necessary for music composition, which he currently did not possess, but indicated he could learn:

Bill: I can think of nice melodies [motions to head] and can put them down, but it's arranging that might be hard. I think it [composing] is a combination of natural talent and musicianship and having the knowledge.

Hauser: Ok, so do you see yourself as having those skills?

Bill: [Looks away] Uh, to a certain extent. I feel I might have some actual talent, to some degree. I feel like I can learn the science behind it, you know, the theory, it kind of aids the tool.

He added:

Like musicianship, you know, having a good understanding of music theory and how instruments sound together, all that orchestration science and stuff. Strong musicianship skills to get the sound you want to compose a piece and, like, you want to play it with a group, you have to, you know, say, “OK, oboes, you have to do this to get that kind of sound.”

Like the other participants, when Jeff was asked if he saw himself as a composer, he was unsure because of perceived deficiencies in his skills.

Jeff: [two second pause]. I...[looks away]...kind of? [Looks at interviewer]. Yeah. I mean, I would love to do it, I just feel hesitant ‘cause I feel like...it’s one of those things that really has... It’s like there’s really a lot of natural stuff to it that I don’t know if I have it or not? I think that, to be a great composer there are certain skills, like being able to hear a good melody line. Something that really...[two second pause].

Hauser: Stands out?

Jeff: Yeah, sticks out in your mind. Uh, the ability to make, like, themes and creatively, like [motions with his hands], alter them, but keep the theme in tact and stuff. Keep it interesting. Um, and hear the chord changes and tonality changes and things...I guess.

Hauser: Do you see yourself as having those abilities?

Jeff: Ah...[smiles and looks away]...I...I’d like to think so [smiles and looks back]...but, I don’t know [laughs]. But I wouldn’t want to be like [in a British accent], “Yes, yes, I have all sorts of...” I mean, I would love to try it and see...but...

Jeff felt that being a composer required the ability to create interesting themes and hear chord changes. While he would like to think he had these skills, he could not say for certain whether he possessed the skills.

Perceptions of Composition

Some of the lack of confidence might be attributed to the participants’ preconceived perceptions of composition. For example, Ashley mentioned that a

composition must be notated: “ ‘Cause composers...you know authors have books and they write it down and you think “composer” and they write it down.”

When Bill was asked to talk about the experience, he also mentioned that compositions should be notated and more “formal:”

Bill: It was pretty cool and interesting. I really didn't know what to expect. Like, I didn't know what I was going to have to compose. Like, do I need to compose an actual piece...and write something out.

Hauser: You said, “*actual piece.*” What do you mean by that?

Bill: [Smiles and looks away] Oh... [laughs]

Hauser: So was this [pointing to xylophone] an actual piece and was it composing?

Bill: Well, that's a good question [smiles and looks away]. Well, I was thinking more of a formal... like, ok, you have to write it down with notation. Like, “You have ten minutes and you have to write something out.” It [the composition study] was more free, but not as formal as I thought it would be. I thought it would be almost like a homework assignment. Like, “Compose a 12-bar thing and come back...” I don't know...

Similarly, even though Jeff mentioned that he wrote music “a lot,” he questioned whether he had truly composed anything. He surmised that most of what he wrote was improvisation and that composition must be more “concrete.”

Jeff: Well...it's not really so much composing as it's...I don't know...I don't feel like it's composing. It feels...I don't know...it feels too easy. I don't know. It's just like...

Hauser: What feels too easy? What you're doing is too easy?

Jeff: Yeah. Yeah, I don't know. I just...I feel like there is more to composing than just what I do on piano. 'Cause, like, I play chords and stuff [shakes head], but...I don't know...it's not really concrete. It's just flowing. I don't know...

Hauser: So, would you consider it improvisation or...

Jeff: Yeah. Yeah. It's definitely improv.

Hauser: Oh, really? OK. Then, at what point would it be composing?

Jeff: [Smiles] Hmph...ah...I don't know. I really don't know. I mean, I'm sure, like, there's a part of composition in it, I guess. I'm sure there are themes that I like...recycle. As I unconsciously recycle them as I improv, but, um... That's a good question. I'm not really sure.

Jeff mentioned that he did not want to sound “pretentious” and call himself a composer because, “I really don't have anything to show. Like, I don't have, like, this one-hand keyboard thing that I wrote, with vocals.” Like Bill, Jeff thought that composition should be formal: “I thought that it [composing] should be more difficult or, like, more strict [emphasizes with hands], you know, with more guidelines and, like, structured, I guess.”

Insights Gained from Composing Music

The second major theme that emerged from the participants' interviews related to their insights after they completing the composition tasks. These insights involved any assumptions about composition that were challenged or revelations learned through the process of composing. The theme of insights was divided into three sub-categories: (a) enjoying composing music, (b) finding a process, and (c) assumptions that were challenged.

Enjoying Composing Music

All the participants indicated they enjoyed the opportunity to compose music. Even Ashley who expressed no confidence or experience writing music mentioned she enjoyed doing the compositions. “I thought it was a lot of fun [smiles]. I...I...[laughs]. Like the 10-minute period we had, I almost wanted to keep playing.” Later, she added,

“...it was fun for me, like, I didn’t want to stop. So I just wanted to keep messing around [mimics playing a xylophone].” When asked if she was comfortable composing these tasks, Ashley smiled and replied:

I was comfortable doing it. I thought it was...when I was comfortable and I was having fun [mimes playing xylophone] with the instruments, I was more inclined to want to have fun with it and do it ‘cause I wanted to make something sound good and I thought that was really cool... I thought it was fun, yeah, I was definitely comfortable doing it... I thought it was... when I was comfortable and I was having fun [mimes playing xylophone] with the instruments, I was more inclined to want to have fun with it and do it ‘cause I wanted to make something sound good and I thought that was really cool.

When Bill was asked if he enjoyed the overall experience of composing, he replied:

Yeah, [Smiles and nods head] I really enjoyed it. It was just something cool and different. Composition is something I’m really interested in. And I thought this would be something...to... I might learn something. So, I thought it was really cool. Just a different experience.

He also mentioned that he enjoyed the poem task more than the unstructured or rhythm because the poem offered “meaning behind” the melody:

I liked the poem one because you have to, like, you know, think about it a little bit. It can be an inspiration type of thing, ‘cause I think that’s the kind of thing with music and composition...what makes it a really good piece is not only a good melody, but, like, the meaning behind it. That’s what adds to it.

Like the other two participants, Jeff enjoyed participating in the creative activities. When asked to talk about the experience, Jeff quickly answered, “I really enjoyed it. It was...it was a lot of fun.” Like Ashley, Jeff wished he not only had more time, “Sometimes it’s frustrating only having 10 minutes,” but also expressed discontent with the harmonic limitations, “I think [having] chromatic [notes] would’ve been nice.” Jeff also mentioned some frustration with his mallet technique and wished he could have composed on piano:

Jeff: Even then it was also kind of frustrating ‘cause it was like, my skills with [mimes playing with mallets] xylophone isn’t up to par with how advanced other music kids here are at [the Large Music School].

Hauser: Right.

Jeff: Uh... But no, it was enjoyable.

Hauser: Would it have been easier for you on the piano?

Jeff: Yeah. Oh, yeah [laughs]. Piano would have been *far* easier [with emphasis].

Unlike Bill, when asked which task he enjoyed the most, Jeff cited the unstructured task, “Ah...[two second pause]...I think I enjoyed the unstructured one the most, but I think that...that as far as just, like, making stuff up, it was the most fun.”

Finding a Process

Though the creative process was not a specific question within the interviews, the participants’ comments offered insights regarding their methods of composition. Ashley commented that having a prompt helped provide a starting point:

Ashley: But I think having a prompt helped me with it, ‘cause it was kind of like a guideline, it wasn’t just... ‘cause sometimes when I think about composition is that it just has to come from nowhere. But I think when you have a prompt it’s easier ‘cause you’re focusing in on one aspect of it. Like rhythm or off of a poem, or something like that.

Hauser: Well, one of the tasks was...the prompt was...there was no prompt.

Ashley: [Smiles] I know, I know... I think just the fact that I was being prompted to be there and to make something up [hands pretend to play xylophone] was a fun part of it.

Bill also commented that having a prompt was helpful for his creative process. When asked if the rhythm prompt was too constraining, he said:

Ah...not really. I felt like it was helpful, so I could think of a melody. As I said before, I could put a melody to the rhythm. I mean, you could think that [that it is constraining] since I have to work with this melody, but kinda, just, I got the rhythm, now I can just [mimics playing xylophone] make a melody to it. So it's kind of relieving...Instead of constraining, it was more relieving.

However, in the first task—in which there was no given prompt or structure—Bill mentioned that he imbued a sense of structure to it as part of his creative process:

Bill: ... that's why it [first composition task] was a little hard for me in the beginning. 'Cause, you know, I was trying to make some sort of form, so it's not just notes [mimics playing xylophone haphazardly].

Hauser: So you were adding structure to it [the unstructured task]?

Bill: Yeah, I was thinking, "How in my mind can I make this sound like a composition, instead of just a free melody? So that was kinda hard in the beginning. So, it's something, like, you know, in my mind...adding structure.

Jeff commented that the rhythmic task required more of a mathematical approach and that the unstructured task was more emotionally based:

Just by the nature of the...putting any restrictions on it [the rhythm task]... But it would be less than, no restrictions. I mean, I think there is more, like, mathematical part of it, almost, to the rhythm...just 'cause, it's like solving a puzzle, almost. Whereas the open one [unstructured] was, I feel...musically and emotionally oriented, I guess.

When asked about the process used in creating the poem task, Bill said he text painted. Jeff remarked that he turned the poem into a song, "I was one of the ones who put [motions with hands as if playing a mallet] note to words." Ashley commented that she not only text painted, but she also linked the notes with the words.

Ashley: I did kind of make it [poem composition] go with...if it was a happy kind of word, then I would make the scale go up. And if it was a sad word I would make it go down. But I also made the rhythm of it...the way I was playing with it...go with the words. So it kind of went with the beat [rhythm] of the words.

Assumptions about Composition were Challenged

All of the participants commented that their assumptions of composition were challenged. Ashley remarked this composing experience was not as hard as she thought it would be:

Ashley: I left every time thinking, ‘That wasn’t as bad as I thought it would be.’

Hauser: Oh, really?

Ashley: Yeah. Yeah. I was like, “That was really easy.” [Shrugs shoulders]. Like it wasn’t... Like when you said “composition, like, we’re going to do this” [moves hands]...I was like, “Mmm...I don’t know if I want to do that, ‘cause I’ve never done it before. But after leaving each time it was like... [shrugs shoulders – as if it was no big deal]...”

Later in the interview she added, “But now that I’ve had the experience with it, I think, I realize that it’s not as hard. It doesn’t... I don’t know, it’s not as difficult for me as I thought it would be.” When asked if she has “it”—the skills and talents to compose—she, mid-sentence, adjusted her thinking of her ability as a composer. Ashley said, “That’s the hard part, to actually identify what it takes, ‘cause, I mean...I don’t have any, like, ability...well I didn’t see myself as having any ability to compose things and now I feel like it’s easy.” Later she added:

... before this experience I thought being a composer you had to be this big, professional, accomplished musician to do it. But you could do something as simple as the activities as we did and you still composed something and you could still notate it and say, “This is a composition.” And you could put it in a music book and do this... And it just doesn’t take as much as I thought it did.

Bill made similar observations through the course of his interview, “At first, my idea of composition was something that was formally written and after this I realized, well, ‘Ok,

anything could be a composition.”” Bill added that the standard for what defines a composition might be subjective:

I think it depends upon the person. You kind of think...the more musical background, this [motions to one side] might be a better composed piece compared to my student [motions to the other side] who might not have as much musical background, but I think it kind of depends upon how you view the piece, you know, or how complex it is or just how it sounds. Your student might not have as much musical background but be able to compose a beautiful melody. So, I think it depends upon how you view composition.

Later, Bill commented that composition might not entail knowledge of orchestration and theory, but that anybody could compose:

I kinda realized that, you know, ‘cause before I thought, “Ok, teaching how to compose you have to have all of this background knowledge [motions with hands showing large amount] and everything.” And this, to an extent, you do. But not all composers need that to... I mean, to compose a piece you don’t need all this orchestration and theory [motions large again] background. I realized, it’s kind of in you, you can compose a piece and anybody can compose.

Jeff mentioned that his perception of composition had changed through the course of this experience. Like Bill, Jeff hinted at the idea that composition might be subjective:

I guess I have a broader definition of composing at this point. I think that...I think there is more of a grey line between what is and what is not composing, I guess. Actually, it kinda depends upon your definition. But, yeah, I think that it did change a little bit, because.... Like I said, when I was playing the bells [xylophone] it felt like it was when I was playing the keyboard, except that I had to, like, “Alright, decide on something.” [motions with hand]....And just keep doing it.

Later, he added that he thought anybody could compose; however he was a bit hesitant to label his pieces as compositions.

Jeff: Anyone could. Anyone could hit the bells. I don’t know. It’s...I guess...I mean, whether you’re making great master pieces or not is obviously up to question, but I think that anyone can compose in some respect.

Hauser: Do you consider this composing?

Jeff: [2 second pause]...I mean...uh...yeah...yeah I would.

Hauser: You were kind of hesitant there.

Jeff: I was just trying to think of any reason why it wouldn't be, I guess.
Um...it's obviously not super intricate or, like, most of the things we made weren't hardly difficult, but um... I mean we wrote a piece and it was set in stone [emphasizes with hand]...

Impact on Teaching

The third and final theme that emerged from the interviews was impact on teaching. This theme focused how the participants perceived the composition experience to impact their views on teaching music, creativity and the pedagogical process. The teaching theme was divided into three sub-categories: (a) Value of teaching composition, (b) beliefs about creativity, and (c) insights about teaching.

Value of Teaching Composition

All of the interviewed participants agreed composition should be taught in the schools. Some cited the value of creative self-expression and others cited the value of composition's ability to teach other musical concepts, such as theory. When Ashley was asked if composition should be taught in the schools, she answered:

Um...I think it should 'cause it would give students some more well-rounded knowledge of music. 'Cause I think a lot of students in public schools deal with the performance aspect or theory or kind of like paper-based kind of knowledge of it. Like you take a test on what this means and what this means [mimes as if writing answers on a test] and the musical terms and performance, but I think this [pointing to xylophone]...um...composition could give people a more well-rounded look at music.

Bill cited the value of composition as a means of self-expression and learning more about music:

For one thing, I think it's a good way to learn about music in a way, you know. And to express yourself as well. I can imagine, like, in high school, if I had a composing class, that's...I mean, to me, that would be fun. And along the way you can learn about the theory and stuff about how, you know music is built.

Jeff argued the value of composition as a means of self-expression within a music classroom that was typically dominated by performance. When asked if composition should be taught in the schools, he replied:

Uh, yes. Yeah [more confident], absolutely. Um, I think that...well, I know that in smaller schools, it was really sad because the only music we have is performance. It's always just band and choir...and the occasional orchestra. There really is no general music...except in, like, 4th grade. But then...there's only general music up until band and choir start. Once band and choir starts, general music is gone [sweeps with hands]. And...it's all performance. And while that's great I think there's *so* [he added emphasis to the word] much to it than that. Like, "Here's the music, sing it, great, and now go home." There's so much more outlet, I think. It's not just music either. I think it's all the arts.

Jeff expressed the need for creativity beyond the scope of music:

Jeff: Yeah, I mean, in my school there were, like, two creative outlets [motions with two fingers]; if you want to direct a play or if you want to be an MC for the variety show. And, like, you can create and you can do these things, but it's just not encouraged or...or it's not even encouraged, it's...it's not even really acknowledged, I guess. It's not discouraged, it's just not even brought up at all [seemed to be said stronger and more emphatic].

Hauser: Did that frustrate you?

Jeff: Well, yeah, now it does. Yeah.

When asked why composition was important he emphasized the need for self-expression:

Jeff: Um...[two second pause]...because it's enjoyable? I mean, why is music, like, important? I don't know. It's in the same realm of...like I think composition is important, like singing is important, or acting is important, dance is important. It's all expression and I think there are all types of expression for

different people. I think there are people that can compose that perform very well; and I think there are people who perform who don't compose very well and...to just have that one [performance] outlet...

Hauser: And that outlet being what?

Jeff: Just performance [emphasizes with hands].

Hauser: I see, I see. Ok.

Jeff: But I also think there are kids that could live up to so much more than...like become even better at performance if they pursue composition more. It's just...I mean...[louder] if you learn something more, you're definitely going to get better at it.

Beliefs about Creativity

This sub-category focused on how participants' perceived the composition experience to impact their beliefs of creativity and teaching for creativity. For example, Ashley remarked that withholding judgment was an important component that facilitated creativity. Though Ashley admitted she had a fear of failure, she commented that she was not fearful creating these composition pieces because she knew the product would not be judged. "I feel like anything we created was going to be OK."

Out of all the composition tasks, Ashley thought the poem task allowed her to be more creative. It was also the task she favored:

I thought the poem one, was brought out more [creativity]. 'Cause it's your interpretation, so it brings out more of who you are and how you see...you know, how you interpret a poem can reflect on...or can affect how you see the world and how you interact with the instruments. So I think that is the one.

Bill thought the unstructured task allowed him to be the most creative because it offered no restrictions at all, "Ah, probably the first one. Besides the fact that the structure

was... there was no structure.” Later Bill added, “[In] the first one, I felt like I could be more free.”

Jeff thought that while the poem task allowed for more originality, he also suggested that each task offered a degree of creativity:

Hauser: So which of the three tasks allowed you to be most creative?

Jeff: [Thinking for three seconds]. I think that, ideally...well [turns head] dang... I mean, they all have special things, ‘cause the more you tighten down the rules the more...[nods head left/right]...I think they all have their special creativity. Like the open one, what can you make out of nothing? And then the poem one...uh...what can you make out of this base template. I don’t know...I think that’s the one that clicked with me the best, like I said. And then the rhythm one...I think there’s still a lot of creativity in the rhythm one...

Hauser: Even though it’s structured?

Jeff: Yeah, ‘cause there’s still so much you can do with that, like, it’s not like there are any rules as far as notes go or time, um... I mean, I would say that the possibilities are definitely smaller than the other two?

Jeff argued that even the rhythm task was not too constricting and offered a means for creativity:

Like the more constraints there are... Like you can still be... Like you can have an incredible composition that...in that small...in those constraints, but I think it is much more difficult and that...it’s a much more broader spectrum [widens hands] of like really great [motions to one side] to average [motions to the other] composition, I guess. Like, I think that if you succeed in...under the constraints it’s much more impressive than if you can succeed... and I think it’s much more memorable if you have all these rules and somehow still manage to make it very enjoyable composition.

Insights about Teaching

This sub-category centered on the participants’ thoughts about teaching and the pedagogy of teaching composition. All the participants remarked that they would like to

include composition in their future classroom. Ashley noted the importance of providing a good model for the students:

Ashley: Yeah. I think so if you give them...teach them about the instrument and say, you know, "This is what we're going to be doing in class today." And you bring something new when you do it for them [models playing a xylophone] first and they can see, "Oh, that's really cool." And I think they would want to do that too. So...

Hauser: So do you think that they could be successful?

Ashley: I think so, yeah, if you teach it. You know, set a good example for them.

When asked which task would allow her students to be most creative, she suggested the unstructured task:

Just because, you know, I think with no structure whatsoever for them to do...that releases the most creativity 'cause whatever they have in their heads... no matter... "OK, this sounds cool" [mimes playing xylophone]...it's right. It's not wrong or anything. It's just what they have is what they want to play [shrugs shoulders].

However, she later added that it might depend upon the needs of the student:

Hauser: Well, I'm kind of curious. You said that it was the poem one that allowed you to be the most creative, but then you think it's the unstructured for your students. Why is that?

Ashley: I think it depends on the person. 'Cause I am more... My interests lie in, like, English or a lot of things. So the poem interested me. But then, if you have more of an outgoing kind of student, they might be, "Oh, I want to do what I want to do" [mimes playing xylophone]. But then if you have more of like, I don't know, a rhythm kind of kid. One who can't stop moving in class [mimics playing a beat on her knee] then they might like the rhythmic one better. I think it just depends on the person.

When asked which task would allow her students to be the most successful, all of the interviewed pre-service teachers chose the rhythm task. Ashley commented:

I think the rhythmic one would allow them to be the more successful because if you gave a student a rhythm and say, "OK, you understand this rhythm and put a, um...melody to the rhythm." I think that gives more components of a song.

‘Cause I think the unstructured one, they might not think about rhythm they may just think about the notes. But if there’s a rhythm already provided, I think it’s going to provide more of the components of the song...or a piece of music.

When asked if this experience influenced his idea of teaching composition, Bill replied:

Yeah, it did. Like I’ve said before, I thought you needed a lot of background knowledge and everything, but I realized...well, you do in a sense, but...there really is no kind of formal way to teach composition... You know, just like learning an instrument, you start with the basics [mimes playing a guitar]...there’s so many approaches to teaching composition. I think that’s what I learned from it. There’s not just that one way to learn how to compose.

Bill, like Ashley, thought the rhythm task would allow for the most success, “...the third one might be...a little bit...might be a good one. ‘Cause with the rhythm it kind of aids them, like I did, ok, I’ve got the rhythm, now I can do the melody.”

Jeff argued against the unstructured task because children needed a prompt to initiate ideas. “Well, I don’t think the first one [unstructured] would be as good first...or as a teaching tool.” Later, he added:

Yeah, I don’t know how well that [unstructured] would teach them to compose. ‘Cause it’s...there’s infinite possibilities [motions wide with body]. Like, I don’t know, where do you start when you’re composing for the first time and you can do *whatever* you want [emphasis on word]? I think it’s like when kids learn to write essays. They don’t, like, “Alright, go home and write me an essay and come back.”

Jeff surmised the rhythm task would be the easiest for his students, but added that it might not have the best “quality.”

‘Cause I think that the kids would be...it would be easiest for the kids to do the third one [rhythm] if they weren’t worried about quality. If they are just worried about, “I’m going to make a song.” ‘Cause, I mean, they would have half of it done already for them.

Jeff added later, “But, uh, I kinda like the second one...” but concluded his thought about the sequence of composition starting with the most structured to the least structured,

“You start with at least some kind of constraint. And then open it up more as the kids [motions with hands] get more comfortable.”

When asked if this experience changed the way he thought about teaching composition, Jeff stated that he now had more resources, but that he still was not completely comfortable with the idea, “Um, I think I have...[2 second pause]...um I think I have more tools to pull from.” Later Jeff added:

Jeff: I wouldn't say that I would to be able to be, like, very successful to teach it at this point, but...

Hauser: So, it didn't change your degree of comfort that much?

Jeff: Um, well, it did a little bit. It definitely is in the right direction [points with hands], but I don't think that three 10-second [minute] compositions are going to make me, like, “Alright, I can teach these kids how to compose.”

Hauser: Right. Right.

Jeff: It's definitely, it's definitely laying the foundation, which is helpful.

When asked if his future students were engaged in these tasks, Jeff—without hesitation—would call their creative work a composition. He also mentioned that he received no exposure to composition in his high school experience.

Hauser: So, if your kids...or kids you were teaching, or whatever, if they did something like this would you say, “OK, yes, you composed something?” Would you tell them that, you did that?

Jeff: Oh, yeah. I mean this is more than I ever did in high school.

Summary

The data from the quantitative portion of the study revealed statistically significant mean differences between all the composition conditions and the pre-task

administration for the compositional self-efficacy measure. Statistically significant mean differences were also revealed between the unstructured task and the rhythm task. Mean differences were not found between the poem task and the rhythm and between the unstructured and poem tasks. Similarly, significant mean differences were found between the pre-task administration of the measuring instrument and all three composition tasks for the instructional self-efficacy measure. Statistically significant mean differences were also found between the unstructured task and the rhythm task as well as the poem and rhythm tasks.

Through their talk, the three interviewed participants seemed to hold preconceived perceptions of composition. While two individuals indicated they had a certain degree confidence composing, they all expressed uncertainty creating music due to a lack of confidence or a lack of mastery of skills. Through this experience, the participants also indicated they gained several insights into creating music. First, they all commented they enjoyed the experience. Second, they all remarked that they had to find their own creative process to complete each task successfully. Next, they all commented that their perceptions of composition had been challenged. Two of the participants thought composing would be difficult, but were surprised to learn it could be easy. All three admitted their definition of composition might have been challenged. Lastly, the participants commented that this experience impacted their ideas of teaching and teaching for creativity. Several insights were made regarding the pedagogical process. One participant indicated the need for a safe and secure environment to facilitate creativity as well as the need for effective modeling techniques. While two of the participants

indicated the poem task offered them the most creativity, one participant observed that each of the task structures offered a degree of creativity. All of the participants thought their future students could accomplish these composition tasks, but indicated the rhythmic task would be the best task to use first to provide initial success. All of the participants indicated they valued composition and would like to include composition activities in their future classrooms. One participant confessed that he had “more tools” at his disposal for teaching composition, but did not feel entirely confident that he could lead a class through compositional instruction.

CHAPTER 5

DISCUSSION AND RECOMMENDATIONS

This chapter begins with a brief summary of the related literature to provide context for the purpose of the study. Next, the study design and limitations are presented. The chapter concludes with a discussion of the findings of the study, its implications and recommendations for future research.

Purpose of the Study

Despite the fact that research into music composition is a growing field (Auh, 1995; DeLorenzo, 1989; Gromko, 1996; Hickey, 2003; Kratus, 1994; Priest, 2001; Smith, 2004; Strand, 2006; Swanwick & Tillman, 1986; Webster, 2003; Wiggins, 2003) composition has received very little attention in academic research compared to the other National Standards in Music Education (Kruse, Oare, & Norman, 2008). Furthermore, research has tended to be neglected in the music classroom (Byo, 1999; Orman, 2002; Wang & Sogin, 1997). Teachers have cited several reasons for not including composition in the classroom. Some of these reasons have included: the teachers had low self-efficacy as composers (Jeannerat & Cantwell, 2002; Peddell 2005; Randles, 2009); they had not been trained in the pedagogy of composition (Bell, 2003; Morin, 2002; Strand, 2006; Thornton et al., 2004); and they had a tendency to view composition as an individual endeavor reserved only for the musically elite (Sherman, 1991; Strand & Newberry,

2007). Within these studies researchers have had children compose music based upon various prompts or task structure (DeLorenzo, 1989; Kaschub, 1999; Kratus, 1994; Smith, 2004). Strand and Newberry (2007) identified three levels of structure used by music educators: heavily structured, moderately structured and unstructured. Most of the research in composition has focused on the creative endeavors of children. There have been a limited number of research studies that have investigated adults as composers and even fewer on pre-service teachers as composers. Little research has been conducted concerning what task structure might influence the compositional and instructional self-efficacy of pre-service teachers. This study sought to fill this gap within the research literature.

The purpose of this study was two-fold: 1) to compare the effects of three different composition tasks with varying degrees of structure on pre-service music teachers' creative self-efficacy as composers and their instructional self-efficacy as pedagogues of composition; and 2) to describe, through pre-service music teachers' talk, perceptions of composition and their experiences completing the three composition tasks. The study was guided by the following research questions:

1. What was the effect of compositional structure on pre-service music teachers' compositional self-efficacy?
2. What was the effect of compositional structure on pre-service music teachers' self-efficacy to teach composition?

3. How did pre-service teachers talk about composition and their experiences with compositional activities?

Discussion and Implications

Research Question 1

Results for the first research question, “What is the effect of compositional structure on pre-service music teachers’ compositional self-efficacy?” revealed statistically significant mean differences for each composition task over the pre-task administration. Mean differences were also found between the unstructured task and rhythm tasks. No mean differences were found between the poem and rhythm tasks or the unstructured and poem tasks.

The fact that mean differences were found for every composition task over the pre-task administration might suggest that any task—regardless of structure—might influence pre-service teachers’ compositional self-efficacy beliefs. This aligned with Jeannerat and Cantwell’s (2002) findings in which a student remarked after completing three composition exercises, “Actually, doing the activities rather than talking about them – I can see how I could develop my composition skills” (p. 39). Similarly, a study by Randles (2006) found that composition experience was the strongest variable that influenced high school students’ self-efficacy.

Statically significant mean differences were found between the rhythm task and the unstructured task in this study. The two prompts might be considered to be on opposite ends of the spectrum, according to Strand and Newberry’s (2007) three levels of

compositional structure. In this study, the rhythm task was highly structured and limiting; whereas, the unstructured task was free and open. The higher mean score for the rhythm task might be attributed to the fact that the rhythm prompt provided the participants not only an entry point to start the composition (Brophy, 1996; Burnard, 1995; Hamilton, 1999; Kratus, 1989) but also provided a strict framework that would better ensure success (Brophy, 1996). This, in turn, might have helped the participants feel more secure and confident about their compositions. During the interview, Bill mentioned the rhythm task was not “constraining,” but that “it was more relieving.” Similarly, Ashley said, “The rhythm was easy because you just had to match up the rhythm to it.” And later she remarked the rhythm task contained “more components of [the] song.” Degree of comfort, then, might be an important variable to weigh when considering efficacy beliefs.

There was no statistically significant mean difference between the unstructured and poem tasks. This might suggest that the poem task and the unstructured task were similar with regard to structure and therefore the participants viewed them as having the same effect on their compositional efficacy beliefs. There was also no statistically significant mean difference between the poem and rhythm task. However, the poem and rhythm task significance levels were closer to the traditional .05 cutoff than was found for the poem and unstructured tasks. This might suggest that with a much larger sample size there might be statistical mean differences between the rhythm and poem task. This is an area that warrants further study.

Teacher educators might want to consider offering composition exercises within the pre-service curricula—regardless of task structure. Pre-service and in-service teachers could consider engaging in composition activities as well. If educators only had time for one 10-minute composition task, then the recommendation of this study would be to choose the rhythm prompt. The rhythm prompt had higher mean scores for increasing pre-service teachers' compositional self-efficacy over all the other composition conditions and was statistically significant over the unstructured task. According to Goodkin (2002), "Often, the tighter the focus, the more satisfying the result" (p. 12). While Goodkin was referring to the product of the composition, the results of the current study might support Goodkin's statement with regard to efficacy beliefs.

Research Question 2

Results for the second research question, "What is the effect of compositional structure on pre-service music teachers' self-efficacy to teach composition?" found that there were statistically significant mean differences between the pre-task administration and all three composition tasks. Mean differences also were found between the rhythm task and the poem task, as well as the rhythm task and the unstructured task. Mean differences were not detected between the unstructured and poem tasks.

The results of this data might indicate that any composition activity—regardless of task— may positively influence pre-service teachers' self-efficacy beliefs to teach composition. This finding supports research by Kennedy (2004) who taught a course

titled *Creativity in the Music Classroom* to pre-service music educators. Kennedy's participants composed three tasks using computer aided composition programs. Kennedy (2004) noted that the study impacted the participants' self-confidence to teach music to their future students. According to Kennedy (2004), "students who had had no previous formal exposure to composition left the course with the confidence that they could take what they had learned into the classroom" (p. 39). Dewey (1938) argued we learn by doing.

In light of the fact that statistically significant mean differences were detected between the rhythm task and the poem task, as well as the rhythm task and the unstructured task, this might suggest that the rhythm prompt may be the safest choice of the three conditions to introduce to possibly influence pre-service teacher's self-efficacy beliefs as pedagogues of composition. Stephens (2003) recognized that we as humans gravitate toward, and associate with, organized patterns and routines; Brophy (1996) theorized that the more structured the composition task, the more it could provide a framework to guide the work. This might explain why the heavily structured task had a higher mean difference than the unstructured or moderately structured tasks. Furthermore, the participants felt more confident as composers after completing the rhythmic task—Research Question 1—and this might have impacted their beliefs that they could teach composition. Ford theorized (1996) that having a strong sense of one's perceived capability for performing a task is a vital component of fostering creativity. In light of Ford's theory, the pre-service teachers might have felt more confident about their rhythmic composition; therefore they may surmise they would have the capability to

teach it, thus affecting their instructional self-efficacy beliefs. Bandura (1997) noted that mastery experiences were the highest source of influencing one's efficacy beliefs. The participants might have felt they achieved a measure of success composing under the rhythmic condition, which might have influenced their instructional efficacy beliefs.

The data did not reveal any statistically significant mean differences between the unstructured and poem tasks on the pre-service teachers' self-efficacy measure as pedagogues of composition. This might suggest that the pre-service teachers felt that the poem task and unstructured task were too similar with regard to their instructional efficacy beliefs. Strand and Newberry (2007) offered three levels of structure: heavy, moderate and unstructured, but perhaps the findings of this study finding would suggest that with regard to the participants' self-efficacy beliefs, the poem task—though moderately structured— might be viewed as too open, free, and unstructured.

The results of the research question suggested that not only might pre-service teachers gain confidence composing by *doing composition*, but they might also gain confidence as pedagogues of composition. If educators only had time for one 10-minute composition task, then the recommendation of this study would be to choose the rhythm prompt for influencing pre-service instructional self-efficacy. The rhythm task had a statistically significant higher mean difference in influencing instructional self-efficacy over all the other composition conditions. Furthermore, all of the interviewed participants also surmised that the rhythmic task would provide initial success for their students.

Research Question 3

The third research question was, “How did pre-service teachers talk about composition and their experiences with compositional activities?” This question was answered by individually interviewing three participants. Three major themes emerged from the interviews with the pre-service teachers: (a) preconceived beliefs about composing music, (b) insights gained from composing music, and (c) impact on teaching. Three sub-categories were found to fall under each of the primary themes. These themes and categories are discussed and the implications to teachers conclude each section.

Preconceived Beliefs about Composing Music

The first emergent theme from the interviews focused on the pre-service teachers’ beliefs they had about composition. These were perceptions the pre-service teachers mentioned they had *before* they engaged in these compositional experiences. From their talk, three subcategories emerged: (a) confidence composing music, (b) lack of confidence composing music, and (c) their perceptions of composition.

Confidence Composing Music

Bill and Jeff expressed more confidence composing music than Ashley did. This was reflected during their interviews. While Bill and Jeff mentioned they had composed before, Ashley said she had no experience composing or improvising, although she later admitted she did make up melodies to sing. According to Bandura (1997), mastery experiences tend to influence efficacy beliefs, and Usher and Pajares (2008) noted that a

synthesis of past successes and accomplishments might influence an individual's self-efficacy beliefs. The participants' expressed confidence—or lack thereof—in creating music might be attributed to their past experiences with composition. Teachers, then, may wish to consider their students' previous experience with composition before assigning any composition task.

Lack Of Confidence Composing Music

Ashley and Jeff indicated some degree of a lack of confidence writing music. For example, Jeff remarked, “like there's really a lot of natural stuff to it [composition] that I don't know if I have or not.” When examining the data across the three participants, there emerged a variety of reasons why they felt some sense of insecurity, but two related areas were common across all three participants: a lack of perceived necessary skills and a need for better musicianship.

A part of the interviewed participants' lack of confidence composing music might be attributed to their lack of mastery of skills. While Bill confessed that he could come up with “nice melodies,” he expressed uncertainty with theory, arranging and orchestration. Similarly, Jeff remarked that composers needed to possess the ability to write nice melody lines. When asked if he had these skills, he said, “I'd like to think so,” but did not want to sound pretentious and call himself a composer. Even though both Bill and Jeff had previous experience and indicated they had a degree of confidence writing music, they might have perceived they lacked sufficient mastery experiences with composition to feel proficient. Bartel, Cameron, Wiggins and Wiggins (2004) claimed

that according to self-efficacy theory, confidence by itself is meaningless without competence (Bandura, 1977). This might explain why Bill and Jeff expressed a degree of uncertainty in writing music; they might have felt they lacked sufficient skill or competence to be considered as composers. The interviewed participants' perceptions concerning the skills a composer needs could also be related to their perceptions of what defines composition, what makes a composition "good," and what it means to be a composer. This connects to perceptions of composition as big-C or little-c processes and products (Csíkszentmihályi, 1996; Gardner, 1993). The big-C and little-c dichotomy also emerged in their talk and is addressed in a later section.

Related to their perceptions of necessary skills in the context of theory and orchestration, all three participants mentioned the necessity for good musicianship. Topics centering on musicianship included having good knowledge of the instrument(s), natural musical talent, having the inner hearing to know what instruments would sound good when, and to hear chord changes and tonality shifts. While these concepts are related to an acquired set of skills, the participants also spoke about being naturally imbued with these as types of inner knowing rather than learned analytical skills of theory and orchestration. In addition to a perceived lack of skills and musicianship, one participant expressed her lack of confidence in terms of being afraid of failing.

Ashley mentioned her concern with being judged by others and not being able to meet others' expectations as a composer. Bandura (1977) noted that social persuasion was a powerful force in determining one's efficacy beliefs and especially negative feedback might diminish self-efficacy. Ashley referenced this fear during her interview.

Hence, much of her lack of confidence composing might be attributed to perceived potential negative feedback. She also mentioned a perceived lack of skills, and because her experience with composition was perceived as non-existent, she had not previously experienced any success composing. Usher and Pajares (2008) noted that failure and disappointment tend to diminish self-efficacy beliefs, but success and achievement tend to bolster one's self-efficacy. This might explain Ashley's low self-efficacy results.

Perceptions of Composition

All of the interviewed participants indicated they had held certain perceptions of composition prior to this experience. Ashley thought that "being a composer you had to be this big, professional accomplished musician to do it." Bill thought that composition was more "formal" and "notated." Similarly, Jeff thought composition must be "concrete" or should be "more difficult or...more strict." The participants' perceptions of composition might be attributed to the dichotomy between big-C creativity and little-c creativity (Csikszentmihályi, 1996; Gardner, 1993). According to Csikszentmihályi (1996) big-C creativity focuses on eminent creativity, whereas little-c creativity represents everyday creativity. The pre-service teachers, with their bias as trained musicians, would likely be aware of eminent composers, such as Mozart and Bach. When they thought of composition, the first thing they might have imagined was big "C" creativity: Wagner, Beethoven, Mahler. So they might have held their creative endeavors to a higher standard. This might explain why they lacked a degree of confidence with regard to their compositional ability. Though Jeff mentioned that he wrote music "a lot,"

he did not consider his creative output as composing. This might suggest that Jeff perceived his creative output as a little-c creativity endeavor rather than big-C creativity.

Bill expressed that while he was not confident of his ability to orchestrate and arrange, he indicated he felt he had “some actual talent, to some degree” and could “learn the science behind it.” Bill’s comments might give credence to Kaufman and Beghetto’s (2009) proposed Four C model of creativity. The researchers agreed with the big-C and little-c creativity as established by Csíkszentmihályi (1996) and Gardner (1993), but also added “mini-c” creativity as well as a “pro-c” creativity. Mini-c creativity was defined as, “the novel and personally meaningful interpretation of experiences, actions, and events” (Kaufman & Beghetto, 2009, p. 3); “pro-c” creativity were individuals who are “professional creators, but have not reached eminent status” (p. 4). The fact that Bill thought he was a “composer in the making” might support Kaufman and Beghetto’s (2009) theory of “pro-c” creativity.

All of the interviewed participants referenced the idea they did not have any creative work to offer as evidence that they were composers. This might suggest the importance of having a product that is valued and recognized by a field of experts (Csíkszentmihályi, 1996; Gardner, 1993). Jeff said, “I don’t have anything to show. Like, I don’t have, like, this one hand keyboard thing that I wrote, with vocals.” Bill also mentioned the need to have a creative product that was validated by others. When asked if he would call himself a composer, Bill commented, “Uh, in a way...yes...I think I’m a composer who needs to finish his piece first.”

Music teacher educators might want to consider that their students have preconceived assumptions about music composition. Pre-service teachers might have a big-C perception of creativity and could hold their creative endeavors to a higher standard than their skills or abilities can accomplish. This has the potential to invalidate their personal compositions and could possibly hinder the self-efficacy beliefs as composers and pedagogues of composition. If pre-service teachers were made aware of their preconceived beliefs before engaging in a creative activity, it might increase their degree of comfort. Furthermore, if pre-service teachers could view composition through the lens of their future students, this might enable them to enjoy the creative process and make insights into the pedagogy of teaching.

Insights Gained from Composing Music

The second major theme that emerged from the interviews suggested that participants gained several insights through the course of composing music. The three subcategories in this section reflected how the participants' beliefs were challenged with regard to composition as well as revelations they made: (a) enjoying composing music, (b) finding a process, (c) assumptions that were challenged.

Enjoying Composing Music

All the participants indicated they enjoyed the opportunity to participate in this composition experience. Ashley, who had no previous composition experience, indicated that it was “fun” and that she “wanted to keep playing.” Ashley also suggested that the

level of enjoyment she had was due to the fact that she “wanted to make something sound good.” While Jeff remarked that he also enjoyed the experience, he felt some frustration that he was limited by his mallet technique, the chromatic limitations of the instrument, and time constraint. These comments by Ashley and Jeff might provide support for Csíkszentmihályi’s (1996) flow theory and the need to balance an individual’s ability level with the degree of challenge. According to Csíkszentmihályi (1996), some of components of flow are: (a) a sense of timelessness, (b) strong intrinsic motivation, (c) knowing that task is attainable, (d) a forgetfulness of oneself, and (e) a balance between challenge and personal skills. Jeff indicated a strong intrinsic motivation to create music, “...probably 80% of what I do on piano is sit down and...[shrugs shoulders]...play.” He also mentioned that while he did not consider his creative output as composition, but that “it’s just flowing.” Similarly, Ashley, who had no prior experience composing, indicated a degree of timelessness: “Like the 10-minute period we had, I almost wanted to keep playing.” Ashley might have enjoyed these tasks more than Jeff because she had less experience composing; therefore, she felt challenged by these tasks. On the other hand, Jeff might have felt frustrated because he had more experience creating music, and he felt limited by the restrictions of the instrument or his technique. Jeff indicated he would have enjoyed these tasks more if he had additional time and could play on a piano, thus increasing the challenge—the range of musical possibilities—to match his skill level. In spite of any perceived frustrations, all three participants found the experience enjoyable, and felt comfortable with the creative process.

Finding a Process

Kratus (1994) observed that, “the *way* children compose affects *what* they compose” (p. 128). Similarly, the pre-service teachers talked about different processes of composing for the three different levels of task structure. The participants mentioned that having a prompt helped provide them with initial success which corroborated previous research (Hamilton, 1999; Kratus, 1989; Strand & Newberry, 2007). Ashley remarked that the prompt guided her composition process. Similarly, Bill remarked that the rhythmic task was not constraining, but “relieving.” Bill’s comment might support Brophy’s (1996) finding that the more structured the composition task, the more it provided a framework to guide the work.

Ashley commented that the unstructured task was harder, “because there wasn’t any really guideline to it.” Even though the unstructured task offered no guidelines, Bill imbued a sense of structure to it which illustrates, according to Stephens (2003), a need as humans to create meaningful and organized patterns. Similar observations have been made by researchers who observed children engaged in unstructured creative music-making (Dunn, 1992; Kratus, 1989, 1994; Pond, 1981; Smith, 2004).

Jeff thought the rhythmic task required more of a mathematical approach while the unstructured task was more “emotionally oriented.” Jeff also commented during the interview that he “loved counterpoint” indicating that he might be more analytical in his compositional process. His comment also might indicate that the more unstructured the task, the more it gave him freedom to audiate or think through the composition in sound.

Audiating or thinking in sound supports Webster's (1990, 2009) model of creative thinking in music.

When asked how the interviewed participants created the poem task, Jeff and Ashley indicated they used the rhythm of the words as an entry point for their composition. Smith (2004) similarly found that the poem task contained an inherent rhythm and meter that provided a successful framework for the students' compositions. Similarly, Dunn (1992) observed that beginning composers who used words and poems as a basis for their composition became more secure in their ability to create new music. While Ashley matched the rhythm of the words, she, along with Bill, employed text painting when approaching the poem task. For Bill, the text provided the "meaning behind" the melody and added more "inspiration." For Ashley, the poem task brought "out more of who you are and...how you see the world."

Assumptions about Composition were Challenged

All of the interviewed participants indicated they held preconceived assumptions about composing and what a composer should look like. By participating in this study, the experience challenged their assumptions concerning the process and product. As previously mentioned, much of their discussion during the interviews gave evidence to support a dichotomy between big-C creativity and little-c creativity (Csíkszentmihályi, 1996). The participants suggested that for a piece of music to be considered composition, it must be "formal," "notated" and "concrete." However, during the interviews there was evidence their perceptions had changed. Ashley surmised that a composition did not

necessarily have to be notated as she thought previously. Bill thought that a composition must be notated, but later surmised that “anything could be a composition.” These findings support Jeannerat and Cantwell’s (2002) study in which pre-service teachers concluded that the ability to notate was not a prerequisite for composition. Bill also dismissed the notion that a composer needed a vast knowledge of orchestration and theory, but realized, “it’s kind of in you, you can compose a piece and anybody can compose.”

All the participants indicated after their experience that they believed anyone could compose. Jeff commented that he now had a “broader definition of composing,” but also noted, “I think there is more of a grey line between what is and what is not composing” and that it “depends upon your definition.” Bill also surmised that one’s perceptions of composition might be subjective, but it “depends upon how you view composition.” Bill’s comments not only give credence to Kaufman and Beghetto’s (2009) Four C model of creativity, but also to Amabile’s (1996) theory of consensual agreement. Amabile theorized that a creative work must be evaluated by “appropriate observers” or peers specific to that domain (Amabile, 1996, p. 33). Jeff’s comments seemed to support Amabile’s theory as well; while he thought that anyone could compose, he was hesitant to call his pieces compositions because he might have viewed his creative work through the lens of his peers.

Initially, Ashley was a bit fearful of composing, but she remarked that it was easier than she thought: “I didn’t see myself as having any ability to compose things and now I feel like it’s easy.” This might again support Bandura’s (1977) theory that an

individual's mastery experiences affected one's self-efficacy beliefs. Ashley was initially unsure of composition because she was not exposed to it, but after successfully completing these tasks she felt more confident.

An implication for teacher educators is that composition can be engaging, enjoyable and educational. While pre-service teachers might initially be hesitant to compose due to their preconceptions of composition, the tasks should be presented informally. The pre-service teachers might need to be reassured that the compositions do not need to be written down or follow any strict rules of theory and voice leading. Furthermore, teacher educators might want to consider encouraging their students to find their own compositional process, as no two individuals compose the same way. Teachers might also want to consider matching the composition task with the musicianship of their students, so that the degree of challenge matches their skill. Not only does this have the potential to engage their students in the "flow" of the learning process, but it also might increase their enjoyment.

Impact on Teaching

The study impacted the participants' perceptions as future teachers. This last major theme focused on this experience's influence on the participants' thoughts and perceptions of teaching. This teaching theme was divided into three subcategories: (a) Value of teaching composition, (b) beliefs about creativity, and (c) insights about teaching.

Value of Teaching Composition

All of the interviewed participants agreed that composition should be included within music instruction. Ashley cited composition's value as giving students a well-rounded perspective of music. Jeff supported Ashley's statement, "But I also think there are kids that could live up to so much more than...like become even better at performance if they pursue composition more." Ashley's comments might provide support for Bunting (1988), who argued that musically creative activities expand students' musical understanding as they draw upon their previous musical experience and learning. Bill cited that engaging in compositional experiences might provide a way for students to learn musical concepts, supporting the findings of researchers who have noted that students' understanding of music theory and syntax increased when they were engaged in various composition tasks (Hickey, 2003; Strand & Newberry, 2007).

All three participants also cited the value of composition as a means of self-expression. Ashley and Jeff lamented that much of music in schools is performance oriented instead of allowing for creativity. Ashley believed that composition could give students a more well-rounded view of music; Bill suggested composing offered a much-needed means of self-expression. Jeff remarked that there was "much more to it" than merely performance. This need for self-expression and creativity according to Jeff was not limited to music, but an issue with public education as an institution. He lamented in his high school experience, creativity was "not even really acknowledged. It's not discouraged, it's just not even brought up at all." As Jeff made these comments his voice grew louder indicating this was a topic that elicited strong emotions. He remarked that it

frustrated him that he did not receive many creative experiences within his public schooling. Research has supported Jeff's stance. For example, researchers have documented that music specialists tend to emphasize student performance (Abril & Gault, 2008; L'Roy, 1983; Reid, 2002; Roberts, 1991, 1995) and information retrieval (Sherman, 1991) rather than composition (Byo, 1999; Orman, 2002; Wang & Sogin, 1997). Also, Webster (1988) argued against the propensity of music educators who emphasized performance but neglected creative activities.

Beliefs about Creativity

By participating in these tasks, the interviewed pre-service teachers revealed inherent beliefs about creativity. Ashley mentioned that she did not like to fail and had a fear of other's reactions to her creative work. However, throughout her participation in the study, she did not express feelings of discomfort or fear. She highlighted the importance of feeling safe and free of any external evaluation for her to be creative. She noted, "I feel like anything we created was going to be OK." Because she perceived no one would be judging her work, she was less fearful and expressed a sense of comfort that allowed her to have fun. When asked if she had to complete these tasks for a grade, she responded that it would be, "more nerve-racking." Peddell (2005) found that pre-service teachers, "need to experience activities in a non-threatening environment where they feel safe to experiment" (p. 101). Also, Webster (1990) suggested that the environment can be an example of a non-musical enabling condition that could have a profound influence on the creative process.

Ashley and Jeff thought the poem task offered them the most creativity, but Bill thought the unstructured task enabled him to be more creative. Bill cited the unlimited possibilities of the unstructured task allowed him to “be more free.” Similarly, Hickey (1997) found that students’ compositions were more creative when they were given no parameters over those who were given task conditions. Furthermore, Smith (1994) found that students preferred to compose without researcher-imposed guidelines even though they rated the unprompted activity as being more difficult than the structured activities.

Jeff, however, noted that each composition condition offered a degree of creativity: “I think they all have their special creativity.” Jeff later added that composing within the framework of severe structure might be “more impressive” and would be “much more memorable if you have all these rules and somehow still manage to make it very enjoyable composition.” Amabile (1996) remarked that constraint tends to impede creativity, but a “freedom in deciding what to do or how to accomplish the task stimulates creativity” (p. 231). Conversely, Stevens (2003) stated: “Freedom does not come from the absence of guidelines or rules, but through the establishment of clear parameters within which decisions can be made” (p. 129). Additionally, DeLorenzo (1989) discovered that structured exploratory activities helped students reach higher levels of creativity and presented students with new ways to approach composition that might enhance their problem solving skills. Jeff’s insights about the rhythm task aligned with Stevens’ (2003) and DeLorenzo’s (1989) ideas that creativity could be found even within severe constraint.

Insights about Teaching

The participants indicated this experience affected their perceptions as future music educators in that they expressed a desire to incorporate compositional activities within their future classrooms. This experience also provided insights into their pedagogical process of teaching for creativity.

Each of the three interviewed participants indicated they would like to engage their future students in composition activities. They all surmised that the rhythm task would offer their future students the most success. Ashley said, “But if there’s a rhythm already provided, I think it’s going to provide more of the components of the song.” Bill agreed, “Ok, I’ve got the rhythm, now I can do the melody.” These comments seemed to support previous research that the more constrained the structure, the more focus the composition and the more it provided a framework for success (Hamilton, 1999; Kratus, 1989; Strand & Newberry, 2007). According to Goodkin (2002), “Often, the tighter the focus, the more satisfying the result” (p. 12). While Jeff also thought that the rhythm task would offer his students initial success, he mentioned that it might not be the best condition if a teacher is looking to obtain the best quality. However, studies by Smith (1994; 2004; 2008) reported that the structured products created by children were rated higher in overall musicality than the unstructured compositions.

The participants also made several insights regarding the pedagogy of composition. Ashley commented on the need for effective modeling to “set a good example for them.” Jeff indicated the need for sequential instruction that could be matched to the student’s degree of comfort: “You start with at least some kind of

constraint. And then open it up more as the kids [motions with hands] get more comfortable.” Ashley also commented that the task condition might need to be based upon the needs of the student. She offered several scenarios in which each of the three tasks might fit the needs and personality types of her students and concluded, “I think it just depends on the person.” Other researchers have also commented on the need to find balance between the task challenges with the abilities of the individual (Csikszentmihalyi, 1996; Webster, 1989; Wiggins, 1990).

Ashley indicated that she had a fear of failing, but did not feel uncomfortable participating in these composition tasks because she knew her product would not be judged by others. Ashley later commented on the importance of creating a safe environment that was free from critical evaluation in order to cultivate composition. Facilitating an environment that cultivates creativity and is conducive to the student’s needs has shown to be important to several researchers (Peddell, 2005; Shand, 2002; Webster, 1990). Shand (2002) found that students who engaged in composition tasks challenged the boundaries of their musical experience by exploring possibilities without the limitations of being right or wrong. Ashley also indicated that the unstructured task might better facilitate her students’ creativity. Bill agreed that the unstructured task allowed him to be “more free” and surmised it would cultivate creativity in his students. These statements seemed to support Hickey’s (1997) findings in which the participants’ compositions were more creative when they were given no parameters over those who were given task conditions. Additionally, Smith (2004) and Stephens (2003) noted that

students' perceived creative control seemed to increase their intrinsic motivation and perception of the composition task (Smith, 2004; Stephens, 2003).

When asked if this composition study influenced their perceptions of teaching composition, all the interviewed participants indicated it had. Bill remarked that he thought he needed a lot of background knowledge of orchestration and theory, but realized, "there [is] really no kind of formal way to teach composition." When the question was posed to Ashley, she smiled and remarked, "I left every time thinking, 'That wasn't as bad as I thought it would be.'" Also, Jeff mentioned that he had more tools in his repertoire in which to teach composition, but stated that he did not feel entirely comfortable with it, but that it provided him initial framework for understanding the pedagogy of composition. While this composition study engaged the participants in three composing tasks, it certainly did not engage them in any formal teaching. Jeff might still feel uncomfortable teaching composition because he had not had any mastery experiences teaching for creativity (Bandura, 1977).

Music teacher educators should consider incorporating composition activities in their classroom not only as a means of enhancing self-efficacy beliefs, but also as a means of encouraging self-expression and creativity. Teachers teach as they were taught; hence, the need for pre-service teachers to receive creative experiences during the undergraduate curricula. This might increase the potential for pre-service teachers to provide composition instruction within their future classrooms. Teacher educators might also consider creating a classroom environment that is free of evaluation and criticism.

This might have the potential to nurture creative expression for students who have never composed before.

Teacher educators should consider that though the rhythmic task might provide initial success and increase self-efficacy beliefs, it might not allow for the most creativity. While degree of creativity was not a variable within this study, the interviewed participants indicated that they favored the creative freedom of the poem and unstructured tasks. Consideration should be given, therefore, to possibly add—in addition to the rhythmic task—a moderately structured or unstructured composition task as a means of facilitating creative expression.

Summary

The primary implication for teacher preparation programs would be to consider including composition within undergraduate curricula. An assumption to be made here is that music education faculty themselves would need to be comfortable and proficient leading students in novice composition experiences. Composition might be included in a variety of courses: in an introduction to music education class as a way to diagnose and improve musicianship skills as well as introduce composition; in elementary methods classes, particularly given the value of being able to compose pieces focusing on particular musical concepts for elementary students; and in secondary methods classes to guide future band, orchestra and choir directors in how composition might provide a more well-rounded middle and high school experience.

Dewey (1938) theorized that knowledge and learning are best attained by *doing* rather than passively absorbing. Furthermore, students generate new ideas by making connections to previous learning only through engaging in learning experiences. Dewey further argued the importance of expression, free activity and play as essential tools of knowing (Dewey, 1933). The interviewed participants, both in the main and pilot study, enjoyed participating in these tasks. For some, it was a form of play. Ashley remarked, “I thought it was a lot of fun [smiles]. I...I...[laughs]. Like the 10-minute period we had, I almost wanted to keep playing...” These activities had the potential to be fun, engaging and educational. Furthermore, they might increase pre-service teachers’ confidence as composers and as future teachers of composition; but it seems they must first “do composition,” to get its benefit. According to Ashley, “I think I’m more comfortable with it. Just because... I’ve had the experience with it and it’s just not as “scary.” In music education, we have the potential to offer a respite from the convergent-thinking and teaching-to-the-test mentality offered in many current educational institutions. As musicians we can offer opportunities for creativity and self-expression. This would have the potential to justify our place not only within the curriculum, but also to our creative selves.

Limitations

As with the discussion of any study, caution needs to be taken when evaluating the results and the limitations should to be considered. First, the findings of the current study are not generalizable due to the fact the sample size was small ($N = 29$) and the

participants all attended universities in the north-central region of the United States. Secondly, while efforts were made to recruit pre-service teachers from three different sized universities, the ratio of participants was not equitable: 69% were from the small university, 7% were from the mid-sized college, and 24% were from the large university.

An additional limitation to the study might be due to the presence of an order effect within the pilot study. The composition tasks within the pilot study were given to the participants in a counter-balanced order; however, an order effect was still observed within some of the task sequences. Since the pilot study revealed no order effect for either dependent variable question for the *unstructured task*, *poem task* and *rhythm task* sequence, this sequence was chosen to guide the main study. However, within each dependent variable question for the main study, the means from each task progressively increased. While there was no other task sequence in the main study to compare it to, this information provided a concern that the results of the study might not be due to a specific composition task, but might be attributed to an order effect. This warrants further investigation to closely monitor a possible order effect with a larger sample size.

Despite attempts to maintain sound research procedures, further limitations to this study might involve threats to internal and external validity. First, a location threat might have occurred because the participants completed their compositions not only at different times of the day, but also different days of the week. Additionally, while a majority of the participants completed each task within a seven-day interval, eight participants had scheduling conflicts and had to reschedule, thereby making the interval between 5 to 14 days to complete the last composition task. In addition, the participants were pooled from

three different universities, and instead of having the participants travel to one location, it was easier for the participants for the researcher to meet each individual on each respective campus. While the pre-service teachers might have felt comfortable in their familiar surroundings, the location was not consistent across the participants.

Another internal validity threat might be within the subject population. Though many participants were recruited for the study, only 29 students completed the study. Since the participating students chose to be part of the study, they might have had a predisposition or interest in composition. This might have unintentionally biased their responses and dependent variable scores.

A Hawthorne effect might also be an additional threat to the study. Since the participants knew they were participating in a study that focused on self-efficacy beliefs and composition, they might have felt compelled to adjust their efficacy scores for each composition task. Through the course of the interview Jeff commented, "...and after thinking about that this was a study about music educators teaching composition, it made me a lot more aware of what I was doing as I composed."

There might have been inherent researcher bias during the interviews. While attempts were made to limit this bias in the grand tour questions, some might have occurred during the interview. The following dialogue with Jeff might be such an example:

Jeff: Yeah. Yeah, I don't know. I just...I feel like there is more to composing than just what I do on piano. 'Cause, like, I play chords and stuff [shakes head], but...I don't know...it's not really concrete. It's just flowing. I don't know...

Hauser: So, would you consider it improvisation or...

Jeff: Yeah. Yeah. It's definitely improv.

Steps were taken to avoid a novelty threat by having the students explore and improvise on the bass xylophone before each task was presented. While this might have given them a degree of familiarity with the instrument, it might not have given them sufficient preparation for the composition tasks. This was revealed during the one-on-one interviews. When asked if he was comfortable composing, Bill remarked, "At first, it was, 'OK, you have 10-minutes to compose a piece.' I kinda freaked out a bit [motions with his hands to show panic]...what do I do?" Similarly, Jeff commented, "I mean, the first one was kind of daunting cause I was just like...[pauses and looks at researcher]... it was the first one." Later, Jeff added that he adapted quickly, "But I think that worked itself out pretty quickly."

Another limitation of the study might involve the length of time each participant had to compose their compositions. The study mirrored research conducted by Kratus (1989, 1994) in which students were given 10 minutes to compose a piece. However, 10 minutes might not be sufficient time for students to immerse themselves fully in the creative process. According to Wallas (1926), individuals involved in a creative endeavor traveled through a four-staged process: *preparation*, *incubation*, *illumination* and *verification*. Ten minutes might not allow for the creative work to truly travel through the incubation stage. Webster argued that musicians needed to think in sound to produce a creative work. The pressure of having to create a work in 10 minutes might not have allowed the participants to audiate their compositions as Webster suggested. A future study which allows participants to compose without any time constraints might be

informative. While these results should not be generalized to every population, and caution should be taken when evaluating them, the data provided important information concerning pre-service teachers' compositional and instructional self-efficacy and their perceptions of composition.

Future Research

Like any research study that aims to answer questions and fill the void in the research literature, more questions have been raised than answered. First, it would be interesting to know if any of the participants in this study actually incorporated composition within their future classroom experiences. According to Reid (2003) teachers tend to teach as they were taught (Reid, 2003). Furthermore, Byo (1999) noted that teachers tend to emphasize the music standards with which they were most comfortable. All three interviewed participants mentioned they would implement these activities in their future classrooms. Similarly, the participants in the study seemed to become more confident in their self-efficacy as composers and teachers of composition. It would be useful to know if research truly informed practice; if these participants actually incorporated compositional activities within their instruction.

Choosing a different instrument as a medium for composition would be an area of future investigation. During his interview, Jeff commented that he was frustrated on many levels: (a) the chromatic limitations of the xylophone, (b) the fact that he did not have better mallet technique, and (c) that he wanted to compose these exercise on piano. This might have indicated that he was limited creatively by the limitations of the

instrument and wanted to compose more than he was physically able to produce. The xylophone was used for this study because, for many of the participants, it was not their primary instrument and hopefully each participant would have a consistent ability level (Thornton et al., 2004). Additionally, the xylophone was an instrument that might be found in a general music classroom and would provide real life connections for the pre-service teachers. Future researchers, however, might consider having students play on their primary instrument to see if that would have any effect on their self-efficacy beliefs.

Another area of research would be to conduct a similar study with in-service music teachers. Would engaging experienced teachers in composition tasks affect their self-efficacy as composers and teachers of composition? Again, a follow-up study could be conducted to determine if they actually put it into practice.

Epilogue

To those reading this dissertation, it might be of no surprise to know that I am a composer and a music educator. As a composer, I have written music since I was in second grade; yet as an educator, I have a passion to give authentic, meaningful and engaging musical experience to children. I have written a 20-minute orchestral composition entitled, “The Circus Train,” which is a musical adaptation of the Olive B. Miller story of *The Little Engine that Could*. It has received multiple performances by several recognized symphonies within their young children’s programs. I was also commissioned to write a children’s jazz dance suite, performed by the Nashville Ballet. I have composed songs for high school choirs, children’s choirs and jazz choirs. I also

have given presentations and workshops on facilitating creativity within the music classroom to pre-service and in-service teachers. Having this background in composition, I did not know what to expect from the creative output of the pre-service teachers' 10-minute compositions.

However, after completing the study I was thoroughly delighted and surprised at the musicality and innovativeness of the participants' creative endeavors both during this study and in the pilot study. They showed levels of novelty and divergent thinking that I did not anticipate. For example, several students simulated a percussive drum effect by hitting the side of the xylophone. Many students added harmony to their melodic lines. While most compositions were in major and minor tonalities, one student purposely chose to compose in Lydian mode. Another student remembered the unstructured composition and presented it to his composition professor. He later developed the piece into a brass quartet; it was performed recently at a student composers' recital and was titled, "Unstructured." One student in the pilot study tried to expand the limitations of the xylophone by creating chromatic harmonies through muting the xylophone bar with his hand. During the unstructured composition several students asked if they could take out bars from the xylophone and rearrange them to aid their mallet technique. During the poem task one student asked if she could sing along. Several students asked if they could repeat the rhythmic pattern more than once. I did not say "Yes" or "No" to these inquiries, but I merely reread the instructions again. I did not want to influence, limit, overly encourage or restrict their creativity. The participants surmised that the instructions did not say anything against singing, or hitting, or playing in harmony, so

they commenced with their unique approaches to composing their music. Meanwhile, I kept my objective “researcher face on”, but the composer in me was thrilled. The participants showed a level of “out of the box” thinking that surprised me. It was these bursts of creative music writing motivated my scholarly writing and gave me further reason to believe that creativity *is* within all of us. It just needs to be tapped.

APPENDIX A
INTERNAL REVIEW BOARD APPROVAL LETTERS



OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND ECONOMIC DEVELOPMENT
October 3, 2011 Research Services

Donna Emmanuel
Department of Music Education
University of North Texas

Re: Human Subjects Application No. 11425

Dear Dr. Emmanuel:

As permitted by federal law and regulations governing the use of human subjects in research projects (45 CFR 46), the UNT Institutional Review Board has reviewed your proposed project titled "The Effect of Three Compositional Structures on the Compositional and Instructional Self-Efficacy of Pre-Service Teachers." The risks inherent in this research are minimal, and the potential benefits to the subject outweigh those risks. The submitted protocol is hereby approved for the use of human subjects in this study with the stipulation that approval is received from Concordia University before contact with human subjects at that site. **Federal Policy 45 CFR 46.109(e) stipulates that IRB approval is for one year only, October 3, 2011 to October 2, 2012.**

It is your responsibility according to U.S. Department of Health and Human Services regulations to submit annual and terminal progress reports to the IRB for this project. The IRB must also review this project prior to any modifications.

Please contact Shelia Bourns, Research Compliance Analyst, or Boyd Herndon, Director of Research Compliance, at extension 3940, if you wish to make changes or need additional information.

Sincerely,

Patricia L. Kaminski, Ph.D.
Associate Professor
Department of Psychology
Chair, Institutional Review Board

PK:sb

CONCORDIA UNIVERSITY
INSTITUTIONAL REVIEW BOARD

Date Received: 9/16/2011

RESEARCHER NOTIFICATION

Contact Information

Researcher: Hauser, Christian

Title: The effect of three compositional structures on the compositional and instructional self-efficacy of pre-service teachers (Main Study)

This study reviewed by: ACDubois & Ebecker

- Is in the possession of the reviewer, and currently under consideration.
- Has been approved. We have your application in our permanent file.
- Is approved with the conditions explained on the bottom of this form.
- Has not been approved as explained on the bottom of this form.

Exempt from further review for the next 12 months.

AC Dubois & E Becker - 9/27/11
Dr. A. Clark Dubois
Chair, Institutional Review Board

Researcher: Please contact Clark Dubois, Concordia University, by phone: 708-209-4069, or e-mail: crfduboisac@curf.edu, to notify this office when you have completed your research project, or if you have any questions.

Explanation, if any:

CUC IRB gives conditional approval to be effective upon receipt of the IRB Approval from the Univ. of North TX IRB office.

CONCORDIA UNIVERSITY
7400 Augusta St.
River Forest, IL 60305
Phone: 708 771 8200



October 28, 2011

IRB Notice of Approval

Principal Investigators: Christian V. Hauser (Music Faculty member at Concordia University, Chicago)

Project Title: The effect of three compositional structures on the compositional and instructional self-efficacy of pre-service teachers (Main Study)

Renewal Date: October 24, 2012

This letter certifies that the proposed study as described in the revised application (received October 28, 2011), has been approved because the Elmhurst College Institutional Review Board has been determined that the protocol fulfills all the necessary requirements for human subjects research.

This approval has been granted from October 25, 2011 until October 24, 2012. Should you need to continue this study beyond this period, please submit to the Chairperson of the Elmhurst College IRB a one-page continuation application by October 10, 2012. Include in this continuation application a brief description of the progress to date in the study.

Please note that this approval is for the protocol as described in your application. Should you desire to make any modifications in your protocol, any and all proposed modifications must be submitted to and approved by the Elmhurst College IRB prior to being initiated.

Sincerely,

A handwritten signature in black ink that reads "Raymond Kraus".

Raymond Kraus, Ph.D.
Institutional Review Board Chairperson
Elmhurst College
Department of Kinesiology
Elmhurst College
190 Prospect Avenue
Elmhurst, IL 60126

Department of Kinesiology *190 Prospect Avenue* *(630) 617-3148 phone*
Elmhurst, IL
60126

**Institutional Review Board Office
Northwestern University**

Biomedical IRB
750 North Lake Shore Drive
Suite 700
Chicago, Illinois 60611
312-503-9338

Social and Behavioral Sciences IRB
2205 Tech Drive
Suite G-100
Evanston, Illinois 60208
847-467-1723



October 17, 2011

To: Christian Hauser
Assistant Professor of Music, Concordia University
Christian.Hauser@cuchicago.edu

From: Lucas Sikorski, CIP
Senior IRB Coordinator
Institutional Review Board Office

Re: The effect of three compositional structures on the compositional and instructional self-efficacy of pre-service teachers

Status: Not Human Subjects Research at Northwestern University

Dear Professor Hauser,

According to the information submitted to the IRB Office by e-mail on 10/11/2011, Northwestern University faculty member, Dr. Maud Hickey, will allow you to recruit her students for your research study and will not be helping you carry out any research procedures beyond this recruitment purpose. No research is being done at Northwestern University for the purposes of your study and no NU faculty will be consenting subjects.

As such, the project referenced above does not require Institutional Review Board (IRB) at Northwestern University as the HHS guidance states that activities limited to the following does not make the institution engaged in human subjects research:

OHRP guidance: <http://www.hhs.gov/ohrp/policy/engage08.html>

III.B.4. Institutions whose employees or agents:

- a. inform prospective subjects about the availability of the research;
- b. provide prospective subjects with information about the research (which may include a copy of the relevant informed consent document and other IRB approved materials) but do not obtain subjects' consent for the research or act as representatives of the investigators;
- c. provide prospective subjects with information about contacting investigators for information or enrollment; and/or
- d. seek or obtain the prospective subjects' permission for investigators to contact them.

For more information regarding IRB submissions and guidelines, please consult <http://www.northwestern.edu/research/OPRS/irb>.
This Institution has an approved Federalwide Assurance with the Department of Health and Human Services: Assurance ID# FWA00001549.

You may conduct this research without any further review by the IRB. If you make any revisions to the project which may make Northwestern University engaged in human subjects research, you must submit it to the IRB for review and approval prior to the revised project being initiated.

Sincerely,

A handwritten signature in blue ink that reads "Lucas Sikorski".

Lucas Sikorski, Senior IRB Coordinator

APPENDIX B
IRB INFORMED CONSENT SAMPLE

University of North Texas Institutional Review Board

Informed Consent Form

Before agreeing to participate in this research study, it is important that you read and understand the following explanation of the purpose, benefits and risks of the study and how it will be conducted.

Title of Study: The effect of three compositional structures on the compositional and instructional self-efficacy of pre-service teachers.

Principal Investigator: Dr. Donna Emmanuel (with Key Personal: Christian V. Hauser, a graduate student in the University of North Texas, Department of Music Education).

Purpose of the Study: You are being asked to participate in a research study that examines the degree of confidence you have in your ability to compose music and the degree of confidence you have in your ability to teach your future students how to compose.

Study Procedures: If you choose to participate in this study, you will be asked to answer questions on a Demographic Form (comprising of gender, rank in school, major degree, primary instrument and previous composition experience), and the Compositional and Instructional Self-Efficacy measurement (comprising of only two questions regarding compositional self-efficacy and your self-efficacy in teaching your future students how to compose). This should take approximately 10 minutes.

Then within a three week period, you will be asked to complete three composition tasks on the bass xylophone. You will complete one composition task per week. The tasks are (not necessarily in this order):

- 1). Compose a melody to a given rhythm.
- 2). Compose a melody without any constraints.
- 3). Compose a melody to a poem.

The composition tasks should take approximately 10 minutes each. These compositional activities used in this study are part of your regular course work, but if you do not want to be part of the study then your data will be discarded. Participation in the study will have no bearing upon your grade in class. You also may opt out at any time. To ensure replicability, you will play the composition two times. A video camera will record your composition. In efforts to ensure confidentiality, the camera will focus on your hands and will not record your face.

After you complete each composition, you will be asked to answer the Compositional and Instructional Self-Efficacy questions. The total time to complete the composition tasks and answer the Compositional and Instructional Self-Efficacy questions should take approximately 50 minutes.

Three individuals will be randomly chosen (drawing of names) to be part in semi-structured interviews (focus group). Like the rest of the participants, they will complete all three composition tasks, the Composition Reflection Forms and have their compositions recorded. The researcher will interview each participant for no more than 25 minutes to provide any additional insight deemed noteworthy. The interview will be video taped to help document your experience. The interviews (for the focus group) will take place at Concordia University in the music building. It will take place after each participant has completed each of the three composition tasks (most likely during the first or second week of November). If you are randomly chosen to be interviewed, but do not want to be have this level of involvement, then another participant will be randomly chosen.

Participation is voluntary and has no bearing whatsoever on your grade for the class. You may opt out of the study at any time.

Foreseeable Risks: There are no foreseeable risks in this study. However, because you will be engaging compositional activities that are a part of regular course work, the only foreseeable risk would be loss of anonymity. To address this, you will be identified by pseudonyms on all documents and in any subsequent publications. All data, including tapes, field notes, the demographic questions and self-efficacy questionnaires, will be kept locked in the principal investigator's office for three years after the study, then destroyed.

Benefits to the Subjects or Others: The study offers several potential benefits for you and the field of music education. By participating in the study, you will have the opportunity for musical self-expression through creation of three composition tasks. Furthermore, if you choose, you can revise, expand and share your compositions with others. You will also have time to reflect about the process of composition and may incorporate these tasks into your own lesson plans as future music specialists. Furthermore, this study may increase the music education profession's understanding the kinds of structure that help pre-service music teachers compose and feel confident being able to teach others how to compose.

Compensation for Participants: You will receive no compensation for your participation in this study.

Procedures for Maintaining Confidentiality of Research Records: Steps will be taken to ensure your confidentiality of your identity. Though your compositions will be videotaped, the researcher will angle the camera so it only records your hands (and not your face). All of your materials (videos, notes, interview information, transcripts and scores) taken during the study will not be directly linked to your identity. You will not be asked to write your name on the Demographic Form and Compositional and Instructional Self-Efficacy. Instead, you will be given a code number. I will have a coded list that will match your name with your code number. Three participants will be randomly chosen to be interviewed on campus. The interview will be video taped. However, the videotape will be locked and maintained by the Principal Investigator, Dr. Emmanuel, on the UNT campus for three years past the end of the study. Your name will not revealed in the video or written on the tape to ensure your anonymity. The matching code list and your study data (videos, notes, interview information, transcripts and scores) will be retained by the principal investigator's office and stored in separate locations.

The collected materials (videos, notes, interview information, transcripts and scores) and research data will be maintained by the Principal Investigator, Dr. Emmanuel, on the UNT campus for three years past the end of the study. All the materials will be destroyed after 3 years. No one else will have access to the information. The confidentiality of your individual information will further be maintained in any publications or presentations regarding this study.

Questions about the Study: If you have any questions about the study, you may contact Christian V. Hauser at telephone number [REDACTED] or the faculty advisor, Dr. Donna Emmanuel UNT Department of Music, at telephone number 940-369-7973.

Review for the Protection of Participants: This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-3940 with any questions regarding the rights of research subjects.

Concordia's Review for the Protection of Participants: This research study has been reviewed and approved by the Institutional Review Board (IRB) at Concordia University Chicago. Concordia's IRB can be contacted at (708) 209-4069 with any questions regarding the rights of research subjects.

Research Participants' Rights: Your signature below indicates that you have read or have had read to you all of the above and that you confirm all of the following:

- Christian V. Hauser has explained the study to you and answered all of your questions. You have been told the possible benefits and the potential risks and/or discomforts of the study.
- You understand that you do not have to take part in this study, and your refusal to participate or your decision to withdraw will involve no penalty or loss of rights or benefits. The study personnel may choose to stop your participation at any time.
- You understand why the study is being conducted and how it will be performed.
- You understand your rights as a research participant and you voluntarily consent to participate in this study.
- Your decision to participate or to withdraw from the study will have no effect on your standing in this course or your course grade.
- You have been told you will receive a copy of this form.

Printed Name of Participant

Signature of Participant

Date

For the Principal Investigator or Designee: I certify that I have reviewed the contents of this form with the participant signing above. I have explained the possible benefits and the potential risks and/or discomforts of the study. It is my opinion that the participant understood the explanation.

Signature of Principal Investigator / Designee

Date

Office of Research Services
University of North Texas
Last Updated: August 9, 2007

3 of 3

APPENDIX C
QUANTITATIVE MEASURING INSTRUMENT

ID#: _____

Music Composition Study Demographic Form

Background Information:

Which category below best describes your current academic status?

Freshman

Sophomore

Junior

Senior

How many full semesters have you completed toward your undergraduate degree? _____

What is your primary instrument (voice/flute/piano etc.)? _____

What is your age? _____

What is your gender (circle one)? Male / Female

What is your music education emphasis (choral, strings, band, elementary education)? _____

Have you ever composed music before (circle one)? Yes / No

If "yes" then please describe below:

ID#: _____

Compositional and Instructional Self-Efficacy Questions

Questions: Please rank the degree to which you agree or disagree with the following statement. Circle the number that indicates your response:

1. I feel confident I can compose a piece of music.

Strongly Disagree

Strongly agree

1 2 3 4 5 6 7 8 9 10

2. I feel confident I can teach my future students how to compose a piece of music.

Strongly Disagree

Strongly agree

1 2 3 4 5 6 7 8 9 10

COMPOSITION TASK #1

Unstructured Composition

Compose a piece of music on the bass xylophone. You have 10 minutes to compose your song. Your song can be long or short as you would like and use whatever notes or sounds that seem appropriate. Create a piece that is as musical as you can and that you would be willing to share with others. You are free to compose this piece of music without any given structure and there will be no restrictions placed upon you. There is no need to write it down, unless you want to make few notes to help you remember it. When you have the finished piece, please practice it a few times so that you are sure you can play it the way you want to.

When you are finished composing your piece of music, I am going to ask you to play it for me twice. Next, please answer the two questions below.

Questions: Please rank the degree to which you agree or disagree with the following statement. Circle the number that indicates your response:

1. I feel confident I can compose a piece of music.

Strongly Disagree

Strongly agree

1 2 3 4 5 6 7 8 9 10

2. I feel confident I can teach my future students how to compose a piece of music.

Strongly Disagree

Strongly agree

1 2 3 4 5 6 7 8 9 10

COMPOSITION TASK #2

Structured Composition – Poem

Compose a piece of music on the bass xylophone based upon a poem. You have 10 minutes to compose the piece of music. Your song can be long or short as you would like and use whatever notes or sounds that seem appropriate. Compose a piece that is as musical as you can and that you would be willing to share with others. There is no need to write it down, unless you want to make few notes to help you remember it. When you have finished the piece, please practice it a few times so that you are sure you can play it the way you want to.

Make sure you can say read the before you begin. The poems is:

*See the stars up in the sky
Shining brightly through the night
Light falls down—upon me
Giving life for all to see*

When you are finished composing your piece of music, I am going to ask you to play it for me twice. Next, please answer the two questions below.

Questions: Please rank the degree to which you agree or disagree with the following statement. Circle the number that indicates your response:

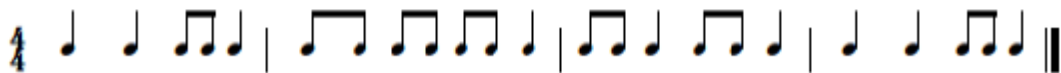
<p>1. I feel confident I can compose a piece of music.</p> <p style="text-align: center;">Strongly Disagree Strongly agree</p> <p style="text-align: center;">1 2 3 4 5 6 7 8 9 10</p>

<p>2. I feel confident I can teach my future students how to compose a piece of music.</p> <p style="text-align: center;">Strongly Disagree Strongly agree</p> <p style="text-align: center;">1 2 3 4 5 6 7 8 9 10</p>

COMPOSITION TASK #3

Structured Composition – Rhythm

Compose a piece of music on the bass xylophone using a rhythmic pattern that I will give you. You have 10 minutes to compose the piece of music. You may use whatever notes that seem appropriate, but make sure you follow this rhythm pattern. Compose a piece that is as musical as you can and that you would be willing to share with others. There is no need to write it down, unless you want to make few notes to help you remember it. When you have finished the piece, please practice it a few times so that you are sure you can play it the way you want to. To make sure you understand the rhythm, please clap or say the rhythm pattern below:



When you are finished composing your piece of music, I am going to ask you to play it for me twice. Next, please answer the two questions below.

Questions: Please rank the degree to which you agree or disagree with the following statement. Circle the number that indicates your response:

1. I feel confident I can compose a piece of music.											
Strongly Disagree											Strongly agree
1	2	3	4	5	6	7	8	9	10		

2. I feel confident I can teach my future students how to compose a piece of music.											
Strongly Disagree											Strongly agree
1	2	3	4	5	6	7	8	9	10		

APPENDIX D
REPLICATION RUBRIC (UNUSED)

Composition Replication Rubric (unused)

Instructions: On the QuickTime movie provided, each participant will play a composition two times. Preceding each composition you will hear the researcher state the participant code number and composition task. Please write the participant code number and circle the composition task below. For example, if you hear: “Participant #13, unstructured task.” Then you would write #13 next to Participant #, and circle unstructured next to task.

Participant #: _____ Task (circle one): Unstructured Poem Rhythm

Then, please listen carefully (as many times as you deem necessary) to each performance to determine if the participant is playing the same piece and answer the following questions:

Scoring

1. Rhythm.

Was the rhythm consistent between the two performances? _____

_____ 0 – 3 rhythmic differences (1 point)

_____ 4 or more rhythmic differences (0 points)

2. Pitch.

Were the pitches consistent between the two performances? _____

_____ 0 – 3 pitch differences (1 point)

_____ 4 or more pitch differences (0 points)

3. Overall.

Were these two performances representative of the same composition? _____

_____ Yes (1 point)

_____ No (0 points)

TOTAL: _____

_____ 3 points = acceptable composition

_____ 2 or less = NOT a composition (improvisation)

Comments:

APPENDIX E
REPLICATION QUESTIONS

Participant #1: Unstructured Task

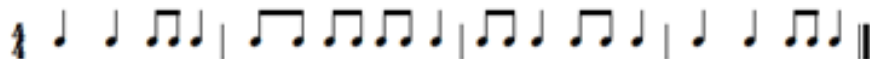
In your opinion, were these two performances representative of the same composition? _____

Participant #1: Poem Task

In your opinion, were these two performances representative of the same composition? _____

Participant #1: Rhythm Task

Does the participant use the rhythm pattern below? _____



In your opinion, were these two performances representative of the same composition? _____

Participant #2: Unstructured Task

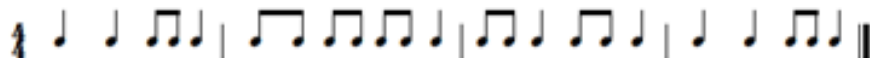
In your opinion, were these two performances representative of the same composition? _____

Participant #2: Poem Task

In your opinion, were these two performances representative of the same composition? _____

Participant #2: Rhythm Task

Does the participant use the rhythm pattern below? _____



In your opinion, were these two performances representative of the same composition? _____

Participant #3: Unstructured Task

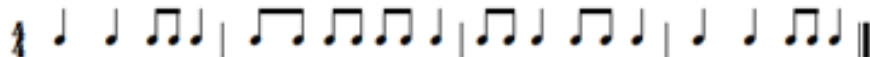
In your opinion, were these two performances representative of the same composition? _____

Participant #3: Poem Task

In your opinion, were these two performances representative of the same composition? _____

Participant #3: Rhythm Task

Does the participant use the rhythm pattern below? _____



In your opinion, were these two performances representative of the same composition? _____

APPENDIX F
SURVEY RESEARCH INTERVIEW QUESTIONS

Tell me about yourself.

Your musical background?

What is your primary instrument

What drew you in to consider a career in music?

I am really curious to know what you think about composition. What does it mean to be a composer? What kinds of skills should a composer have? What would his or her personality like?

Have you ever tried making up a piece of music before? If so, talk to me about it.

You mentioned several skills and personality traits that composers might have...do you see yourself having any of those? Is it possible for you to think of yourself as a composer?

What kinds of assumptions might you have about composing music? For example, does it have to be of a certain musical sophistication? Is it reserved for only really talented people?

So what we did the other day, those three tasks... talk about the overall experience....

What was easy about it? What was difficult about it? Were you comfortable or not?

What made you comfortable/uncomfortable?

We did three different tasks...

Which was harder? Which was easier? Which was the most fun?

Did one of the three, more than the others, change your thinking about being able to compose?

Doing what we did the other day, did it make you feel more comfortable in your ability to create a piece of music? Why or why not?

Did you enjoy this experience? Why or why not?

Do you think your future students would enjoy a similar experience? Why or why not?

Did this experience make you think anything differently about teaching composition to your future students? Please talk about it. Why or why not?

Did this experience change the way you think about composing music? Is it easier or more difficult to see yourself creating music?

Did this experience challenge/change any of the assumptions you might have about being a composer, or what the composition process should look like?

What kind of assumptions do you have as a music educator who is asked about teaching composition to your students?

Did this experience challenge those assumptions?

Do you think composition SHOULD be taught in music programs in public schools?
Why or why not?

Please share any additional thoughts you might have...

Thank you for your time and participation!

APPENDIX G
RESULTS OF PILOT STUDY

Results of Pilot Study

The results of the pilot study need to be tempered. While 22 students filled out the initial measuring instrument, only 15 participants completed the three composition tasks. Scores from the dependent variable questions were entered into Windows SPSS

Table G.1

Skew, Kurtosis and Standard Error for the Pilot Study CISEQ

Question Item	<i>Skew</i>	<i>S.E.</i>	<i>Kurtosis</i>	<i>S.E.</i>
<u>No task administration</u>				
Confidence composing	.20	.58	-.63	1.12
Confidence teaching composition	.40	.58	-1.29	1.12
<u>Rhythm Task</u>				
Confidence composing	-.73	.58	-.60	1.12
Confidence teaching composition	-.05	.58	-.63	1.12
<u>Poem Task</u>				
Confidence composing	-.15	.58	-1.34	1.12
Confidence teaching composition	-.04	.58	-.88	1.12
<u>Unstructured Task</u>				
Confidence composing	-.71	.58	-.44	1.12
Confidence teaching composition	-.54	.58	-.92	1.12

Note: N = 15.

(Version 19). Each item was checked for normality. The assumption of normality was met for each dependent variable question using the 95% confidence interval multiplied by the standard error of skewness and kurtosis (see Table G.1). Having each participant complete each composition task alone and free from any outside influence ensured the assumption of independence. Before testing for the sphericity assumption and before any mean differences were measured, the data were examined for a possible order effect. poem, unstructured, and rhythm group. Only one task group order appeared to have no order effect: unstructured, poem and rhythm (see Table G.2). Regarding the instructional self-efficacy item, no clear order effect was observed with the rhythm, unstructured, poem group or the unstructured, rhythm, poem group. An order effect was deemed possible for the other groups.

Because an order effect was deemed possible for certain conditions a repeated-measures ANOVA was determined to be inappropriate as a statistical analysis choice for these data. Hence, the results for the pilot study were analyzed descriptively. Since an order effect was not evident with the unstructured, poem, rhythm group for both dependent variable questions, it was determined that this should be the order used to guide the main study.

Research Question 1

In analyzing the first research question, “What is the effect of compositional structure on pre-service music teachers’ compositional self-efficacy?” the unstructured task had the highest compositional self-efficacy mean, ($M = 7.88$, $SD = 1.95$, range = 6 to

10) followed by the poem task ($M = 7.80$, $SD = 1.82$, range = 5 to 10) and the rhythm task mean ($M = 7.67$, $SD = 2.06$, range = 4 to 10). All of the tasks were higher than the pre-task administration (6.07 , $SD = 2.37$, range = 2 to 10) (see Table G.2 for means, standard deviations and range for Question 1: Compositional self-efficacy).

Table G.2

Means, Standard Deviations and Ranges for Question #1: Compositional Self-Efficacy

Task Item	M	SD	Min.	Max
1. No task administration	6.07	2.37	2.00	10.00
2. Rhythm task	7.67	2.06	4.00	10.00
3. Poem task	7.80	1.82	5.00	10.00
4. Unstructured task	7.87	1.96	6.00	10.00

Note: $N = 15$.

Research Question 2

In analyzing the second research question, “What is the effect of compositional structure on pre-service music teachers’ self-efficacy to teach composition?” the rhythm task had the highest self-efficacy to teach composition mean ($M = 6.40$, $SD = 1.84$, range = 6) followed by the unstructured task ($M = 6.20$, $SD = 2.27$, range = 9) and the poem task mean ($M = 6.07$, $SD = 1.94$, range = 6), (see Table G.3 for the means, standard deviations and range for question #2: Instructional self-efficacy). All three composition tasks had a higher mean than the pre-task administration ($M = 4.60$, $SD = 2.10$, range = 6).

Table G.3

Means, Standard Deviations and Ranges for Question 2: Instructional Self-Efficacy

Task Item	<i>M</i>	<i>SD</i>	Min.	Max
1. No task administration	4.60	2.10	2.00	8.00
2. Rhythm task	6.40	1.84	3.00	9.00
3. Poem task	6.07	1.94	3.00	9.00
4. Unstructured task	6.20	2.27	2.00	9.00

Note: N = 15.

Research Question 3

To answer Research Question 3, “How do pre-service teachers talk about their experiences with compositional activities?” data were gathered through a semi-structured interview. The participants were randomly chosen by drawing a name out of a hat. The three students were given pseudonyms to protect their identity: Curtis, Ashley and Justin.

Participants

Curtis was a 25 year-old junior education major. He intended to be a choral director and his primary instrument was voice. He was a tall young man. He was wearing jeans and a short sleeve shirt advertising the cymbal maker Zildjian. His hair was pulled back in a ponytail. He had a goatee and mustache and seemed very relaxed, phlegmatic and easy going. He mentioned that he wrote songs for guitar, voice and piano.

Amy also intended to be a choral director; her primary instrument was voice. She was 21 years-old and a sophomore. Amy had wavy long hair that was dyed dark red with

several highlights throughout that were lighter red, almost pink. She was relaxed, comfortable and quick with a smile. She was dressed in a comfortable yet chic yellow blouse with intricate designs on the front. She indicated that she had minimal experience with composition, only writing songs and a couple pieces for instruments.

Justin was also a sophomore music education major; however, he had not decided on an area of emphasis. His primary instrument was percussion. He was very laid-back, and was dressed in a brown coat halfway zipped up with a beatnik hat. He was relaxed and philosophical during the whole course of the interview. He mentioned he wrote some songs for the purposes of teaching guitar and wrote simple arrangements as a member of his garage band.

Emergent Themes and Categories

Several key themes emerged from these interviews. While each participant had written music previously through songwriting, theory assignments or as a member of a rock band, none of them viewed themselves as composers; all the participants seemed to express a lack of confidence in composing. Justin remarked, “I didn’t have a way of understanding how I was going to go about it. I didn’t have a way of thinking. I didn’t have confidence in what I was doing.” Similarly, Curtis said, “What does it take to be a composer? I guess someone with a lot more musical mastery than me [laughter]!” Ashley remarked, “I like writing songs [arms open wide convincingly], but I don’t feel qualified or I don’t feel like I have the personality type or the whole package to be driven, like, to write orchestral pieces.”

Ashley's and Curtis' comments also seemed to highlight a distinction between the creating that they did (little-c creativity) and the composing that prominent composers do (big-C creativity). Curtis added, "And a lot of the problems I've had composing myself, you know, a lot of the time I put pressures on myself that it's got to be this grandiose thing [motions hands with a large gesture]." Similarly, Justin questioned, "Is there a difference between composing and writing? Composing kind of carries connotations of *symphony* [grand motion with added emphasis]."

Two participants acknowledged their creative efforts as a composer. The composition tasks for this study, as well as their previous creative experiences, were considered as little-c composition because they perceived they lacked the advanced talents and skills possessed by an eminent composer; however, they realized that to create a grandiose composition, it must start with a small germination of an idea. Curtis reflected:

A lot of the music I listen to is pretty grandiose. So coming in, I kind of expect there to be some grandiose notion behind what I'm writing... And that's kind of just a preconceived notion I had, and walking in here, you know, doing this, kind of made me realize that it doesn't have to start out with this grandiose thing. Maybe it could start out in little-chunks and build to that.

Similarly, Ashley reflected: "Well, I guess I've always felt unqualified to be considered to be a composer, but I guess [looking again at xylophone] being a composer means that if you can write a piece of music...well...that makes everyone a composer."

Ashley remarked there was too much emphasis on performance within the schools' music programs and that there was a need to foster creativity and self-expression:

If you think about it, like, a lot of the kids, you know, in the public schools they are taught to perform, you know. And that's not all music is, you know...and there's two sets of music. There's, like, the writing aspect [motions with left hand] and then the performing aspect [motions with right hand] and I feel like, kids are performing the stuff, but they really don't know where it is coming from, you know, they are not really being able to use their creative juices....to use their creativity... you know. And I think, um...[looking up]... Like, 'cause, in art they are able to use their creativity, so why shouldn't they be able to do something like this in music, you know?

Curtis agreed, "I think if students had a broader knowledge of music, and composition in general, they would not be led into this I-IV-V mode, you know, 4-5 chord songs.

They'd be interested in creating something more interesting."

All the participants agreed that composition should be taught in the public schools. Justin reflected, "It'd be great! I feel like people kind of enjoy making things up, you know, even if it's simple." Ashley agreed:

If there are more kids that do stuff like this, then we might have more music out there and a lot more creativity coming from these kids. And I think that would be awesome. I kinda wish I had that when I was younger.

APPENDIX H
INTERVIEW TRANSCRIPT FOR ASHLEY

Hauser So, tell me about your musical background.

Ashley Ah...um...I have been interested in music ever since I was little and I think it was because...um...my family always went to church—I'm Lutheran, so they always took me to church every week. And when you are Lutheran you sing a bunch of hymns. And then first through eighth grade, I was at a private Lutheran school, so I had experiences with that, and like, the music director, who knew my parents and so we had a close relationship with them. And then, I think that's where the music started. And then, in high school I was involved in my concert choir, a woman's choir and a show choir. And so, it was just like my life [motions with hands] and just like, what is was for me. So...and I just...my senior year is when it really clicked [snaps fingers] that like, "oh I like music" and my whole family are teachers and so I thought, "why not put the two together."

Hauser And so that's why you chose music education?

Ashley Yeah...and it just clicked for me, so that's what I thought I wanted to do.

Hauser OK. Good, so your primary instrument is voice?

Ashley Voice [nods head].

Hauser So what drew you in to consider a career in music?

Ashley Um [looks away]...I would have to say it was my...um...my high school choir director. I was with her my freshman year through my senior year. She directed the woman's chorus, concert choir and varsity singers. She was in charge of the whole music program for choir. And she was so passionate about everything she does [hits fist on palm] and she just...there are some choir directors who are like [motions to the side], "Oh, it's OK, we'll do it later." But she was like, "We're going to get this and we're going to do it until we get it right" [hitting fist on palm – emphatic gesture]. And she was so...just wanted to do everything right and well. And to the best of her ability that was possible. We did a contest every year, like a state finals, or whatever, and um...the top 16 choirs...or...um...every choir in the state would audition for the qualifications. They would sing three pieces and the top 16 choirs would go to the state finals and you have to really perfect everything. And we went every year [smiles]. So it was just...and we did really well, so...

Hauser It was the passion?

Ashley Yeah, yeah [smiles].

Hauser Cool, cool. So, have you ever tried making up a piece of music before?

Ashley Never [shakes head], to be honest. No, that was the thing, that I never...I've never really done any, like, improvisation or composition.

Hauser Not even improvise?

Ashley No. Not with music really. I mean, maybe a little bit with show choir [motions with hands] but not...it doesn't really come into it.

Hauser Like scat singing or something like that?

Ashley [Shakes head] No.

Hauser Oh, really?

Ashley Never. It's something totally new to me.

Hauser Wow.

Ashley It's made me...I don't want to say I'm totally uncomfortable with it, but people say, like, "Compose this." And I'm just like, "oooooaa" [motions as if scared of something]. Like, having theory though, it's a little bit better, but not on instruments or anything.

Hauser So, I'm curious to know what you think about composition. For example, what does it take to write music?

Ashley Um...I think it takes the skill of knowing how to play the instrument. Knowing about the range of the instrument [motions with hands indicating length]. And being able to see it in front of you and how you interact with it. I mean...I think...[looks away]. I don't know, it's like...I've never thought about that before [laughs], but um...that's interesting... [2 second pause].

Hauser What other skills?

Ashley I don't know if you definitely have to have particular music skills, but, you know, knowing, like, having a singing background or an instrumental background would definitely help you with that...so...

Hauser So, musicality?

Ashley [Nods] Uh, huh.

Hauser So, regarding these skills...uh...so do you see yourself as having any of these skills? You said, "Singing background," and you have a singing background.

Ashley Ah...[smiles and looks away]...

Hauser You said you need knowledge of the instrument...so...you might know the range of this instrument [pointing to xylophone] or you know the range of your voice.

Ashley I think I can could [sounds uncertain] if I put myself into it and, like, make myself more aware about it [motions with hands—spinning], but it's not a place where I really...I don't know...it's just not a place where I'm comfortable.

Hauser Why is that?

Ashley Ah...um...just 'cause I've never been exposed to it before. So, not being exposed to it, I think has an effect on...you know...not wanting to do it [smiles]. So...

Hauser Right, right.

Ashley Cause if you're uncomfortable with it [motions to one side] you don't want to do it, or...

Hauser Right, we want to do what we're comfortable doing?

Ashley Yeah, exactly.

Hauser Do you think it's possible to see yourself as a composer? Or do you think it's possible for you to see yourself in that role?

Ashley Um...[looks away and smiles]...my cousin, Matt [name changed for privacy reasons], um...he...um.. does a lot of composing things and he's been tutoring me for theory. And I like it. I like making little four-part things or whatever, but that's the most I've ever done with it. But I mean, I think that's fun, but I think once you know the basics of how you do it [motions with hands] I think it's interesting, but...I think...I don't know...

Hauser So, I'm kind of getting the vibe that you saying it's not for you?

Ashley Yeah...[motions hands-waving stop] I'm more into the singing...but if I had lessons or something, then I'm sure I could do it, but it's just not where I see myself going.

Hauser Right. So you don't have any inclination for yourself to go that route?

Ashley Not particularly. No.

Hauser So, it's not really your niche?

Ashley [nods head in agreement]

Hauser So you mentioned your brother...does that.

Ashley My cousin.

Hauser Oh, he's your cousin.

Ashley Yeah.

Hauser So what sort of skills does he possess?

Ashley Um...[smiles and looks away]. My family calls him, like, a Mozart kind of person. Like he just has that...you know...[looks away again]. I don't want to say that...

Hauser So what is, "that?"

Ashley I don't want to say that he's a prodigy or anything, but he has that, just inclination to hear [motions to ear]...he can hear so many, like, music...he always hears music in his head. When I talk to him about it, he says it's always there. And so, he just writes down what he's playing or writes down what sounds good to him. And I've listened to it and it's like [motions incredulously with hands], "How do you come up with that? How do you hear that in your head?" And I think it's just a gift that he has, that he's going to share with people...but

Hauser So, do you see yourself having that gift?

Ashley Um...[looks away]

Hauser Or can you hear things in your head?

Ashley I mean...I'll, like...in the car or when I'm driving or something and hear a song on the radio, I always harmonize with the songs or something. I make up little tunes to myself or whatever...

Hauser So you do...write music?

Ashley I mean...yeah...it's more in my head [2 second pause] ...I just never notate it, I guess.

Hauser Right.

Ashley So I think it's there [motions to head], it's just the notation part of it [mimes writing something down]...that [unintelligible word]. What I hear in my head doesn't...won't [mimes writing down] get down on paper.

Hauser So you think you have the ability to write it?

Ashley Yeah.

Hauser So, is that what makes a composer? The ability to write it down?

Ashley I guess. 'cause composers...you know authors have books and they write it down and you think "composer" and they write it down.

Hauser Huh....

Ashley Yeah...I guess I never thought about that. But yeah, I do make up little tunes in my head. Dododododledo [singing] or something like that. Or off of a song and...[harmonizing off of a song]...I don't know.... I just never write it down or anything. It's just kind of there

Hauser Why?

Ashley [Looks away and thinks]

Hauser Time or...

Ashley Time and it's just not a priority. I just think it's not a priority of mine. And it's not something that I'm like, "Oh, I'm going to go and write this down or I'm going to go compose something" [mimes going off and writing something].

Hauser Right.

Ashley It's not my priority.

Hauser Cool, cool. Um...so in reflecting on what we did—the three tasks—so talk about the overall experience.

Ashley Um...I thought it was a lot of fun [smiles]. I...I...[laughs]. Like the 10-minute period we had, I almost wanted to keep playing, like we've played it in class a couple of times...

Hauser Was it too short?

Ashley Yeah...well it was fun for me, like I didn't want to stop. So I just wanted to keep messing around [mimics playing a xylophone]. And I guess when I realized this is not as hard [motions with hand] as I thought it was...like once you've been exposed to it and you understand, like...you know it's...[mimics playing a xylophone]...it's just bumping around on the xylophone, or whatever. I think it's not as hard as people might perceive it to be.

Hauser Right. So, um, so were you comfortable doing it?

Ashley I thought was fun, yeah, it was definitely comfortable doing it.

Hauser Even the very first time, when you were like, “Here, go.” And you were, “wooha.”

Ashley Yeah, I think...I mean there were times, like, where we could make it up [mimes playing with mallets] and think about it. But I think having a prompt helped me with it, ‘cause it was kind of like a guideline, it wasn’t just...cause sometimes when I think about composition is that it just has to come from nowhere. But I think when you have a prompt it’s easier ‘cause you’re focusing in on one aspect of it. Like rhythm or off of a poem, or something like that.

Hauser Well, one of the tasks was...the prompt was...there was no prompt.

Ashley [Smiles] I know, I know.

Hauser Did that...so...

Ashley I think just the fact that I was being prompted to be there and to make something up [hands pretend to play xylophone] was a fun part of it

Hauser It was enough of a prompt?

Ashley Yeah, it was enough want to do it.

Hauser OK. Good. So, um, so, so...were you uncomfortable, like, “Oh, my gosh, I have to compose something” or were you comfortable?

Ashley I was comfortable doing it. I thought it was...when I was comfortable and I was having fun [mimes playing xylophone] with the instruments, I was more inclined to want to have fun with it and do it ‘cause I wanted to make something sound good and I thought that was really cool. So...

Hauser Good. OK. Good. So in thinking about the three different tasks. Which one was harder?

Ashley [3 second pause]

Hauser Cause we did three of them...the unstructured, poem and rhythm tasks. Which was harder?

Ashley Um...I think the unstructured one 'cause there wasn't any really guideline to it. Having the... Well maybe the poem. I think the unstructured and the poem were the harder ones. The rhythm was easy because you just had to match up the rhythm to it. But...um...the poem 'cause you could interpret it so many different ways and I thought...the way I did it was that I put tunes to the words of the poem. Like if the word was "happy" then I made the scale go up [mimes playing xylophone higher]

Hauser Oh...oh, so you kind of text painted? Is what you're saying?

Ashley Yeah [smiles]. Yeah.

Hauser So out of the three, which one did you like best? That you did?

Ashley Um...I know I just said the poem one was harder, but I thought it was cool because...that was my favorite one

Hauser Oh, that's OK. Sometimes you could have a hard one and it can still be your favorite. That's fine. That's fine.

Ashley Um...I did kind of make it go with...if it was a happy kind of word, then I would make the scale go up. And if it was a sad word I would make it go down. But I also made the rhythm of it...the way I was playing with it...go with the words. So it kind of went with the beat of the words.

Hauser And that is why you liked it?

Ashley Uh, huh [smiles].

Hauser Um. Uh. So did you enjoy the experience?

Ashley I thought it was fun because I have never been...I've never had to do it before. So it was something new for me.

Hauser Cool. So, uh, so which of the tasks do you think allowed you to be more creative?

Ashley Uh...[looks away]...what do you mean?

Hauser Which task, do you think, your creativity was brought out more so than the others?

Ashley Um...I thought the...[3 second pause]...I thought the poem one, was brought out more. 'cause it's your interpretation, so it brings out more of who you are and how you see...you know, how you interpret a poem can reflect on...or can affect how you see the world and how you interact with the instruments. So I think that is the one.

Hauser OK. Good. OK. And so, uh, talk about this experience regarding your degree of comfort creating music. So, first you mentioned earlier that, "Uh, composing not for me."

Ashley [Smiles] Yeah.

Hauser So talk about your degree of comfort.

Ashley Um. I feel like now that I've done it, and I've kind of faced that, you know, new thing and I've done it before. I think I'm more comfortable with it. Just because... [1 second pause] I've had the experience with it and it's just not as scary [hands display quotes]. 'cause sometimes when you try something new it's scary and you don't want to do it, but once you've done it, it makes it more comfortable.

Hauser So did you approach composition as being—you know before doing this—was the idea of composing scary?

Ashley Um. Yeah, maybe because I fear that...I have a fear of failing. I don't like to fail at things at all. So. I guess when you compose things, there are no...you know, sometimes there aren't any guidelines. So it's not failing it's just your perception of failing, I guess. Or my perception of failing.

Hauser So, composing is fearful because it's something that you did and you think others would think, "Eh, it's not..."

Ashley "It's not good." Or, "Oh, you need to do this...you need to make these, you know, edits or need to fix these parts, or..." I don't know, I don't like that.66

Hauser Were you fearful of failing doing this [motioning towards xylophone]?

Ashley Um...[two second pause]...I don't think so because I feel like anything we created was going to be OK. So.

Hauser And I wasn't judging it?

Ashley Right.

Hauser Nobody was judging it.

Ashley Yeah. Yeah [nodding head].

Hauser OK. OK. Um, so, so, in thinking about your future classroom do you think your future students could accomplish these tasks?

Ashley Yeah. I think so if you give them...teach them about the instrument and say, you know, "This is what we're going to be doing in class today." And you bring something new when you do it for them [models playing a xylophone] first and they can see, "Oh, that's really cool." And I think they would want to do that too. So...

Hauser So do you think that they could be successful?

Ashley I think so, yeah, if you teach it. You know, set a good example for them.

Hauser And modeled it?

Ashley Yeah. And they would be wanting to do it.

Hauser Did it [this experience] make you think anything differently about teaching composition?

Ashley I thought it... [Smiles] I left every time thinking, "That wasn't as bad as I thought it would be."

Hauser Oh, really?

Ashley Yeah. Yeah. I was like, “That was really easy.” [Shrugs shoulders]. Like it wasn’t... Like when you said “composition, like, we’re going to do this” [moves hands]...I was like, “Mmm...I don’t know if I want to do that, ‘cause I’ve never done it before. But after leaving each time it was like... [shrugs shoulders – as if it was no big deal]...”

Hauser So, why is that? Why did you have that initial thought?

Ashley Like I said, it’s the fear of failing. Like someone’s going to judge it, but [in this exercise] no one’s judging it, I guess. Or it’s just... I don’t know...it’s the fear of failing. I have a fear of failing personally. ‘cause I always want to do things to the best that I can and I don’t like the possibility that you might not do it right the first time.

Hauser So if somebody says, “We’re going to do a composition thing.” How would you react to it? If someone asked you that again?

Ashley I think if there were some guidelines to it...for this and for this purpose...for this event [motioning with hands] I think it would be, like, OK. So... I think if I did it with other people too, I think that makes it more comfortable.

Hauser Other people?

Ashley Yeah. ‘cause if you do it by yourself, it can be a little intimidating ‘cause it’s all on you [points outward].

Hauser So if this was for a grade, would it be like, “ewshshshs” [imitating fear]?

Ashley Yeah [smiles]. I think it would, it would, be a little more nerve-racking.

Hauser Yeah. So, uh, uh...so which of these three tasks do you think would allow you students to be most creative?

Ashley Um [looks away]...the unstructured one. Just because, you know, I think with no structure whatsoever for them to do...that releases the most creativity ‘cause whatever they have in their heads... no matter... “OK, this sounds cool” [mimes playing xylophone]...it’s right. It’s not wrong or anything. It’s just what they have is what they want to play [shrugs shoulders].

Hauser Well, I'm kind of curious. You said that it was the poem one that allowed you to be the most creative, but then you think it's the unstructured for your students. Why is that?

Ashley I think it depends on the person. 'cause I am more... My interest lie in, like, English or a lot of things. So the poem interested me.

Hauser Uh, huh.

Ashley But then, if you have more of an outgoing kind of student, they might be, "Oh, I want to do what I want to do" [mimes playing xylophone]. But then if you have more of like, I don't know, a rhythm kind of kid. One who can't stop moving in class [mimics playing a beat on her knee] then they might like the rhythmic one better. I think it just depends on the person.

Hauser OK. Um, so, I asked the question, "Which of the three tasks would allow them to be the most creative?" And am I gathering you right in saying that it depends upon the student?

Ashley Yeah.

Hauser So, which task do you think will allow them to be the most successful?

Ashley Um...[2 second pause]

Hauser In terms of them creating a piece and going, "Yeah. I dig that." You know, like for you, you enjoyed the poem one the most and you said it allowed you to be the most creative. So it was the poem one again. So I asked which one would allow them to be the most creative , but also which one do you think...

Ashley I think the rhythmic one would allow them to be the more successful because if you gave a student a rhythm and say, "OK, you understand this rhythm and put a, um...melody to the rhythm." I think that gives more components of a song. 'cause I think the unstructured one, they might not think about rhythm they may just think about the notes. But if there's a rhythm already provided, I think it's going to provide more of the components of the song...or a piece of music.

Hauser Right. OK. Good. Um. So did this experience change the way you think about composing music?

Ashley Um. Probably. I think it did, just 'cause I thought it was hard before, and then... Before I ever had experience with composing I thought it was hard and I didn't want to do that and now...

Hauser Why?

Ashley Um, just 'cause it's something I've never done before and it's new to me and I think I don't know if I could ever be good at that or if I would, or... But now that I've had the experience with it, I think, I realize that it's not as hard. It doesn't... I don't know. It's not as difficult for me as I thought it would be.

Hauser So you mentioned your cousin, Matt, who has "it." So what is that, "it?" I think I asked this before, but I want clarification. But you didn't see yourself as having, "it" so...

Ashley Yeah. I think...

Hauser So, what is "it?"

Ashley Um... I want to say, the way I see my cousin is he has a lot of complex, like, textures of music in the way he composes...and like melodies and rhythms, they just sound very professional. And the way he does it, it seems like he's a prodigy in music 'cause things just come...he said he's always had it, but didn't have the musical knowledge of what it was and how to notate it on the paper. But I feel like it's almost something like, something like, Mozart had it. 'cause he could almost compose...cause he just didn't have to write it down. He can put it in his computer, push the buttons and it's just there and it sounds great. It sounds really pretty. And I just feel like not everybody can do that 'cause they can't hear those things, but...I don't know...

Hauser OK. That's cool. Uh, so after doing this is it easier for you to see yourself as a composer? Or is it the same?

Ashley Uh, easier. Uh, I think...if anything I think it would be easier to see it, 'cause now I know what it takes to do it.

Hauser So, what does it take?

Ashley [Laughs] Uh, I don't know. That's the hard part, to actually identify what it takes, 'cause, I mean...I don't have any like ability...well I didn't see myself

as having any ability to compose things and now I feel like it's easy. So I guess I'm saying it doesn't take that much to compose something, 'cause if you like it, I guess, it's a composition and you can say, "This is my composition." So...I guess...you're the judge of it, 'cause you're creating it. So if you like it, I think it's a composition. So I guess, really anybody could create a composition if they really wanted to.

Hauser OK. Good. Did this experience change or challenge any assumptions you had about being a composer?

Ashley I think so, because I think before this experience I thought being a composer you had to be this big, professional, accomplished musician to do it. But you could do something as simple as the activities as we did and you still composed something and you could still notate it and say, "This is a composition." And you could put it in a music book and do this... And it just doesn't take as much as I thought it did.

Hauser What you said before, you said that to be a compose you had to have the skills to write it down. 'cause, I don't know if you wrote it down. Did you?

Ashley No. No I didn't.

Hauser So did it change your perceptions about the composition process?

Ashley Yeah, I mean, you could...I mean, if I was the composer or a student was the composer they could just play it and you could get someone to write it down for you. So, you wouldn't have to have it notated. So as long as it sound good and you can hear it in your ear, then you can...I guess. I guess anyone could do it, now that I think about it [smiles]. So...

Hauser OK. Good. So do you think composition should be taught in public schools?

Ashley Um. I think it should 'cause it would give students some more well-rounded knowledge of music. 'cause I think a lot of students in public schools deal with the performance aspect or theory or kind of like paper based kind of knowledge of it. Like you take a test on what this means and what this means [mimes as if writing answers on a test] and the musical terms and performance, but I think this [pointing to xylophone]...um...composition could give people a more well-rounded look at music.

Hauser And I realize that some people...some people just don't have time to do it. Some don't have the ability to do it. So not everybody includes composition...I mean...you know...have, have you had it in your past?

Ashley Nope [shakes head]. Never.

Hauser So, what additional thoughts to you have about this experience? Or composing? Or being a composer?

Ashley I have to say I definitely liked it. It changed my ideas about it. Just because I thought it would be hard, but it turns out it's not as hard as I thought it would be. Once you try something it's not as difficult as you think it is. 'cause I personally...I...I try to make myself do new things, but I don't like to because I'm afraid of trying something new.

Hauser ...of failure?

Ashley Yeah, so I guess this has [pointing to xylophone] taught me that composition isn't as hard as I originally thought it was.

Hauser OK. Thank you so much for participating. You've been great.

Ashley Yeah, yeah, no problem

APPENDIX I
INTERVIEW TRANSCRIPT FOR BILL

Hauser Tell me a bit about yourself...your background and musical background.

Bill My name is [Bill]. And my main instrument is guitar. I've been playing for about five years and stuff.

Hauser So how did you get into music?

Bill [Sighs] Ah, let's see...I always kinda had a thing for music. My musical career, I guess, didn't really start until the end of my freshman year in high school. In middle school I, like, played around with piano a bit, but nothing too crazy. But I started getting kinda serious about music when I started playing guitar.

Hauser So, why music education then?

Bill Ah, well, [shrugs] 'cause in high school I thought...well, I enjoyed playing guitar in high school and thought, "How can I make a career out of this?" 'cause, I can't be a rock star, ya know? So, I thought music education might be a good outlet. And then when I got here [university]—cause I have to learn all of this music stuff—I actually found out that I really enjoy learning how to string instruments or teach choir. So I kinda found out that I don't just want to teach guitar, but I want to teach anything I can.

Hauser Oh, cool. Even band and choir?

Bill Yeah, even band and choir. I was surprised with that, because for some people who just want to teach guitar have to learn everything else and it's like "uhhh" [mimics boredom].

Hauser Well, having those skills will make you more versatile and marketable.

Bill Yeah, that's how I kinda view it. So my love for music education has grown ever since.

Hauser ...and what year are you in?

Bill Sophomore.

Hauser Ok. So have you ever—before participating in my study—have you ever made up a piece before?

Bill Ah...[sighs] I kind of composed in my free time. I've tried doing, like, arrangements and stuff. Or compose some string pieces, but I really haven't gotten the chance to finish them...sadly... [laughs] Yeah, just in my free time I try to study composition. I have some books and stuff.

Hauser So have you written a piece and said, "Hey, mom, listen to what I wrote."?

Bill Well, I've written some pieces, but never fully completed them...but yeah, I have.

Hauser So, what about songs?

Bill Songs?

Hauser Yeah, have you done some song writing?

Bill [Looks up] Uh, a little bit. Like for the guitar. Nothing too crazy, but a lot of instrumental stuff, mostly.

Hauser So would you call yourself a composer?

Bill Uh, [looks uncertain] in a way...yes...I think I'm a composer who needs to finish his piece first [laughs and shifts in chair]. Well, I mean, like, I guess...well, maybe. I guess I wouldn't compared to some others who can sit down and complete a piece and have repertoire of their own. I can't really say, "Oh, I've composed this piece, check this out," but I think I'm a composer in the making [smiles], maybe.

Hauser Oh, cool. So do you feel confident composing?

Bill Uh, yeah, to a certain extent. I mean, before this [points to xylophone] when I composed, I was not too sure [motions with hands], like I kinda have a gist of it, but kinda like with orchestration and everything...there's a theory side of composing which, you know, can be kinda scary. But I think I can compose a piece. I can kinda just sit there in my own little approach, you know, and work around a melody.

Hauser So if someone asked if you call yourself a composer...what would you say?

Bill [Smiles and shrugs] yeah [uncertain]...maybe a composer in the making.

Hauser So what sort of skills does it take to be a composer?

Bill ...[thinking]...uh...

Hauser So when you think of the word, “composer,” what does that look like to you?

Bill Like musicianship, you know, having a good understanding of music theory and how instruments sound together, all that orchestration science and stuff. Strong musicianship skills to get the sound you want to compose a piece and, like, you want to play it with a group, you have to, you know, say, “OK, oboes, you have to do this to get that kind of sound.” I guess, you can have a talent for composing, I kinda feel like I have...I don’t want to say natural talent, but I have melody ideas. I can think of nice melodies [motions to head] and can put them down, but it’s arranging that might be hard. I think it [composing] is a combination of natural talent and musicianship and having the knowledge.

Hauser Ok, so do you see yourself as having those skills?

Bill [Looks away] Uh, to a certain extent. I feel I might have some actual talent, to some degree. I feel like I can learn the science behind it, you know, the theory, it kind of aids the tool.

Hauser Good. So in thinking about the three tasks we did...please talk about the experience.

Bill It was pretty cool and interesting. I really didn’t know what to expect. Like, I didn’t know what I was going to have to compose. Like, do I need to compose an actual piece...and write something out.

Hauser You said, “actual piece.” What do you mean by that?

Bill [Smiles and looks away] Oh... [laughs]

Hauser So was this [pointing to xylophone] an actual piece and was it composing?

Bill Well, that’s a good question [smiles and looks away]. Well, I was thinking more of a formal... like, ok, you have to write it down with notation. Like, “You have ten minutes and you have to write something out.” It was more free, but not as formal as I thought it would be. I thought it would be almost like a homework assignment. Like, “Compose a 12-bar thing and come back...” I don’t know, so... I mean, in a sense, it still is composing a piece...

Hauser So then, what would be an “actual” composition, in your mind?

Bill [Sighs] Well... [looks away]...that’s a good question...[smiles and laughs] uh... I don’t know, I mean, anything is a composition. Even this [points to xylophone]. Yeah, it’s a composition. At first, my idea of composition was something that was formally written and after this I realized, well, ‘Ok, anything could be a composition.’ There’s really no standards for composition.

Hauser So, if one of your future students did something like this...

Bill Yeah, I would say that they composed. I would. I kinda realized that now.

Hauser So is there a stigma between what your students compose and what you, as a future teacher might compose? Is there a different standard there?

Bill It...I think it depends upon the person. You kind of think...the more musical background, this [motions to the side] might be a better composed piece compared to my student [motions to the other side] who might not have as much musical background, but I think it kind of depends upon how you view the piece, you know, or how complex it is or just how it sounds. Your student might not have as much musical background but be able to compose a beautiful melody. So, I think it depends upon how you view composition.

Hauser Right. Cool. Ok, so in thinking about these tasks we did, please talk about the overall experience.

Bill It was interesting. It wasn’t too hard. It was pretty easy, you know. At first, it was, “OK, you have 10-minutes to compose a piece.” I kinda freaked out a bit [motions with his hands to show panic]...what do I do?

Hauser Oh, really? Was it difficult?

Bill Now that I look back on it, no, not too much. Just the first time [first task], in my mind it was kind of like building a formal piece, I thought it had to have a formal structure, like it’s gotta have this [motions with hands] and this [motions again] and an intro, bla, bla, bla. I didn’t realize that it’s just [motions as if he’s playing a xylophone] compose a little melody.

Hauser It could be whatever?

Bill Yeah, it could be whatever. I was thinking about it too much and [shrugs], you know, it's not too crazy.

Hauser So at first were you a little bit nervous? Were you comfortable with it?

Bill Yeah, well, at first I was a little nervous, you know, trying to figure out what sounded good, and that kind of thing, and as the sessions go on I felt more confident. And, you know, it's nothing too crazy, I realized I wasn't supposed to create a masterpiece.

Hauser Right. Right, well good. So, in thinking of the three different tasks, the first we did was the unstructured (no rules), the second was the poem task and the third was the rhythm, which of the three tasks was harder for you?

Bill [Sighs] Ahhh... I think the free one was a little harder. Compared to the two other ones, where there was something I could build off of, you know, the poem or the rhythm. The free thing [looks away], you know, is... [thinking] 'cause I feel, that...my idea of composition is that it should have structure...it's kind of hard...

Hauser It should be structured?

Bill It should be structured, but that's why it was a little hard for me in the beginning. 'cause, you know, I was trying to make some sort of form, so it's not just notes [mimics playing xylophone haphazardly]

Hauser So you were adding structure to it [the unstructured task]?

Bill Yeah, I was thinking, "How in my mind can I make this sound like a composition, instead of just a free melody?" So that was kinda hard in the beginning. So, it's something, like, you know, in my mind...adding structure.

Hauser Right. So which one [task] was the easiest, if that one was the hardest.

Bill Ah...[thinking]...I think, the rhythm one was pretty easy, because the rhythm structure was enough...

Hauser ...it was given to you

Bill ok...I have the rhythm—I can create a melody to that...so...

Hauser So, which task did you enjoy the most? This isn't which one was hard or easy, but which did you enjoy?

Bill I liked the poem one because you have to, like, you know, think about it a little bit. It can be an inspiration type of thing, 'cause I think that's the kind of thing with music and composition, like music compositions what makes it a really good piece is not only a good melody, but, like, the meaning behind it. That's what adds to it.

Hauser Ah...

Bill You know, I have this poem, so I get to make a piece that ties to express that idea.

Hauser Now how did you do the poem, because I forgot...did you use text painting or did you make it into a song, with the notes lining up with the music?

Bill I did it like a painting.

Hauser Oh, text painting?

Bill Yeah [nods]

Hauser Oh, cool, cool. So, in thinking in the three compositions, in which one did you like your final product the best?

Bill Ah...[thinks], probably the poem one. I think it was more expressive compared to all the other ones, you know. The first one was more free [runs hands] and the third one was based more on the rhythmic thing. So, I like the second one because it was more expressive and kinda had a story behind it, I felt.

Hauser OK. Cool, so in thinking about the overall experience, did you enjoy it?

Bill Yeah, [Smiles and nods head] I really enjoyed it.

Hauser Why? What about it?

Bill It was just something cool and different. Composition is something I'm really interested in. And I thought this would be something...to... I might learn something. So, I thought it was really cool. Just a different experience. Yeah...

Hauser Ok, ok, good. So, in thinking about the three different tasks, which one do you think allowed you to be more creative?

Bill Ah, probably the first one. Besides the fact that the structure was...

Hauser There was no structure.

Bill Right [smiles]. Yeah, there was no structure. I mean you could argue I could be more freer than that, I mean, so... Probably the first one, but the second one, I felt [looks away]...I don't know...

Hauser The poem one?

Bill Yeah, the poem.

Hauser I'm sorry...what about it?

Bill No, like...I don't know what I'm trying to say about it...never mind about that, the first one I felt like I could be more free.

Hauser [Thought he said the first one]. The very last one. Did you feel constrained because the rhythm was given to you?

Bill Ah...not really. I felt like it was helpful, so I could think of a melody. As I said before, I could put a melody to the rhythm. I mean, you could think that [that it is constraining] since I have to work with this melody, but kinda, just, I got the rhythm, now I can just [mimics playing xylophone] make a melody to it. So it's kind of relieving.

Hauser Ok, cool.

Bill Instead of constraining, it was more relieving.

Hauser Oh, really, that's interesting. Cool. So, in thinking about your future students, do you think they could do something like this?

Bill Yeah.

Hauser How so?

Bill I kinda realized that, you know, 'cause before I thought, "Ok, teaching how to compose you have to have all of this background knowledge [motions with hands showing large amount] and everything." And this, to an extent, you do. But not all composers need that to... I mean, to compose a piece you don't need all this orchestration and theory [motions large again] background. I realized, it's kind of in you, you can compose a piece and anybody can compose. So, I mean, I think...[pause]

Hauser Have you always held that assumption?

Bill Yeah, 'cause if you're musical and you have that musical..[pause]..[more emphatic] music inside you, I guess. If that didn't sound too cheesy. So, I think, really anybody can compose. If you have the musical-ness about you. So...

Hauser Right. Musical-"ness" you said? Do you mean "nitch?"

Bill I kinda...musical quality about you.

Hauser Ok, I'm sorry, I didn't understand that word.

Bill Oh, it's ok.

Hauser So, if you were a teacher which task would you start them [students] out on?

Bill Uh, probably the first one.

Hauser The unstructured?

Bill Yeah, no rules. Yeah, just to see what they think about composing a piece. You know, how they do, you know. If they have the melody in their mind and everything [motions to head]. You know, and they can create something [mimics playing xylophone], I think that's a good start. Kinda like what you do, you know, and then to progress on adding things to the structure, you know, like the rhythm, and the next test

Hauser How about this...which one [task] do you think they would be most successful at? Where they go, "Yeah, I really dig this."

Bill Ah...[sighs and looks away]

Hauser Which of the three different tasks.

Bill Uh, [scratches chin] I think the second one [poem] might be kinda hard depending on, uh,

Hauser The poem?

Bill The poem, because it takes sort of an expressive kind of rout, you know, some people might struggle with trying to make an expressive piece. You know, they can make a really good melody, but some musicians just can't be that expressive, so maybe the third one might be...a little bit...might be a good one. 'cause with the rhythm it kind of aids them, like I did, ok, I've got the rhythm, now I can do the melody.

Hauser Right. Ok, cool, cool. Did this experience change your opinion on what you think about teaching...

Bill Teaching composition?

Hauser Yeah.

Bill Yeah, it did. Like I've said before, I thought you needed a lot of background knowledge and everything, but I realized...well, you do in a sense, but...there really no kind of formal way to teach composition. I'm sure there are many kind of methods, but, you know, everyone has their own approach on composing a piece. And I realized that, you know, "How do you find out how you compose." And I realized that there is not a text book way, like, you start here and... Anybody can, you know, teach composition if they tried, because they all have their different approaches. I realized there is not one textbook way of teaching. You know, just like learning an instrument, you start with the basics [mimes playing a guitar]...there's so many approaches to teaching composition. I think that's what I learned from it. There not just that one way to learn how to compose.

Hauser OK. Good, so, uh, doing this, did it change any assumptions you had about being a compose or what composition looks like?

Bill Yeah, like I said before...

Hauser Oh, that's right you said...

Bill The whole structure [motions with hands] and everything...and having the background...I feel like I'm repeating myself

Hauser Oh, that's fine, some of my questions might overlap.

Bill Oh, that's fine [smiles]. You know, just having that background and everything...is...I thought you need all this music theory background and everything, so I feel that...uh...you know, that kind of...you don't need that [motions with hands] and there's not all that [looks away and thinks]. Like, composition doesn't have to have all that structure, like I thought, all of this forms, like ternary form and be like that, you know, it can be as free as you want...I guess [shrugs]

Hauser So did you have composition training? In your schools, when you were a student?

Bill Oh, no. I haven't.

Hauser Did you take, like, AP theory in high school?

Bill Yeah, I took a theory class.

Hauser Was there any composition in there?

Bill Uh, I'm trying to think...[pause]...I don't think there was any theory...uh, composing...

Hauser Do you wish you had?

Bill Yeah.

Hauser So do you think it should be taught in schools?

Bill Yeah.

Hauser Why?

Bill For one thing, I think it's a good way to learn about music in a way, you know. And to express yourself as well. I can imagine, like, in high school, if I had a composing class, that's...I mean, to me, that would be fun.

Hauser Uh, huh.

Bill Or, anybody who's interested in music, oh, *creating your own piece* [he added emphasis]. And along the way you can learn about the theory and stuff about how, you know music is built.

Hauser I think it's interesting, you mention that composing was not only about self-expression, but also it's a great way to learn.

Bill Yeah [nods], exactly.

Hauser ...to add more tools to your toolbox.

Bill Yeah, it's [composing] is a fun way to learn about music. I mean, you could sit in a music theory class, and you know, there will be some people who are interested [motions one side] and there will be some kid who [mimics bored kid] "Oh, God"

Hauser Yeah.

Bill And I think composition is kinda that way too, you know. Learn about the theory behind music

Hauser Any other comments you have about composing, or teaching?

Bill No, no. It was really cool to help you out and stuff.

Hauser Oh, I really appreciate it. Thank you.

Bill No problem [smiles].

Hauser I really appreciate you participating. You've been so great about responding back to me. So, thanks...

Bill Yeah, great.

[We shake hands and exit]

APPENDIX J
INTERVIEW TRANSCRIPT FOR JEFF

Hauser So, first tell me about yourself and your musical background.

Jeff Um...I got into music in high school.

Hauser In high school? Wow.

Jeff Yeah.

Hauser The reason I'm amazed is that a lot of people start music in second grade.

Jeff Nope, nope. I was an athlete until...well, actually, no. I was in sports my freshman year and then the beginning of my sophomore year I started to move towards music more. Music and drama, or theater. The first thing I did musically was musical theater. And then I did...um...I did madrigals—acapella renaissance group in high school.

Hauser Uh, huh.

Jeff I always did marching band. Marching band [is something that] I have always done.

Hauser As well as sports?

Jeff I did it with football my freshmen year. I've played tuba since 5th grade. Uh...yeah [looks away]...yeah...that's exciting [sarcastic remark]. Um...

Hauser Is that your main instrument? Or euphonium?

Jeff Uh, voice is my...is my...what I'm actually studying here [large university]. I've really never done too much private studying with tuba...just in marching band and concert band, which isn't terribly difficult so I wasn't that great. Yeah, marching band is probably my primary the main thing I enjoyed musically.

Hauser Uh, huh.

Jeff Um...I guess singing and tuba are the two main things I do. I play, sort of like guitar, ever since high school. So this is 4...or 5 years I've played guitar. And I started piano two years ago. So, its...

Hauser Cool. So what drew you to consider a career in music then?

Jeff Uh...[shifts in chair] I was a theater major last year.

Hauser Oh, wow. You're a sophomore?

Jeff Yeah, I switched over. Yes. I'm a sophomore. I was a theater major. Well, I actually auditioned for voice, but I didn't get in. So I switched to theater.

Hauser So you did want to do music initially?

Jeff Yeah, I initially wanted to perform. I wanted to do music performance. When I was doing theater, I realized that I didn't really want to do performance. I guess? I mean, I enjoy performing, but I think that it's so much to it than just performing. There's so much more about music and I feel like the impact was so much greater in education than...than, um, performance. And...

Hauser So is that what drew you towards music education?

Jeff Um, I think it was the appeal... The appeal for music education was...[2 second pause] the idea that I could really help and influence kids in a very important time in their lives through a medium that was very different than any other subject in school. Um...I don't know, I guess it's kind of shaky right now, but...

Hauser What do you mean by shaky?

Jeff Well, the job climate.

Hauser Ah...yeah. The market. Is there going to be a job?

Jeff Right. Yeah, but...I was a theater major so [said with hint of irony].

Hauser [Laughter].

Jeff [Laughs] So...it could be worse than that...so...

Hauser What about...So what is your emphasis. You mentioned you want to work with students, so what age?

Jeff Uh [looks up]...I mean... What I thought I wanted to do when I switched was high school, but right now I wouldn't say anything for certain 'cause I really don't know, but...yeah.

Hauser So it might change with the field experiences that you have?

Jeff Sure. I'm sure it will change several times before I graduate...so...

Hauser Cool. Cool. So, um, have you ever made up music before?

Jeff Uh. Yeah. A lot actually.

Hauser Tell me about it.

Jeff Um. I mean...well... probably through guitar and piano. A lot of times...I mean...probably 80% of what I do on piano is sit down and...[shrugs shoulders]...play.

Hauser Fiddle around?

Jeff Yeah.

Hauser So composing is nothing new to you?

Jeff Well...it's not really so much composing as it's...I don't know...I don't feel like it's composing. It feels...I don't know...it feels too easy. I don't know. It's just like...

Hauser What feels too easy? What you're doing is too easy?

Jeff Yeah. Yeah, I don't know. I just...I feel like there is more to composing than just what I do on piano. 'cause, like, I play chords and stuff [shakes head], but...I don't know...it's not really concrete. It's just flowing. I don't know...

Hauser So, would you consider it improvisation or...

Jeff Yeah. Yeah. It's definitely improv.

Hauser Oh, really? OK. Then, at what point would it be composing?

Jeff [Smiles] Hmph..ah...I don't know. I really don't know. I mean, I'm sure, like, there's a part of composition in it, I guess. I'm sure there are themes that I like...recycle. As I unconsciously recycle them as I improv, but, um... That's a good question. I'm not really sure.

Hauser So, what drives you to sit down and make up stuff?

Jeff It's a good outlet, I guess. I don't know. It's nice to just be able to sit down and play and not worry about having to say anything...or...I don't know, it's just...[2 second pause]. It's just a good emotional...[motions with hands]...focus. I don't know. I'm not sure how else to explain it.

Hauser Yeah.

Jeff Focus the emotion in one direction.

Hauser So have you had other people say, “Hey, play that song you did.” Or have others said, “Hey, that piece you made up...you know...play that again.” Has anybody said that before?

Jeff Um...no...

Hauser Or your parents or anything.

Jeff People have asked, like, “What was that?” And I’m like [shrugs shoulders]...I don’t know. But no one has ever said, like, “Play it again.” But, people will ask, “What were you playing?”

Hauser Have you written anything you were fiddling...or played anything and were like, “Oh, I need to write that down?”

Jeff Um...I’ve written a couple of things. I tend to be too lazy to sit down and... I don’t know. I just prefer to just let it happen and...[shrugs shoulders]...move on, I guess. But, uh...

Hauser So even though you’ve written it down you don’t consider it composing?

Jeff I’ve composed a little bit [smiles]. I don’t know. I...I’ve...I wouldn’t say I haven’t composed. It’s just most of what I do, I wouldn’t consider it as composing. Just ‘cause it kind of...[mimes playing] play it, and then...leave it.

Hauser Right. Do you see yourself as a composer?

Jeff [2 second pause]. I...[looks away]...kind of? [Looks at interviewer]...Yeah. I mean, I would love to do it, I just feel hesitant ‘cause I feel like...it’s one of those things that really has... It’s like there’s really a lot of natural stuff to it that I don’t know if I have it or not?

Hauser Like what? What do you mean?

Jeff Like just the ability to hear lines. I mean there’s just a natural talent to it that...that separates the really good composers from the really great composers. I mean I wouldn’t want to, like, make a leap and say, “Yeah, I have, like...” I mean, like, I don’t have any idea. I mean, I like to compose [more firm]. I enjoy composing. It’s...[looks away] a lot of fun. And I would love to do it in the future. Actually, actually that’s...that is another thing that...

Hauser Are you considering composition as a major?

Jeff Yeah, yeah. I have been thinking about that.

Hauser Cool. Cool.

Jeff But...I like'd like to think of myself as a composer, but I don't know if I actually would or not.

Hauser Why, why is that?

Jeff It's just...I don't know. I would feel like pretentious, I guess. 'cause I'd be like, "I'm a composer" [said with an air of superiority]. When I [shrugs shoulders] really...I really don't have anything to show. Like, I don't have, like, this one hand keyboard thing that I wrote, with vocals.

Hauser Oh really.

Jeff It's not...it's nothing to, like...[shrugs shoulders]...it's a very small thing. I really wouldn't warrant the title of composer.

Hauser Yeah. Um...so you said, that to be considered a composer you said they need certain skills that you were unsure if you had those. What are those skills that...that a composer possesses?

Jeff Um...[2 second pause]...I mean, I feel like it's just a natural ability to know, like, how... I mean, like, anyone can be a composer.

Hauser Hm...

Jeff It's just a matter of...like...if some...if someone was not an incredible composer, but was a composer because they wrote a lot, like, "OK. Fine." I think that, to be a great composer there are certain skills, like being able to hear a good melody line. Something that really...[2 second pause].

Hauser Stands out?

Jeff Yeah, sticks out in your mind. Uh, the ability to make, like, themes and creatively, like [motions with his hands], alter them, but keep the theme in tact and stuff. Keep it interesting. Um, and hear the chord changes and tonality changes and things...I guess.

Hauser Do you see yourself as having those abilities?

Jeff Ah...[smiles and looks away]...I...I'd like to think so [smiles and looks back]...but, I don't know [laughs]. But I wouldn't want to be like [in a British accent], "Yes, yes, I have all sorts of..." I mean, I would love to try it and see...but...

Hauser And that's the reason you're dabbling and considering composition?

Jeff Yes. [Nods] Yeah.

Hauser Cool. Um, so, um...so in reflecting upon the tasks that we completed, just talk about the experience.

Jeff Uh...I really enjoyed it. It was...it was a lot of fun. Sometimes it's frustrating only having 10-minutes.

Jeff ...and only a bass xylophone. It's like, OK, I have 12 notes to choose from. So, um, and also it's like [mimes playing with mallets]...

Hauser So, did you want a bigger range? Or...or chromatic?

Jeff Um. I think, chromatic would've been nice.

Hauser Oh, really? OK.

Jeff Uh, the bigger range would've been OK, but the chromatic would have been more interesting, but, um...Even then it was also kind of frustrating 'cause it was like, my skills with [mimes playing with mallets] xylophone isn't up to par with how advanced other music kids here are [at the Large Music School].

Hauser Right.

Jeff Uh... But no, it was enjoyable.

Hauser Would it have been easier for you on the piano?

Jeff Yeah. Oh, yeah [laughs]. Piano would have been *far* easier [with emphasis].

Hauser Uh, part of the reason I kept it on xylophone was for most of us it's not our primary instrument and so, hopefully, there was a level playing field for all of us, so that's the reason I had to do that.

Jeff Right. So no one rips out a huge...

Hauser But that's one of the things I'm wondering about is if I do this study again, you know, maybe have people do it on their primary instrument to see how that influences them.

Jeff Yes. Right

Hauser Because when you approach the instrument there's a fear factor, like, "I've never done this before." And that's why before we've done every task, it's like:

“Fiddle. Just fiddle.” So you get comfortable. And it’s xylophone, so it’s not that hard.

Jeff No, it’s not hard, it’s just. Yeah. I think I, like, we had to limit ourselves...compositionally to what we could play. Which, I mean, for the sake of this study, I guess works, but...um...

Hauser ...but you heard more things you could’ve done, or something like that?

Jeff Yeah. Yeah, I mean there were definitely...there’s definitely more I... I mean, I was half way into it and I would have to stop and be, like, “OK. I have to play this now.”

Hauser Right. Well, that’s kind of cool because it shows your innate ability to hear more than what the limitations of the instrument provided. I think that’s good. So, um, was it easy?

Jeff Um, yeah. I thought so...

Hauser I mean, was it easy or hard, or...

Jeff I thought it was pretty easy. Just...sit down and write it. I don’t know. I mean it’s kind of the same way when I play piano...like you’re just hitting keys. I don’t know. It’s just...[shrugs shoulders nonchalantly]...just sitting down and making music out of nothing. I don’t know.

Hauser Were you comfortable doing it?

Jeff Yeah [nods]. I thought it was...yeah, I was pretty comfortable.

Hauser OK. So the three tasks that we did...we did the unstructured task first, then the poem and the rhythm. Um, which one...which one of those three was harder for you?

Jeff The last one was the hardest.

Hauser Really? Why?

Jeff Um...[2 second pause]...I’m not sure. Probably because...being locked into that meter was challenging, you know to find a melody...cause I mean, the melody has to work with the meter, I think. And finding a melody that worked [motions with hands] in that strict, uh, like those four measures...and like sounded finished when it was done, and everything...um... I think it was...that was the most, like, [motions with hands like a cage or strangling someone] closed in of the three.

Hauser Constricting?

Jeff Constricting. Yeah.

Hauser Did that make it less enjoyable because it was that? I mean, I don't care either way, I'm just curious of your response.

Jeff Um...I definitely enjoyed the first two more. I don't know if...I mean...I'm sure there are tons of other factors that could have added into that, I'm sure.

Right. Right.

Hauser

Jeff If I was having a bad day or something, then, obviously it wouldn't have been as much fun.

Hauser That's true.

Jeff I don't remember, but...um...

Hauser So, you mentioned you enjoyed the poem and unstructured. So, which of those two did you enjoy the most?

Jeff Ah...[2 second pause]...I think I enjoyed the unstructured one the most, but I think that...that as far as just, like, making stuff up, it was the most fun. But I think that the poem one was the easiest 'cause it had just enough, like, foundation to it that...it gave, like...it gave pretty...it narrowed down the possibilities, like, I guess. 'cause the unstructured was, like, "You do whatever" [motions with hands—big gesture], and then the rhythm one is, like, [hands gesture tightly] very focused, like, "You can do whatever you want as long as it has these beats" [emphatic and legalistic].

Hauser Uh, huh.

Jeff And then, like, the poem one was like [more relaxed], "You can do whatever you want in this field" [motions medium gesture with hands]. I think that really added...it just focused it just enough so that there was a lot of creativity open. Like, pretty much anything you wanted to do, but it was you didn't have to focus it all. Or, at least, we didn't have to focus it.

Hauser Yeah, that makes sense. So, out of all three of them, which...in thinking about your final product, which were you kind of like, "I kinda dig that?"

Jeff I was most proud of my third one, I think.

Hauser [Misunderstanding what he said. I thought he said, “poem one.”] Oh, really, so how did you do that poem task? Did you...cause, some people text paint it and some people, like, put it into a song where you actually sing the words. Which did you do?

Jeff I was one of the ones who put [motions with hands as if playing a mallet] note to words.

Hauser So you made it into a song?

Jeff Yeah.

Hauser Have you song written before? Playing guitar or piano?

Jeff Ah...yes. Yes I have.

Hauser So, you just saw the lyrics and put it to a song.

Jeff [Nods].

Hauser OK. Cool. [3 second pause]. So which of the three tasks allowed you to be most creative?

Jeff [Thinking for 3 seconds]. I think that, ideally...well [turns head] dang... I mean, they all have special things, ‘cause the more you tighten down the rules the more...[nods head left/right]...I think they all have their special creativity. Like the open one, what can you make out of nothing? And then the poem one...uh...what can you make out of this base template. I don’t know...I think that’s the one that clicked with me the best, like I said. And then the rhythm one...I think there’s still a lot of creativity in the rhythm one...

Hauser Even though it’s structured?

Jeff Yeah, ‘cause there’s still so much you can do with that, like, it’s not like there are any rules as far as notes go or time, um... I mean, I would say that the possibilities are definitely smaller than the other two.

Hauser Uh, huh.

Jeff Just by the nature of the...putting any restrictions on it. But it would be less than, no restrictions. I mean, I think there is more, like, mathematical part of it, almost, to the rhythm...just ‘cause, it’s like solving a puzzle, almost. Whereas the open one was, I feel...musically and emotionally oriented. I guess.

Hauser Right, right. Emotionally because there’s a connection with...

- Jeff I mean, it's...you don't have to worry about following your rules so you can really...I mean, if you decide to put in the rules, then, like, that's fine, but...I think that... Yeah, it's... It's more connected to emotion than it is than your cognitive part. Cognition...I guess.
- Hauser Did the rhythm one...um...Uh, first I think it's interesting that you said there is creativity. 'cause a lot of people would say there is no creativity at all. But I think it's interesting that you have a standpoint in going, "Well here are your boundaries, but you can still be creative within those boundaries."
- Jeff Yeah [nods head].
- Hauser Cause, it's like serialism. You have Schoenberg, you know, like, "Here are the notes I'm going to use. Now, how do I let my creativity thrive?"
- Jeff Yeah, exactly. I think that, that... I think it's much more hit or miss. Like the more constraints there are... Like you can still be... Like you can have an incredible composition that...in that small...in those constraints, but I think it is much more difficult and that...it's a much more broader spectrum [widens hands] of like really great [motions to one side] to average [motions to the other] composition, I guess. Like, I think that if you succeed in...under the constraints it's much more impressive than if you can succeed... and I think it's much more memorable if you have all these rules and somehow still manage to make it very enjoyable composition.
- Hauser Right. Right. That's cool and very interesting. So, uh, um...I lost what I was going to say. So, talk about this experience...so, uh, about your degree of comfort in creating music. So, did it any of the tasks make you feel uncomfortable or did you feel constrained on the rhythm one, or were you like, "OK, here are the rules." And just go at it. Or how did affect your degree of, like, comfort?
- Jeff Um. I mean, the first one was kind of daunting 'cause I was just like...[looks at researcher]... it was the first one. So... But I think that worked itself out pretty quickly. That's also probably why I liked the second one the most. 'cause I got the first one out of the way, and it [the poem] was still pretty open. But, um...as far as comfort goes, I don't think...like the third one was more challenging, but I don't think it was uncomfortable. It was just more, like...I had to think more about it, than just let it happen.
- Hauser Right. OK. Good. Um, so in thinking about future students that you might teach...do you think they can succeed or accomplish these tasks?
- Jeff I mean...I think anyone could.

Hauser Anyone could?

Jeff Anyone could. Anyone could hit the bells. I don't know. It's...I guess...I mean, whether you're making great master pieces or not is obviously up to question, but I think that anyone can compose in some respect.

Hauser Do you consider this composing?

Jeff [2 second pause]...I mean...uh...yeah...yeah I would.

Hauser You were kind of hesitant there.

Jeff I was just trying to think of any reason why it wouldn't be, I guess. Um...it's obviously not super intricate or, like, most of the things we made weren't hardly difficult, but um... I mean we wrote a piece and it was set in stone [emphasizes with hand]...

Hauser Recorded on video [laughs].

Jeff Yeah [smiles]. And we did it twice, the same thing. But, uh, yeah it's composing. I wouldn't see why it wouldn't be.

Hauser Yeah. OK. So, if your kids...or kids you were teaching, or whatever, if they did something like this would you say, "OK, yes you composed something?" Would you tell them that, you did that?

Jeff Oh, yeah. I mean this is more than I ever did in high school.

Hauser Oh, really? So you had no experience like this?

Jeff I had absolutely zero [looks away] composition in high school.

Hauser Although you said that you did compose on your own?

Jeff Yes. I mean, that's the only exposure I had to a creative outlet was guitar and piano in high school.

Hauser And it was pretty much...self-motivated.

Jeff Yes. There was nothing in school.

Hauser What about your sophomore year here, like your theory classes that you're taking? Have they...

Jeff Yes. Yeah. I *love* theory, in terms of doing counter point where we started [smiles]. .. And I'm so glad I switched to music, 'cause that...that was one of my favorite things.

Hauser Cool.

Jeff I love writing counterpoint. 'cause it's... I really like math also...so it's kind of figuring out a puzzle. But it's still, like, a creative puzzle...cause it's not... 'cause there's so many ways you could still do it, but there are certain ways better than other ways, but there's still these rules that you have to follow and I think that is *really* fun [emphasized word].

Hauser So there is kind of an inherent structure...like, there is an chord structure in counterpoint. So it is similar.

Jeff [Nods]

Hauser So did this experience...now during this whole experience, I did not teach you how to teach kids how to compose. You just did a whole bunch of tasks. Now did this experience influence your thinking of how to teach composition?

Jeff Um, I think I have...[2 second pause]...um I think I have more tools to pull from, I guess...after actually doing it and, like, and after thinking about that this was a study about music educators teaching composition, it made me a lot more aware of what I was doing as I composed.

Hauser Right.

Jeff I wouldn't say that I would to be able to be, like, very successful to teach it at this point, but...

Hauser Oh, ok.

Jeff Um...I think that...

Hauser So, it didn't change your degree of comfort that much?

Jeff Um, well, it did a little bit. It definitely is in the right direction [points with hands], but I don't think that three 10-second [minute] compositions are going to make me, like, "Alright, I can teach these kids how to compose."

Hauser Right. Right.

Jeff It's definitely, it's definitely laying the foundation, which is helpful.

Hauser Which of these tasks do you think will allow your future students to be more successful?

Jeff [4 second pause]

Hauser Or, let me rephrase that. Which [task] do you think you would introduce to your kids first?

Jeff I, would...definitely not the first one.

Hauser Why is that?

Jeff I think...well, actually, I don't know...I feel like kids would just get flustered, almost? 'cause I mean...maybe, I don't know. I think they would be successful, still on the first one...oh, that's a tough question... I'm leaning towards the la...[didn't finish word]...[smiles and sighs]...actually...I'm not [laughs].

Hauser Oh, that's ok.

Jeff I mean...I don't know [repositions himself in his chair]. That's a tough one. 'cause I think that the kids would be...it would be easiest for the kids to do the third one [rhythm] if they weren't worried about quality. If they are just worried about, "I'm going to make a song." 'cause, I mean, they would have half of it done already for them.

Hauser Right.

Jeff But, uh, I kinda like the second one.

Hauser So are you saying that the first one [but meaning the third one] would allow them to achieve it, but they wouldn't be as creative? [I meant third one]

Jeff Well, I don't think the first one [unstructured] would be as good first...or as a teaching tool.

Hauser Oh, the unstructured one.

Jeff Yeah, I don't know how well that would teach them to compose. 'cause it's...there's infinite possibilities [motions wide with body]. Like, I don't know, where do you start when you're composing for the first time and you can do *whatever* you want [emphasis on word]? I think it's like when kids learn to write essays. They don't, like, "Alright, go home and write me an essay and come back."

Hauser “Whatever.” Yeah.

Jeff It’s like, you give kids a picture and write about the picture.

Hauser Right.

Jeff I think it’s kind of like that. You start with at least some kind of constraint. And then open it up more as the kids [motions with hands] get more comfortable.

Hauser Right, right. That makes perfect sense. Um, so did this experience...I don’t know it may or may not have, but did this experience change the way you think about composing music?

Jeff Um [2 second pause]...

Hauser And the reason I couch that...is that you have improvised on your own already. ‘cause, for some people who don’t improvise or don’t even touch a keyboard...then this would be a very new experience, but it may not have changed it for you, but I don’t know...

Jeff Well...I mean, it felt a lot like what I do on the piano. And if I call this composing, then, I don’t know, I guess...it’s weird, I guess.

Hauser Oh, so, that word composing...

Jeff I think it should open up meaning of that word, I guess.

Hauser How so?

Jeff I guess, I have a broader definition of composing at this point. I think that...I think there is more of a grey line between what is and what is not composing, I guess. Actually, it kinda depends upon your definition. But, yeah, I think that it did change a little bit, because... Like I said, when I was playing the bells [xylophone] it felt like it was when I was playing the keyboard, except that I had to, like, “Alright, decide on something.” [motions with hand]...And just keep doing it.

Hauser Uh, huh.

Jeff Whereas, on keyboard, I just...play it, I guess [shrugs].

Hauser Yeah, yeah. So is it easier to see yourself as a composer? Or more difficult to see yourself as a composer?

Jeff I think it's easier. Yeah. [still seemed uncertain]

Hauser Um, did it change any assumption you had about what composing should look like?

Jeff I think that I'm more inclined to say that its...I think before, I thought that it should be more difficult or, like, more strict [emphasizes with hands], you know, with more guidelines and, like, structured, I guess. But...now, I'm more inclined to say, that you write something that you can perform, then that's composing, I guess.

Hauser And, and leave the judgment out of it?

Jeff Yeah.

Hauser Ok, I don't want to put words in your mouth.

Jeff Yeah.

Hauser So, did you receive any composition experience in high school, or middle school or elementary?

Jeff No. No. I came from a small town [smiles].

Hauser Do you think it should be taught?

Jeff Uh, yes. Yeah [more confident], absolutely. Um, I think that...well, I know that in smaller schools, it was really sad because the only music we have is performance. It's always just band and choir...and the occasional orchestra. There really is no general music...except in, like, 4th grade. But then...there's only general music up until band and choir start. Once band and choir starts, general music is gone [sweeps with hands]. And...it's all performance. And while that's great I think there's *so* [added emphasis] much to it than that. Like, "Here's the music, sing it, great, and now go home." There's so much more outlet, I think. It's not just music either. I think it's all the arts.

Hauser So when you say there is so much more outlet. What do you mean?

Jeff Like, just, composition, improvisation, I don't know...uh... I'm thinking even more broader than just music at this point. I was talking with some friends, like, yesterday, how my friends choreographed dance routines for their school dance team.

Hauser Uh, huh.

Jeff And it's like [said incredulously], "What? That happens?" Nothing like that happens.

Hauser Because it's a creative outlet?

Jeff Exactly, yeah. We do have student directed plays in my [high] school which is as close to as it gets with...

Hauser Back home?

Jeff Yeah. Well, we actually have a variety show and the students write the MC...or students are MCs and the students write the...it's kind of like a skit. So that is definitely the most creative...creativity I got out of high school is being an MC for that

Hauser So it wasn't just music or your music classes, but all across the board there were...

Jeff Yeah, I mean, in my school there were, like, two creative outlets [motions with two fingers]: if you want to direct a play [motions to one side] or if you want to be an MC for the variety show [motions to the other side]. And, like, you can create and you can do these things, but it's just not encouraged or...or it's not even encouraged, it's...it's not even really acknowledged, I guess. It's not discouraged, it's just not even brought up at all [seemed to be said stronger and more emphatic].

Hauser Did that frustrate you?

Jeff Well, yeah, now it does. Yeah.

Hauser Oh, so you're looking back...

Jeff Yeah, at the time, I was just, like, this is...

Hauser Oh, "This is life."

Jeff Yeah, but now that I've come to civilization [smiles]...

Hauser [Laughter].

Jeff ...and it's like...

Hauser [Singing] "It's a whole new world..."

Jeff Like, I thought I loved my high school. I mean, I did. I loved high school, but I realized now that there is *so* much more that could have been done.

Hauser Yeah. So if look at it as if you were a teacher going back what would you bring to it?

Jeff [Sighs]...oh...I would...I mean, I would...I don't know if I would have a class for composition, but I definitely encourage...and maybe have an after school thing, or something extracurricular for the kids who are interested. Or at least kick it off and get the ball rolling, or something like that. But I this it's really important factor...

Hauser Why is it important?

Jeff Um...[2 second pause]...because it's enjoyable? I mean, why is music, like, important? I don't know. It's in the same realm of...like I think composition is important, like singing is important, or acting is important, dance is important. It's all expression and I think there are all types of expression for different people. I think there are people that can compose that perform very well; and I think there are people who perform who don't compose very well and...to just have that one [performance] outlet...

Hauser And that one outlet, being what?

Jeff Just performance [emphasizes with hands].

Hauser I see, I see. Ok.

Jeff But I also think there are kids that could live up to so much more than...like become even better at performance if they pursue composition more. It's just...I mean...[louder] if you learn something more, you're definitely going to get better at it.

Hauser Uh, huh. Yeah, that makes sense. Yeah, I think it's interesting to expose them to performance... "Ok, we're doing works that others have done, now, what can you do?"

Jeff Yeah.

Hauser Ok, so what other thoughts do you have about composition, or this experience, or anything about creativity that you'd like to add?

Jeff I think that...uh...

Hauser Uh, first, I think it's really cool that you're passionate about this. I'm passionate about it too, but it seems that you're equally...uh...cause I see you get animated when you are talking about your past, like, "Ugh, they didn't offer this."

- Jeff [Smiles and nods]. Yeah. No. Well that's also something that I have recently discovered that I really didn't think about until a couple of days ago, so it's really fresh on my mind.
- Hauser Well, any thoughts that you have about composing, or this experience or anything?
- Jeff Um. Well, I think that it's something that people fear, just 'cause it's, like, "Oh, creating something" [motions with hands as if scared]. I don't know...it's...
- Hauser Why do people fear it?
- Jeff Just 'cause, it's not taught a little bit? I don't know...it's...like people... people are afraid to enter that sphere [motions with body as if jumping in]. Just 'cause it's something new. I think that if teachers were to just, like, to have kids compose in 4th, 5th, 6th grade...but I think that if they were to break that barrier of unknowing, I guess, it would make people a lot more comfortable and probably a lot more, uh, more prone to actually trying it and composing on their own. Just...self driven....
- Hauser OK. Well, cool. Well, thank you so much for participating. I so appreciate it and appreciate your thoughts too.
- Jeff Yeah. No problem. Thanks.

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