The Consensual Assessment Technique as a measure of creativity in children's musical compositions motivated by visual and verbal stimuli

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THE CONSENSUAL ASSESSMENT TECHNIQUE
AS A MEASURE OF CREATIVITY
IN CHILDREN’S MUSICAL COMPOSITIONS
MOTIVATED BY VISUAL AND VERBAL STIMULI

A Thesis

Submitted to the Graduate Faculty
of Louisiana State University and
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in partial fulfillment of the
requirements for the degree of
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in

The School of Music

by
Katie Toups Traxler
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ABSTRACT

The purposes of this study were: 1) To compare the relationship between the degrees of creativity shown in musical compositions of third grade students (N=163) when they were exposed to either a visual or verbal stimulus, and 2) to examine inter-judge reliability for creativity ratings using the Consensual Assessment Technique (CAT) with instrumental group compositions. Throughout a nine-week teaching unit, all subjects participated in regular music classes where they learned compositional techniques and concepts. They worked in small cooperative learning groups of 3 to 6 students throughout the unit to compose several “mini” compositions and two large-scale compositions. For the last composition, four classes received a verbal stimulus and the other four received a visual artwork stimulus. Performances of these 34 compositions were videotaped and judged on 13 dimensions by three elementary music teachers using the CAT.

Even though both stimuli were successful compositional motivators for their respective groups, the subtle differences in stimuli types over a short period of time as in this study were not influential enough to affect the creativity scores of student compositions. No significant differences were found between the two groups for any of the dimensions. Reliability scores were calculated, and ranged from .48 to .83 with coefficients on 11 of the 13 dimensions resulting in significant (p<.05) agreements among the three judges. This assessment technique was found to be successful when used with small group instrumental music compositions of third grade students.
CHAPTER 1
INTRODUCTION AND REVIEW OF LITERATURE

Introduction

A complete music education for elementary age students includes many different concept areas. Governed by the National Standards for Arts Education, a total music curriculum affords many opportunities for creative expression including composition, improvisation, and analysis (MENC, 1994). Despite the numerous personal and group benefits provided by these activities, most teachers dedicate little to no instructional time to them (Strand, 2006). Due to the complex nature of “creative” activities and teachers’ inexperience in composition and improvisation, teachers are unsure of how to teach these concepts and even more intimidated by the lack of techniques for assessing them. How do you assess something you know little about? When students are given the chance to create their own music, they are able to make concrete connections between the theoretical knowledge and experience they receive in music class and their own lives. These meaningful connections between knowledge and synthesis, as defined by Bloom in his *Taxonomy of Educational Objectives: Cognitive Domain (1956)*, invite students to engage in highly complex thinking skills that are often unnecessarily neglected in the elementary classroom. They are able to experience the value of self-expression through music. They are able to enjoy the beauty of their own original work. Music teachers can provide regular instruction in these creative music concepts so that students may develop the skills necessary for success in music.

Teachers must develop a variety of assessment strategies to nurture students’ creative development in the music class. Much research has been done in the music field on creativity assessment (Baltzer, 1988; Bangs, 1992; Barret, 2003; Brinkman, 1999; Daignault, 1997; Hickey,
1995, 2001a, 2001b, 2003; Webster, 1987, 1990, 2003). Amabile (1996) developed the Consensual Assessment Technique to assess the creativity aspect as well as others aspects specific to the relevant content area being assessed. Her technique has been modified for many different fields including music, literature, and visual art. It was my goal as investigator to add to the existing research on this technique in order to assist future researchers in developing a variation of this method appropriate and reliable for the elementary music classroom.

In designing this study, research from music education and related fields was consulted. These studies guided the selection of the independent variable, dependent measure, and instruction module used in the project. The review of this literature is divided into three sections of research examining the three major aspects of this study: creativity, music composition, and assessment.

Review of Literature

Creativity

*Creativity is in the personality, the process, and the product within a domain in interaction with genetic influences and with optimal environmental influences of home, school, community and culture, gender, and chance. Creativity is a basic human need to make new.*

_Jane Piirto_ (Piirto, 2004, p. 37)

Researchers have studied creativity for decades; however, differing concepts of creativity coupled with a confusing changing body of research often have resulted in more questions than answers (LaChapelle, 1983). Two of the most prominent goals of identifying and assessing creativity in education are to help recognize creativity when it occurs and to create conditions in order to allow it to develop further. Even though there are texts and research studies addressing the most basic questions about creativity theories and experiences, the authors rarely expound upon the implications of research and theory for daily classroom life (Starko, 2005).
Defining creativity has been a constant challenge because educators, psychologists, scientists, and researchers view creativity from different perspectives. Most of the literature recognizes three areas of creativity: process, person, and product. Some researchers define creativity in terms of the process. Psychologist Paul Givens (1962) described creativity as 

*a uniquely human mental ability wherein an individual conceives a synthesis of ideas which is original for him, searches for deep meanings of the ideas, and seeks either to find their correspondence with reality or their relation to the thoughts of others. Givens’ definition clearly illustrates the complex thought process that many struggle with when trying to identify creativity.* (p. 296)

Amabile (1996) referred to the research of behavioral psychologists Werheimer and Newell, and developmental psychologists Feldman, Gruber, and Barrett who include novel thinking, problem finding, and problem solving activities in their definitions of creativity. Cognitive psychologists define creativity as insight, intuition, a process of selection, and the ability to adapt to novelty (Piirto, 2004). Webster (1987) developed a model to define creative thinking in music based on an earlier model by Graham Wallas (1931) that included four phases within the creative thinking process: preparation, incubation, illumination, and verification. Guilford developed a model called the Structure of Intellect that consisted of three dimensions revolving around convergent and divergent thinking processes including operations, contents, and products. Divergent thinking concepts by which he measured creativity included flexibility, fluency, originality, and elaboration (Guilfo, 1958, 1966, 1967).

Another group of researchers define creativity in terms of the person, more specifically the personality traits that are most characteristic of creative individuals including patterns of aptitudes, interests, attitudes, and temporal qualities (Sternberg, Grigorenko, & Singer, 2004). Sternberg and Lubart (1993, 1999) developed a theory in which a variety of intellectual resources combine to stimulate creativity including knowledge, cognitive style, personality,
environment, and motivation. Sternberg (1985) developed a theory of three types of intelligences. One of the three intelligences, creative intelligence, was defined as the ability to adapt to what is novel or the ability to make something new.

A third group of researchers identify and define creativity by the production of some novel result that is useful, adaptive, and one that elicits an aesthetic response from observers (Amabile, 1996; Piirto, 2004). Csikszentmihalyi (1996, 1999) defined creativity as any act, idea, or product that transforms an existing domain into a new one as well as the systematic phenomenon happening between a person’s thoughts and a socio-cultural context. According to Starko (2005), to be creative, an idea or product must be new to the individual creator. In formal research and creativity assessment, these product-based definitions of creativity are considered most useful. Although differing slightly according to specific domain knowledge, most past and current definitions of creativity revolve around two major criteria: novelty and appropriateness.

As educators, we believe that everyone can learn to be creative (Guilford, 1958). Balkin (1990) supported the educational perspective that talent and creativity are not one and the same. Unlike talent, which can only be developed and nurtured, creativity is an acquired behavior that is learnable, teachable, tangible, and crucial to human development. Children and adults alike should recognize that discipline and practice are vital to creative work. Talent may be only a small part of creativity. Lessons and special discipline-specific classes can enhance creative potential through consistent instruction and practice. Core attitudes for creativity can be taught and nurtured within the classroom environment. Children should be surrounded by models of professional and creative work to inspire their ideas and thoughts (Hickey & Webster, 2001; Stephens, 2003). Teachers can model the creative process for children by taking part in creative projects with their students. Parents can encourage creative behavior in the home through
hobbies, lessons, and recreational experiences and vacations. Especially in an age where socialization is so important, teachers and parents should avoid emphasizing socialization at the expense of creative expression (Piirto, 2004).

Campbell and Scott-Kassner (2006) said “to deny children the opportunity to work creatively with the materials and structures of music is to limit their capacity to think artistically and, ultimately, to limit the full exploration of what it means to be musical” (p. 248). Unfortunately, creative experiences are the least used in music class because of the amount of time and energy they require from the teacher (Flohr, 2005). Creating the art is a fundamental part of learning the art form. In 1959, the Contemporary Music Project (CMP) was introduced as a groundbreaking effort to incorporate novel and creative music programs in the public schools in Ithaca and Interlochen, New York (Benson, 1967). Young composers under the age of 35 were placed in public schools as composers in residence to teach the students. The U.S. Office of Education sponsored the Manhattanville Music Curriculum Project (MMCP) from 1965 through 1970 in order to develop a sequential curriculum design for music education using strategies and techniques that incorporated creative thinking (Brophy, 2000; Webster, 1990). The MMCP Synthesis was the curriculum guide for grades three through twelve (Thomas, n.d.). MMCP Interaction was the curriculum for the primary grades for the project (Biasini, Thomas, & Pogonowski, n.d.). Many elementary music educators also incorporate teaching strategies and activities that encourage creative thinking by implementing elements of Orff-Schulwerk and Dalcroze Eurhythmics within the curriculum. Composing, arranging, performing, conducting, improvising, analyzing, and even listening are all inherently creative music activities (Barret, 2003; Kiehn, 2003; Webster, 1990). Composition in the music classroom provides children the opportunity to develop and show personal expression, as well as explore their own creative
musical skills (Strand, 2005). When children compose together, they learn to communicate their musical ideas and thinking to each other (Wiggins, 2003). Their final products become great personal sources of pride and accomplishment.

Campbell and Scott-Kassner (2006) defined composition as the opportunity to create, reflect on, and revise a piece of original music. Composition is considered such a vital branch of music education that it is included as one of the MENC National Standards (MENC, 1994). Musical composition has been incorporated into the educational curriculum for several reasons: to provide creative experience for all students, to introduce children to the materials and techniques of contemporary music, to underpin the development of musical thinking and understanding, and to more effectively teach composition as a musical process in order to develop another generation of composers (Barret, 2003).

Methods of Composition

Composition activities allow students to embrace their unique ideas and express their personal identities through music. Children are given the tools to construct knowledge of themselves and their culture and reflect it back as a musical idea. However, not all composition activities are designed with creativity in mind. Some are designed to demonstrate an understanding of specific skills or techniques and lack in creativity due to the parameters of the exercise. Brophy (2000) suggested that in order for composition to be assessable in the classroom, the assignments must be clearly articulated and structured around assessable tasks including melodic, rhythmic, structural, theoretical, and aesthetic components, with most aspects being controlled strictly by the teacher. Hickey (2003) found that assignments with such strict parameters do not stimulate creative thinking and therefore often elicit low motivation. According to Hickey (2003) and Strand (2005), the more successful composition activities have
few parameters and no reward placed on the outcome. Strand (2005) warned that too many strict
task directions may cause students to treat composition tasks as “assignments” rather than
creative projects.

It has been suggested that composition activities should be formed around a motivator such as a theme, emotion, mood, artwork, story, poem, or event (Balkin, 1985; Campbell &
Scott-Kassner, 2006; Ginocchio, 2003). This allows younger students to have something around
which to focus their thoughts. Teachers serve several roles in the process. Creating spaces for
children to work together, establishing parameters and behavior procedures, and providing
uninterrupted work time, time to think and work out ideas, and meaningful feedback are ways
through which teachers nurture composition in the classroom. When giving feedback, teachers
should encourage students to find their own musical solutions, being careful not to impose ideas
onto their students’ compositions (Benson, 1973; Hickey & Webster, 2001; Reese, 2003). It is
also suggested that teachers develop a sense of each student’s readiness to receive criticism and
their willingness to revise. Some students may take offense to revision suggestions and be
unwilling to change their compositions. Teachers should present suggestions in a positive and
open-ended manner, and should use this evaluation opportunity to teach students how to both
recognize the positive and to identify room for improvement in their own pieces and in their
fellow students’ pieces (Ginocchio, 2003).

Barret (2003) and Hickey and Webster (2001) promoted using Webster’s four-step
creative musical thinking process (1987) based on Wallas’ (1931) model of creative thinking as a
guideline for the composition process. Kratus (1989) also used this model with much success in
his study of compositional processes of children. The four stages – preparation, incubation,
illumination, and verification – provide the students opportunities to explore new sounds, play
with new ideas, revise, and revisit after time to be away from the project. Hickey and Webster also stress the importance of providing the students with a creative atmosphere where there are no right or wrong answers. Higher levels of self-expression are obtained when students are allowed to make mistakes (Benson, 1973).

There are degrees of lesser or greater creativity in every individual’s work. The process of creative thinking in all disciplines, including music, involves task motivation, domain-relevant skills, and creativity-relevant skills (Hickey, 2003). Amabile’s componential model of creativity has provided a view of general creative thinking (Amabile, 1996, p. 94). Hickey has adapted this model for musical creativity for use in composition (Hickey, 2003, p. 39). In the present study, Hickey’s adapted model was used to guide composition lessons. In the first stage, task identification, the students are presented with the parameters for their composition activities. These parameters are set up as a framework to guide the students through the composition process and to provide them with a starting place (Ginocchio, 2003). They are not designed to limit musical experiences. In the second stage, preparation, similar to Wallas’ incubation stage, students have time to play around and explore with new sounds and ideas. This stage is meant to be a “springboard” for taking chances, exercising options, and making creative choices through trial and error (Balkin, 1985). Kratus (1989) found that nine-year-olds (third grade students) spent the most time during free composition periods in this exploratory stage. The third stage, response generation, is when the creator starts making decisions about the actual composition. In the fourth stage, response validation, the student receives feedback from the teacher and fellow students. The last stage is referred to as outcome. In this stage, students either revise their composition or finalize it and practice for performance.
Assessment of Creativity

Measuring creativity is a difficult challenge in research and education. The most obvious difficulty in trying to assess and measure creativity is the lack of consensus on what constitutes creativity in the first place (Starko, 2005). Since Guilford’s 1950 address to the American Psychological Association on creativity, interest in creative behavior and creative thinking has grown significantly (Guilford, 1950). There has been a noticeable increase in the development of research measurement tools such as creativity tests (Amabile, 1996; Baltzer, 1988; Piirto, 2004). The measurement of creativity is essential to identifying creative individuals and their needs, for the evaluation of educational programs that have been designed to develop and nurture creativity in students, to study relationships between creativity and other variables, to expand our understanding of human abilities, and to provide a common language to professionals intending to discuss aspects of creativity (Baltzer, 1988; Starko, 2005). The purpose of the assessment and measurement guides the test; varying theories and definitions of creativity will yield various designs of tests. In her text, Piirto (2005) discusses the purposes, results, and research for the following creativity tests. The Torrance Tests of Creative Thinking (TTCT), first published in 1966 and still used widely today, have greatly influenced the development of other creativity tests in various domains (Baltzer, 1988). The Torrance Tests of Creative Thinking, Guilford’s Structure of Intellect Test, the Wallach and Kogan Tests, Mednick’s Remote Associates Test, The Creative Reasoning Tests, and the Tel-Aviv Creativity Tests were designed to measure previously defined aspects of creativity and have been influential in designing additional tests for specific disciplines. In his validation study of measures of musical creativity, Baltzer (1988) examined all of the creativity tests designed for the music domain that were available as of 1988. These tests, based on Guilford’s Structure of Intellect of convergent and divergent thinking, were
all divergent production tests, measuring creative thinking with paper and pencil. Divergent tasks referred to questions for which several correct answers were possible; convergent tasks questions had only one correct answer (Gorder, 1980; Webster, 1990). Guilford defined divergent thinking as the generation of logical alternatives from given information where emphasis is upon variety, quantity, and relevance of output from the same source (Guilford, 1966, 1967). The following tests are thoroughly discussed and analyzed in Baltzer’s 1988 study. Vaughan’s Musical Creativity Test was the first creativity test developed for the discipline of music (Vaughan, 1977). Gorder’s Measures of Musical Divergent Production measure (MMDP) was an improvisation-based test for junior high and high school instrumentalists. Webster’s Measure of Creative Thinking in Music (MCRM-II), Gordon’s Primary Measures of Music Audiation (PMMA), Vold’s Measure of Musical Problem Solving (MMPS), Torrance’s Thinking Creatively in Action and Movement (TCAM), and Wang’s Measures of Creativity in Sound and Music (MCSM) are all additional examples of divergent thinking tests for creativity.

Some argue that these creativity tests measure thinking skills, knowledge, and understanding rather than the actual creative work. All of these tests serve the same purpose—to objectively measure divergent thinking skills by using musical tasks such as composition or improvisation. Each test has strict parameters and strict scoring systems. Brophy (2000) contended that tasks involving creative expression among children should be designed to examine the product of the task or the musical skills involved, and not the creative process. He argued that the national standards do not address the creative process, and so it should not be assessed. Ward (1968) argued that a major problem in assessing creativity in young children was that they were incapable of producing significant measureable contributions to an arts or science field in the way that an adult could. He argued that the creativity dimension in young children
could not be measured by a figural test. With the recent research that has developed, new tests have been designed to use authentic creative tasks for all ages, and subjective assessments are becoming more useful.

Amabile (1996) has supported the view that creativity can and should be assessed because there is much we can learn from it. Amabile’s Consensual Assessment Technique (CAT) can be viewed as the reverse of these traditional objective assessments of creativity. People often can recognize and agree on the degree of creativity of a product, but they cannot always explain or define it. According to the consensual definition of creativity, a product or response is creative to the extent that appropriate observers independently agree that it is creative (Amabile, 1982). Appropriate observers are those who have experience and formal training in the domain area being assessed. Formal training is especially important when assessing the music domain because formal music knowledge is not a readily conversant subject matter (Amabile, 1996). By using tasks that allow for flexibility in response in the final creative product rather than strict fill-in-the-blank type activities, the CAT creates a “real world” situation, which results in a “real world” useful product, which a “real world” evaluator will judge. The whole process becomes a valuable learning experience to provide real feedback to students. When the task involves knowledge-seeking activities centered in appropriate contexts, meaningful learning happens (Brophy, 2000). When adapted for use in the classroom, Amabile’s CAT can enhance meaningful learning.

Amabile’s first 21 studies using the CAT were designed to develop and test a subjective method for assessing creativity that could be used across different domains. All of these studies are explained in detail in chapter three of her book Creativity in Context (1996). The CAT was initially designed in Study 1 to examine three different groups of judges assessing the same 22
young girls’ artistic creativity. The three groups of judges included psychologists, art teachers, and professional artists—three groups displaying extremely varying artistic abilities. After having the opportunity to view all the collages, judges were asked to independently rate them against one another according to 23 different dimensions including creativity, technical goodness, and aesthetic appeal. They placed X’s on a five-interval scale with low, medium, and high choices. Results showed high inter-judge reliability coefficients within each of the three groups of judges as well as between the groups on their creativity assessment. In the second study, the judges were all artists with at least five years of experience. The judging procedure was exactly like the first study with the exception that the seven dimensions that had very low reliabilities in the first study were thrown out leaving a total of 16 dimensions to be judged. The reliability among judges for the creativity domain was .79 in this study. In Studies 3 through 13, art collages produced by children and adults were assessed by various combinations of artist and non-artist judges. These studies averaged 11 judges per study; the reliability for the creativity dimension ranged from .72-.93. Starting with Study 14, Amabile began to investigate the CAT for verbal creativity in poetry. In studies 14 through 21, verbal creativity was assessed in poetry, storytelling, and cartoon captions. The judges for these studies were teachers, poets, and college students with a range from two judges to twelve judges. The reliability for creativity ranged from .77-.91. After the success with the first two domains, artistic and verbal, the CAT was adapted for use in many other domains.

Research on the use of the CAT in the music domain is limited. Several researchers have adapted the technique for use in their studies. Bangs (1992) used a modified version of the technique to better understand the role of intrinsic and extrinsic motivation on the instrumental compositions of third grade students. Intrinsic motivation was found to be a beneficial factor in
nurturing musical creativity whereas extrinsic motivation was found to be damaging. Daignault (1997) used a modified version of the technique to study pianists’ and non-pianists’ compositional processes and products by assessing MIDI keyboard compositions of children. He found that previous performance experience did not have the expected positive influence on creative compositional abilities. Brinkman (1999) used a modified version to rate the creativity of high school instrumental students’ melodies on the dimensions of originality, craftsmanship, and aesthetic value, yielding reliability scores for creativity ranging from .77 to .96.

Priest (2001) developed two variations of Amabile’s technique—Creativity and Craftsmanship Assessments (CCA) and the Consensual Musical Creativity Assessment (CMCA)—for use with his study on undergraduate non-music majors’ creative compositions and their listening skills. Independent judges reached acceptable levels of agreement in assessing musical creativity and other dimensions using the CMCA by placing the compositions into high-, medium-, and low-creativity groups. Students’ verbal descriptions of creativity and craftsmanship using the CCA were categorized. The descriptions yielded significant differences between the creativity groups. The compositions that were rated highly creative were written by individuals who were much more likely to describe temporal factors as contributing to creativity and craftsmanship.

Hickey (2001a) studied the relationships between different groups of judges when using the CAT to rate the music compositions of children. The compositions she used were from a previous study (Hickey, 1995) in which fourth and fifth grade students created original compositions on synthesizers. There were five groups of judges including music teachers, professional composers, college theory professors, seventh-grade children, and second-grade children. The teacher group was further broken down into instrumental, mixed, and
general/choral teachers. Inter-judge reliability, using mean creativity ratings for all groups minus the composers, (who showed no relationship in their ratings as a group) was .78. The total teacher group, including all teachers, had the highest reliability of .91. Out of the smaller broken down teacher groups, the general/choral teachers had the highest reliability at .81. Hickey suggested that the most reliable judges for assessing children’s compositions are the very music teachers who teach the children – general/choral music teachers. Their extensive music training and their diverse experience in the classroom with children provides them with the working knowledge needed to make consistent and valid judgments about the creativity of their students’ original musical compositions.

There is a growing body of literature, teaching aids and resources, and powerful technology available for teachers who want to engage students in creative musical activities (Hickey, 2001b). Composition has been identified as an important musical behavior through its inclusion in the national standards of MENC, through government supported curriculum projects like MMCP, and through the support of other music educators and interested researchers. Our understanding about how children learn and create has expanded greatly. Researchers have explored the use and development of creative activities and assessment in the music classroom (Baltzer, 1988; Hickey, 2001a; Kiehn, 2003; Priest, 2006; Strand, 2005; Webster, 2003; Wiggins, 2003). Several teachers have designed, published, and are using authentic creative music tasks involving composition in the classroom. Benchmarks and composition units have been developed by MENC to assist teachers in curriculum planning (Hickey, 2001b). Even in light of these advancements in music education, the controversial issues of whether or not to evaluate these tasks as well as how to evaluate them still remain. The reliable assessment of creative composition tasks, given that creativity as a whole is yet to be clearly defined, is
important to the music curriculum. Therefore, this study was designed to further the research in this area by using the Consensual Assessment Technique to assess the creativity of third grade students’ musical compositions. Specifically, the assessment technique was used to assess thirteen different components of the groups’ compositions and to compare creativity ratings between verbal and visual stimulus groups.
CHAPTER 2

MATERIALS AND METHODS

The primary purpose of this study was to test the effects of visual and verbal stimuli on the creativity shown in musical compositions of third grade children. A secondary purpose was to provide information towards the continuing development and validation of the use of the Consensual Assessment Technique as a measure of musical creativity in classroom composition activities.

Participants

Participants in this study included third-grade students (N=163) attending a public elementary school in south Louisiana. The racial makeup of the student population was evenly distributed between African American and White Caucasian. Students were of varied cultural and socioeconomic backgrounds, with no prevalent extreme. Participants did not include the gifted students. Students identified as gifted in music were pulled out of their regular music class for individual instruction, which resulted in a reasonably homogenous skill level among participating students.

The participants received general music instruction for 30 minutes once a week from a certified music teacher. Their regular music curriculum was based on the MENC National Standards for Music Education (1994) and primarily involved singing, playing Orff instruments and recorder, and movement activities. Prior to the study, very minimal emphasis was placed on composition elements during music class. Participants had received instruction in composition about twice a year for a total of about two weeks.

The participants took part in the project during regular school music classes across nine weeks of instruction (nine 30-minute sessions). Eight intact classrooms of students participated.
Four classes received a visual artwork stimulus, and four classes received a verbal description stimulus. Each class was divided into five small collaborative learning groups. The classes were assigned to a treatment group through a random drawing.

Exemption from oversight was granted from the Louisiana State University Institutional Review Board (IRB) for Human Subject Studies. Consent was also obtained from the principal of the school. During the beginning of the spring semester, participants’ parents and/or guardians were informed of the study through a letter of intent and signed a consent form giving permission for their child to participate. Given that the final performances were videotaped for assessment purposes, assurances were given that the identities of the participants would be kept confidential. Participants also were asked to sign an assent form indicating they understood the rules and purpose of the study. Students who did not return a signed consent or assent form still participated in the class composition unit for the nine weeks, but they were not included in the assessment video for the study. These students were not included in the total number of participants. Copies of the Institutional Review Board exemption form, the principal’s letter of consent, a sample parent consent form and cover letter, and a sample student assent form are included in Appendices A, B, C, and D, respectively.

**Independent Variable**

Campbell and Scott-Kassner (2006), Balkin (1985), and Ginocchio (2003) stated that one of the main roles of the teacher in setting parameters for successful composition experiences is to provide the students with a compositional problem to be solved. The problem can be in one of many forms such as a theme, picture, emotion, story, sound, and so forth, all of which serve as a “motivation” for composition. The main purpose of this study was to compare creativity
assessment scores of music compositions rendered from different motivational stimuli—visual artwork and verbal description.

Four classes used visual artwork as a stimulus for composition. The print was a 29” x 21” framed replica of Alfred Sisley’s *Snow in Veneux-Nadon, Around 1880* (Shone, 1994). A visual art teacher at a local arts magnet elementary school suggested this particular piece of artwork for use as a stimulus due to its high quality artistic value. The participants in the artwork group discussed the different artistic elements, colors, and shapes used in the artwork and shared ideas of what they thought was happening in the winter scene. They discussed the theme of winter and the different moods the piece exhibited, as well as the types of sounds they imagined might accompany the different aspects of the piece. Then they composed a piece of music inspired by the winter scene.

The remaining four classes received a verbal description stimulus. The word “Winter” was displayed on the board for them to reflect on. They discussed the theme of winter, described the ways that winter made them feel, and shared different ideas of what the word winter made them think of. They discussed what musical sounds you would expect to hear in winter. Then they composed a piece of music inspired by these discussions about winter.

**Underlying Theory**

This study consisted of a nine-week music composition unit structured according to Hickey’s adaptation of Amabile’s componential model of creativity (Amabile, 1996; Hickey, 2003). This model of the creative thought process functions in the same manner for low and high levels of creative work. The composition process itself was presented to the students in five stages that followed this model. The titles of each composition stage were adapted for ease of use by the students.
The first stage of Amabile’s model is *Task Identification*. In this stage, the problem is self-discovered or presented by the teacher. There is an external or internal stimulus that motivates the creative process. In this study, the composition assignments were the external stimuli. This stage was called “Identify” for the participants. They began each composition with this stage as I defined the parameters of the compositional problem to the students.

The second stage of Amabile’s model, *Preparation*, occurs when an individual or group recalls prior knowledge and also expands upon existing knowledge with innovative ideas. This stage was called “Explore.” The composition unit for this study contained guided sound exploration activities built in throughout the first five weeks. Many music researchers have stressed the importance of providing children ample time and multiple guided discovery activities so that they may explore sound production on instruments and voices in order to develop a varied repertoire of sound possibilities and techniques to guide future musical decisions (Campbell & Scott-Kassner, 2006; Flohr, 2005; Hickey, 2003; Strand, 2005; Wiggins, 1994).

The third stage, *Response Generation*, is when the true novelty of the product is determined. During this stage, which was called “Compose,” students tried out each other’s ideas, made musical decisions about form, tempo, dynamics, theme, instrument timbres, and so forth, and came up with a tentative product to present for feedback.

The fourth stage in the creative thinking process, *Response Validation*, is when the degree of correctness, usefulness, or value of the new product is determined by using domain-relevant analysis techniques. This stage, called the “Perform” stage, was the first time the participant groups performed their piece for the class in its entirety thus far in the composition process. Feedback, from both me and their fellow classmates, was essential to this stage because
it provided me with information about the level of understanding of the students (Benson, 1973; Brophy, 2000; Wiggins, 1999). Students needed to develop and practice self-evaluation skills in order to critique other performances (Campbell & Scott-Kassner, 2006). Feedback was sensitive, well thought-out, non-critical, organized, and offered only after the student’s work had been fully examined (Reese, 2003; Webster, 2003; Wiggins, 1999, 2003).

The final stage of the process, Outcome or “Revise,” was an important stage. It was here that the decision was made relative to whether progress had been made toward a goal, in which case the entire process continued, or if the goal had been attained and the process was complete. Complete failure also signified that the process was finished. From this stage, participants sometimes went all the way back to the “Identify” stage, restated the problem, and then began again with more exploration. There is much literature advocating the revision process for children’s composition activities. It is in this stage when children are extending and changing their ideas due to musical decisions that it is suggested the real learning happens (Webster 2003; Wiggins, 2005). Participants used these five stages, Identify, Explore, Compose, Perform, and Revise, to guide their small group work during composition activities. The stages were displayed in the front of the classroom for participants to reference during all class activities. The amount of time spent in each stage varied depending on the group and the assignment.

Strand (2005) and Wiggins (1999) have both warned that too many narrow task directions may cause students to treat composition tasks more like nonmusical assignments rather than an expressive creative project. Hickey (2003) also found that the more successful composition activities had few parameters and no reward placed on the outcome. For the present study, participants did not receive a grade for their work, and the composition assignments were designed to be open ended with few narrow requirements.
**Procedures**

In each of the eight third-grade classes at a single elementary school, participants were divided into five small cooperative learning groups of three to five students. The groups were organized ahead of time by the regular music teacher to avoid predictable behavior and social problems and absenteeism from children who routinely attended a speech or reading class during assigned music time. The music teacher also took care to evenly distribute participants according to their observed achievement in music class. Participants worked with the same small groups for the duration of the study. Small group work in the classroom involved many skills including collaborative skills, positive interdependence, individual accountability, personal responsibility, face-to-face interaction, and time for group processing. By keeping the groups the same throughout the entire nine-week period, I hoped that the participants would benefit from the development of a healthy group dynamic where over time everyone was able to contribute to the creative process, making the final product meaningful to all group members. The music teacher and I reminded the participants during the lesson that everyone in the group needed to contribute to the composition and that everyone needed to take turns, to share, and try out each group members’ suggestions. We monitored progress throughout each class time, working for two to three minutes with each group and observing the activity of each group throughout the composition tasks. I kept a detailed log of each class in order to keep track of their progress with the unit plans, to monitor the developing relationships in small groups, and to help track additional observations.

I presented four musical concepts—texture, timbre (similar and different), theme, and form (specifically ABA)—as the focus for classroom discussions, explorations, and composition assignments. These four musical concepts are some of the more commonly used elements in
composition activities with young children (Campbell & Scott-Kassner 2006; Hickey, 2003; Stephens, 2003; Strand, 2005; Webster & Hickey, 1995; Wiggins, 1999, 2003). In order to simplify the teaching process for third grade participants, the definitions of these terms were developed from those in the series *Share the Music* Grade 5 textbook (Bond, et al., 1995). Texture was defined as one or more layers of sound. Timbre, referred to in the text as tone color, was defined as the special and unique sound of each instrument or voice. Form was defined as the order of different parts in a piece of music. Theme was defined as an idea the music expresses. These concepts were introduced during lessons and further explored during class discussion and teacher modeling. I was able to assess student understanding through short “mini-composition” activities presented throughout the nine-week composition unit. The total nine weeks were not consecutive due to conflicts with the regularly scheduled music class. The class did not meet the week of March 10 due to school-wide testing. The school was also closed starting Friday, March 21 through the week of March 24 for spring break. Figure 1 shows an outline of the content and date schedule for the 9-week study.

<table>
<thead>
<tr>
<th>Date (Week of)</th>
<th>Lesson Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 18, Week 1</td>
<td>Introduction to Composition and Sound Exploration</td>
</tr>
<tr>
<td></td>
<td>Mini-Composition #1</td>
</tr>
<tr>
<td>February 25, Week 2</td>
<td>Continued Sound Exploration</td>
</tr>
<tr>
<td></td>
<td>Mini-Composition #2</td>
</tr>
<tr>
<td>March 3, Week 3</td>
<td>Class Composition</td>
</tr>
<tr>
<td>March 31, Week 4</td>
<td>Group Composition Task #1</td>
</tr>
<tr>
<td>April 7, Week 5</td>
<td>Cont.</td>
</tr>
<tr>
<td>April 14, Week 6</td>
<td>Group Composition Task #2</td>
</tr>
<tr>
<td></td>
<td>(split into stimulus groups)</td>
</tr>
<tr>
<td>April 21, Week 7</td>
<td>Cont.</td>
</tr>
<tr>
<td>April 28 Week 8</td>
<td>Cont.</td>
</tr>
<tr>
<td>May 5, Week 9</td>
<td>Video Week</td>
</tr>
</tbody>
</table>

Figure 1. Study Schedule
For the first five weeks, the same instruction was given to all eight classes. Detailed lesson plans describing the instruction can be found in Appendix E. During the first week, the participants experienced, labeled, and discussed the concept of timbre, followed by texture in the second week and theme and form in the third week. The majority of the time in class was spent in the “Explore” and “Compose” stages so that the participants were able to gain the strategies, knowledge, and skills needed to proceed on their own within the small group composition projects (Strand, 2005). The participants had access to a multitude of pitched and unpitched percussion instruments. Unpitched percussion instruments included claves, ratchets, stir xylophones, sandpaper blocks, kokirrikos, slapsticks, rainsticks, thunder-tubes, piccolo temple blocks, a log drum, two-tone crow-sounders, maracas, castanets, caxixi rattles, flexatones, quiros, sleigh bells, cabasas, tambourines, goat-hoof rattles, vibraslaps, frog quiros, woodblocks, tubanos, hand drums, bongos, ocean drums, windchimes, a bell tree, cowbells, agogo bells, triangles, gongs, finger cymbals, suspended cymbals, and crash cymbals. Pitched instruments included alto and soprano glockenspiels; alto, soprano, and bass xylophones; alto, soprano, and bass metallophones; contra bass bars C, D, F, and G; and soprano recorders.

Students composed short “mini-compositions” to illustrate their understanding of texture and timbre. These short assignments were called “mini-compositions” because the participants were not given the opportunity to finish and revise their work to result in a finalized composition. These assignments were exploratory in nature and were designed to give the participants hands-on experience with the new musical elements introduced in class. They also gave the students a chance to play with new instruments and sounds. It was essential to the creative learning process that I provide the participants with a nurturing and flexible atmosphere, rich with creative exploration experiences where there is no wrong or right answer (Hickey &
Webster, 2001). The music teacher and I offered open-ended encouragement during this time, taking care not to impose our own ideas onto the participants’ explorations. According to Reese (2003) music teachers should not lead children where they think the composition should go, but rather encourage them to think through the development of their own ideas. Students were even encouraged to play the instruments in unconventional ways in order to discover new sounds. Hickey (2003) suggested that these open-ended and exploratory tasks are more valuable to developing creative thinking in young children. For this reason, a considerable amount of time was given to these two stages from the start. The participants also experienced the first (“Identify”) and fourth (“Perform”) stages during the first two weeks of the study.

The complete composition process, structured after Maud Hickey’s adaptation of Amabile’s componential model of creativity (Hickey, 2003), was presented to the participants during the third week as a guide for the next three composition tasks. The five stages, renamed “Identify”, “Explore”, “Compose”, “Perform”, and “Revise” for ease of use with third grade participants, were displayed on a bulletin board and discussed throughout the creative process. The concepts of ABA form and theme were introduced and incorporated into a class composition activity that involved participants’ prior experiences with texture and timbre. The theme for the composition was Night and Day. The class discussed the theme and brainstormed ideas about appropriate sounds, instruments, musical patterns, and so forth. The class discussion served as a model for the participants to take a verbal idea and translate it into sound. This particular skill was necessary for the next two composition tasks. I encouraged the participants to draw from prior experiences and guided their thinking with open-ended questions such as, “What instruments would you like to use for this part? Should we use a pattern here? How many counts should we play on that instrument? Do we want these instruments to play together or separate?” I
recorded participants’ ideas on a dry erase board as a model of how students could record their own ideas in subsequent weeks. The class performed the piece, analyzed it together, shared individual thoughts and opinions, and suggested revisions. This debriefing period served as a type of informal assessment tool for the investigator to gauge how well participants understood the objectives in the “mini-composition” assignment. Even though the class did not actually go through the entire revision process, Week 3 served as a model for the complete composition process that the participants followed for the next five weeks.

Weeks 4 and 5 functioned as practice for the final composition task. Participants went through the entire 5-stage creative process in small groups over the course of the two weeks. In the “Identify” stage, I introduced the guidelines for the composition, which can be found in Figure 2.

<table>
<thead>
<tr>
<th>Directions for Composition Project:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Compose a piece using your theme choice: weather, butterfly, the life and death of a mosquito.</td>
</tr>
<tr>
<td>2. Your composition must be in ABA form.</td>
</tr>
<tr>
<td>3. You must use at least four different timbres.</td>
</tr>
<tr>
<td>4. Your composition must have at least one change in texture.</td>
</tr>
<tr>
<td>5. You will perform your composition for the class.</td>
</tr>
</tbody>
</table>

Figure 2. Composition Project Guidelines

The participants “Explored” a theme (they had a choice of three) together, “Composed” a piece of music according to the guidelines, and then “Performed” it for the class. They recorded their ideas throughout and at the end of music class with the help of a composition worksheet guide that I developed for this study. This worksheet guide allowed groups to remember ideas from week to week. A copy of this worksheet can be found in Appendix F. Individuals in the class
were allowed to offer suggestions for revisions on their fellow classmates’ compositions, although they were restricted to positive and “rule-following” comments. For example, “Where was the texture change in the B section?” Participants were not allowed to make artistic judgments. Throughout the “Compose” and “Revise” stages, one major aspect observed was the participants’ readiness to receive criticism on their work. Just as important as their readiness to receive suggestions on revisions is students’ interest and willingness to revise at all (Reese, 2003). Webster (2003) advocated revision for four main reasons: revision is how music is made; revision naturally happens in children’s work in an unrefined form of reflection and exploration; it is educationally valuable; and it assesses compositional thinking. Even if participants did not want to revise, they were given ample opportunities and encouragement to do so. After finishing their revisions, they performed their practice compositions for a final time.

For Weeks 6, 7, and 8, the treatment for the two groups differed. The final composition task took place over these last three weeks of instruction. The participants followed the same model as Weeks 4 and 5. The verbal description group received the theme winter through class discussion, just like in the preceding weeks and composition tasks. Then they composed their final piece according to the guidelines provided to them found in Figure 1.

The visual artwork group was presented with the print of Alfred Sisley’s Snow in Veneux-Nadon, Around 1880. The theme was winter for this group as well, but they had the print as creative inspiration for their piece. They discussed the painting, and composed their final piece according to the guidelines provided to them in Figure 1. Both groups, the visual artwork and the verbal description group, had the same amount of time to complete the task. They were guided in the same ways and had access to the same instruments and musical materials. After the task was identified, they were guided through the “Explore” stage, then the “Compose” stage.
They recorded their ideas with the help of the same composition worksheet guide used during weeks 4 and 5. This record helped them to remember ideas from week to week. In Week 7, all groups performed for each other, the class discussed and offered content revision suggestions, and groups were given a chance to revise their work. They were encouraged to try new instruments, new musical patterns, and new ideas even if they liked what they already had. Week 8 was spent in the “Revise” stage and practicing for the final performance of pieces.

Many of the groups used the composition worksheet during previous composition performances to help them remember their roles in the performance. Participants were told to write down anything that would help them to remember how their composition was supposed to be performed including drawing pictures of instruments, writing rhythms, or names on the blank back of the worksheet. They did not use standard notation. Requiring them to use standard notation would limit their musical thinking and exploration due to their inexperience and lack of theoretical knowledge. Following the suggestions of Wiggins (1989), I helped those students who were unable to record their ideas by using symbols, pictures, and words to depict their verbal ideas. The students performed and described a section of the music to me, and then I helped the students decide what to write down. Eventually, they were able to write their ideas down independently. Each group was given a poster-sized paper and marker to write out their final revised composition during the week for everyone in their group to see. The groups used these large composition sheets in their final performances so that everyone was able to follow their parts. Samples of their work can be found in Appendix G.

In Week 9, all groups were given ten minutes to practice and review their compositions. This allowed for any last minute changes to be accommodated, such as absences or additions. Each group performed their piece for the class. These final performances were video taped for
subsequent assessment. Detailed lesson plans for the nine weeks of instruction briefly described above can be found in Appendix G.

Because of the nature of the musical performance tasks and the age and inexperience of the participants, it was understood that the participants might not perform their compositions correctly on the first try in Week 9. They might have gotten nervous, forgotten a part, or played something incorrectly. After each group performed the first time, I asked the group if they were satisfied with the performance, and if everyone played what and when they were supposed to. Each group was given a second chance to perform if they needed to in order to best represent their composition with a live performance. Both performances were videotaped. Because the judges rated the creativity of the composition through the medium of live performance and not by music notation, it was possible that the creativity rating would reflect a random performance decision rather than a planned musical idea. For this reason each group of participants was allowed to select the first or second performance as being most representative of their composition. The more accurate representation of the participants’ compositions was used for the judges’ evaluations.

I recorded the participants during regular class time using a JVC Everio Hard Disk Camcorder. The video was imported with Cyberlink Power Producer 3 and burned to a DVD that could be viewed from any DVD player or computer. The video included a close-up shot of each small group’s final performance. The performances from both treatment groups (art work and verbal description) were combined and arranged in three different random orders, one for each of the three judges. The performances were renamed a number between 1 and 34 to maintain anonymity. Within the random order, there were no more than two video clips from the same treatment group in a row.
Dependent Measure and Instrumentation

Amabile’s Consensual Assessment Technique was originally developed for assessment research in the domain of artistic creativity (Amabile, 1982). The first studies (Amabile, 1996, pp.44-54) included various numbers and types of judges who were asked to subjectively rate the creativity, technical skill, aesthetic appeal, as well as many more dimensions of high school student-made art collages. By using a 5-point Likert scale, judges rated the collages in comparison to one another instead of a set standard. After achieving acceptable levels of reliability across the artistic creativity studies, Amabile adapted the technique for use in the verbal creativity domain, changing the student task to writing Haikus and changing several judging dimensions to be more domain-specific (Amabile, 1996, pp.55-58). In the initial two studies (Amabile, 1996, pp.44-51), judges were asked to rate the creative product on creativity and other dimensions. She continued to see high reliability results in the verbal creativity studies. High reliability across two very different domains revealed the adaptability of the Consensual Assessment Technique. Researchers from Amabile’s Research Group at Brandeis University adapted the assessment technique for new domains including computer programming, psychology, storytelling, and architecture with success (Amabile, 1996).

Some research has been done using various adaptations of this technique for the music domain. Hickey (1995) used an adaptation of this technique to rate the creativity of fourth and fifth grade children’s musical compositions done on computer. Hickey (2001) then used compositions from the 1995 study to compare inter-judge reliability among five groups of judges. The composition task and Consensual Assessment Technique form have been adapted for the present study from the Hickey and Amabile studies. The task for this study required third grade students to compose and perform a piece of music with several other students while
working in small cooperative learning groups. Unlike Hickey’s work where participants composed on computers, the participants in this study worked with Orff instruments and recorders, writing down their ideas on worksheets from week to week. Certain elements of the compositions such as form, theme, texture changes, and timbre were explored throughout the study and were included in the task instructions.

The consensual assessment form for this project included 13 dimensions, which were modified from verbal and artistic creativity elements to fit the musical compositional elements addressed in this project. Table 1 lists the 13 dimensions the judges used to rate the compositions in the left hand column with the corresponding definition to the right. The judges were asked to make assessments on other dimensions in addition to creativity. Several of the dimensions on the assessment for this study fall under the technical aspect of composition as well as aesthetic appeal. According to Amabile (1996), judges should make ratings in all categories to determine whether creativity is related to or independent of the additional technical and aesthetic dimensions.

The judging dimensions were divided into three main categories that were used in Amabile’s (1996) prior studies: creativity, technical goodness, and aesthetic appeal. The creativity category included creativity, timbral interest, and sectional variation. The technical goodness category included effort evident, form, texture change, accuracy of performance, expression, complexity, and theme. Aesthetic appeal included liking, overall aesthetic appeal, and meaningfulness. Each dimension was rated using a Likert scale where judges marked an X on the appropriate dash along the continuum between 1 (the lowest score) and 5 (the highest.) Further scoring for analysis was modeled after the Consensual Musical Creativity Assessment used by Priest (2001) and the CAT form used by Bangs (1992). The judges were allowed to
Table 1

Dimensions for the Consensual Assessment Technique for Musical Compositions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Descriptive Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity</td>
<td>Using your own subjective definition of creativity, the degree to which the composition is creative.</td>
</tr>
<tr>
<td>Liking</td>
<td>Your own subjective reaction to the composition, the degree to which you liked it.</td>
</tr>
<tr>
<td>Overall aesthetic appeal</td>
<td>In general, the degree to which the composition is aesthetically appealing.</td>
</tr>
<tr>
<td>Effort evident</td>
<td>The amount of effort that is evident in the composition.</td>
</tr>
<tr>
<td>Timbral interest</td>
<td>The degree to which a combinations of instruments were used to create pleasing instrumental and timbral variety.</td>
</tr>
<tr>
<td>Form</td>
<td>The degree to which the composition used similar and contrasting sections to represent ABA form.</td>
</tr>
<tr>
<td>Sectional variation</td>
<td>The degree to which the musical sections A and B varied from one another.</td>
</tr>
<tr>
<td>Texture change</td>
<td>The degree to which the composition shows a pleasing change of texture.</td>
</tr>
<tr>
<td>Meaningfulness</td>
<td>The degree to which the composition reflects quality sounds or noise.</td>
</tr>
<tr>
<td>Accuracy of performance</td>
<td>The degree to which the composition is technically performed.</td>
</tr>
<tr>
<td>Expression</td>
<td>The degree to which the work conveys dynamics, tempo, or high/low contrasts.</td>
</tr>
<tr>
<td>Complexity</td>
<td>The level of complexity of the composition.</td>
</tr>
<tr>
<td>Theme</td>
<td>The degree to which a theme is present throughout the composition.</td>
</tr>
</tbody>
</table>
place a mark anywhere on the continuum, including above fractional values between 1 and 5. There were a total of 21 dashes along the continuum. The judges’ ratings were then quantified into 21 possible points for each dimension, one point for each dash appearing between the whole numbers. Figure 3 shows the assessment form developed for this study.

To prevent order effect, each judge rated the compositions in a different random order. Judges were allowed to preview as many compositions prior to beginning the rating procedure (Amabile, 1996) as they felt necessary in order to establish their personal value judgments before beginning the rating procedure. They were also allowed to replay the video clips as necessary in order to rate all 13 dimensions.

The level of expertise of the judges does not matter as much as one might expect (Amabile, 1996, Hickey 2001a; Priest, 2006); however, it should be noted that in domain fields that are complex and require special training, such as music, it is important to select judges who have a high degree of familiarity with the domain, or the level of agreement will suffer. Researchers rely on the assumption that experts in a domain share creativity criteria to a reasonable degree (Amabile, 1996). The three judges who rated the compositions were certified music teachers with many years of school and/or private music teaching experience. They were very familiar with the technical and aesthetic aspects of the musical domain. The integrity of the Consensual Assessment Technique depends on agreement among judges being achieved without the influence of criteria pre-selected by the investigator or other judges. For this reason, the judges were not allowed to confer while making their assessments. They were not trained or directed as to what constitutes creativity.

Judges were informed that all participants were in the third grade and had the same assignment and time frame to complete their compositions. Judges were also told that the
Dimensions of Judgment Assessment  
(based on an art assessment from T. M. Amabile, 1983)

Directions: Preview as many of the video clips as necessary in order to establish your value judgments for the assessment process. After the preview, watch the performance of each group’s composition and rate it according to the following 13 dimensions. Put an ‘X’ on the point (dash) in the continuum that corresponds to your assessment. One is low and 5 is high. You may replay the video clips as necessary.

1. Creativity
   Using your own subjective definition of creativity, the degree to which the composition is creative.

   1 2 3 4 5

2. Liking
   Your own subjective reaction to the composition; the degree to which you liked it.

   1 2 3 4 5

3. Overall aesthetic appeal
   In general, the degree to which the composition is aesthetically appealing.

   1 2 3 4 5

4. Effort evident
   The amount of effort that is evident in the composition.

   1 2 3 4 5

5. Timbral interest
   The degree to which combinations of instruments were used to create pleasing instrumental and timbral variety.

   1 2 3 4 5

6. Form
   The degree to which the composition used similar and contrasting sections to represent ABA form.

   1 2 3 4 5

Figure 3. Assessment Form
<table>
<thead>
<tr>
<th>No.</th>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>Sectional variation</td>
<td>The degree to which the musical sections A and B varied from one another.</td>
</tr>
<tr>
<td>8.</td>
<td>Texture change</td>
<td>The degree to which the composition shows a pleasing change of texture (the use of more than one instrument or pitch at a time).</td>
</tr>
<tr>
<td>9.</td>
<td>Meaningfulness</td>
<td>The degree to which the composition reflects quality sounds or noise.</td>
</tr>
<tr>
<td>10.</td>
<td>Accuracy of performance</td>
<td>The degree to which the composition is technically performed (not mishitting instrument bars, good tone quality on gong).</td>
</tr>
<tr>
<td>11.</td>
<td>Expression</td>
<td>The degree to which the work conveys dynamics, tempo, or high/low contrasts.</td>
</tr>
<tr>
<td>12.</td>
<td>Complexity</td>
<td>The level of complexity of the composition.</td>
</tr>
<tr>
<td>13.</td>
<td>Theme</td>
<td>The degree to which a theme is present throughout the composition.</td>
</tr>
</tbody>
</table>
elements referred to on the rating sheet were those that would likely appear in the compositions. No further explanation was given in reference to treatment group or teacher instruction. As suggested by Amabile (1996) in her pilot studies, the judges rated products relative to one another rather than against a fixed scale or observed music standard. As the consensual definition of creativity states, a product is creative to the extent that appropriate observers independently agree it is creative. The judges watched the DVDs independent of one another and rated each composition using the consensual assessment form developed for this study. Inter-judge reliability was calculated for each dimension using Kendall’s W statistic.
CHAPTER 3

RESULTS

One of the primary purposes of this study was to compare the effect of two stimuli, specifically verbal description and visual artwork, on third grade students’ creative compositions. Over a nine-week period, eight classes of students received instruction and multiple opportunities to compose original music on a variety of instruments. The groups performed their final compositions while I videotaped them or subsequent evaluation. Each of the eight classes were divided into five small cooperative-learning groups of three to six students for a total of 40 composition groups. Complete consent information was obtained for only 34 groups of students. The six groups that had incomplete consent forms participated in the composition activities, but were not included in the assessment and analysis. Both the verbal description and the visual artwork groups contained 17 small composition groups that were able to participate in the assessment. Three judges rated the videotaped performances of the 34 composition groups on 13 dimensions.

The performed composition of each group was assigned an overall score for each evaluative dimension, which represented the summed raw scores of the three judges. Each Likert scale was broken down into a total of 21 possible points; therefore, the highest possible summed score was 63 (21 points x 3 judges) for each dimension. Independent t-tests, calculated for all 13 dimensions, were used to compare the effects of the verbal and visual stimuli on the student compositions (Pyrczak, 2004). Variances for all comparisons were determined to be equivalent, and the probability was set at .05.

The results of the t-tests are shown in Table 2. The column farthest to the left lists the dimensions in order that they were mentioned in the procedures section. Means and $SD$ are listed
for both visual and verbal stimuli for comparison. Values for \( t \) and \( p \) are listed in the last two columns. There were no significant differences between stimulus groups for any of the 13 dimensions rated. The complexity dimension was the only one in which the visual group on average scored lower than the verbal group. Although these differences were not significant, the visual group was consistently rated higher by the judges on all other dimensions.

Table 2

*T*-test Results for Visual and Verbal Stimulus Groups

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Visual Stimulus Group</th>
<th>Verbal Stimulus Group</th>
<th>( t )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Creativity</td>
<td>38.94</td>
<td>11.98</td>
<td>37.32</td>
<td>10.21</td>
</tr>
<tr>
<td>Timbral interest</td>
<td>37.76</td>
<td>11.18</td>
<td>36.50</td>
<td>9.0</td>
</tr>
<tr>
<td>Sectional variation</td>
<td>33.65</td>
<td>18.76</td>
<td>30.79</td>
<td>17.86</td>
</tr>
<tr>
<td>Effort evident</td>
<td>42.35</td>
<td>9.73</td>
<td>39.12</td>
<td>9.47</td>
</tr>
<tr>
<td>Form</td>
<td>37.62</td>
<td>15.92</td>
<td>33.09</td>
<td>18.28</td>
</tr>
<tr>
<td>Texture change</td>
<td>33.74</td>
<td>16.31</td>
<td>32.03</td>
<td>12.18</td>
</tr>
<tr>
<td>Accuracy of performance</td>
<td>42.74</td>
<td>7.24</td>
<td>38.50</td>
<td>9.23</td>
</tr>
<tr>
<td>Expression</td>
<td>34.24</td>
<td>9.72</td>
<td>32.56</td>
<td>9.22</td>
</tr>
<tr>
<td>Complexity</td>
<td>31.97</td>
<td>11.08</td>
<td>32.15</td>
<td>10.23</td>
</tr>
<tr>
<td>Theme</td>
<td>33.09</td>
<td>13.83</td>
<td>30.62</td>
<td>13.09</td>
</tr>
<tr>
<td>Liking</td>
<td>36.03</td>
<td>13.38</td>
<td>35.12</td>
<td>11.41</td>
</tr>
<tr>
<td>Overall aesthetic appeal</td>
<td>35.06</td>
<td>13.02</td>
<td>32.65</td>
<td>12.54</td>
</tr>
<tr>
<td>Meaningfulness</td>
<td>38.53</td>
<td>9.25</td>
<td>36.15</td>
<td>9.84</td>
</tr>
</tbody>
</table>
Another primary purpose of this study was to compare the reliability of the Consensual Assessment Technique when used with music composition. The Kendall Coefficient of Concordance $W$ test was used because it determines the agreement among multiple judges, rather than the more usual comparison between two judges. This test is often used in studies of inter-judge and inter-test reliability (Siegel, 1956). In order to use this test, all three of the following assumptions were met: data were collected in an ordinal scale of measurement; rating order was random; and intra-sample independence of judges was observed. The test statistic, $W$, represents the degree of association among the multiple variables, in this case the ratings of the three judges. To compute $W$, the raw scores on each of the 13 dimensions from each judge were converted to rank order. Each group’s three rankings (one from each judge per dimension) were used to calculate the statistic. The computed reliability statistic was then converted to a Chi-Square statistic to find the level of significance. These calculations were completed for all 13 dimensions. Table 3 shows the results of the Kendall Coefficient of Concordance $W$ test. The dimensions are listed in the far left hand column followed by the $W$ coefficient (reliability), the Chi Square conversion, and lastly the $p$ values.

High and significant reliability was found among the three judges on all dimensions with the exception of the timbral interest and accuracy of performance dimensions. Significant reliability coefficients ranged from .48 to .83. The first three dimensions listed in Table 3 belong to the creativity category. It is important to note that both the highest and lowest scores were from this three-dimension category. Timbral interest received the lowest reliability score (.43) out of all 13 dimensions. Sectional variation, however, received the highest (.83). The technical goodness category included effort evident, form, texture change, accuracy of performance,
Table 3
Results for the Kendall Coefficient of Concordance

<table>
<thead>
<tr>
<th>Dimension</th>
<th>W</th>
<th>x2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity</td>
<td>.64</td>
<td>63.36</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Timbral interest</td>
<td>.43</td>
<td>42.57</td>
<td>&gt;.05</td>
</tr>
<tr>
<td>Sectional variation</td>
<td>.83</td>
<td>82.17</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Effort evident</td>
<td>.49</td>
<td>48.51</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Form</td>
<td>.79</td>
<td>78.21</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Texture change</td>
<td>.65</td>
<td>64.35</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Accuracy of performance</td>
<td>.41</td>
<td>40.59</td>
<td>&gt;.05</td>
</tr>
<tr>
<td>Expression</td>
<td>.51</td>
<td>50.49</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Complexity</td>
<td>.54</td>
<td>53.46</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Theme</td>
<td>.59</td>
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<td>&lt;.01</td>
</tr>
<tr>
<td>Liking</td>
<td>.54</td>
<td>53.46</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Overall aesthetic appeal</td>
<td>.61</td>
<td>60.39</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Meaningfulness</td>
<td>.48</td>
<td>47.52</td>
<td>&lt;.05</td>
</tr>
</tbody>
</table>

expression, complexity, and theme. Accuracy of performance was the other dimension that was not reliable \[x^2 (3, N=34)=40.59, p>.05\]. All of the other dimensions within this category achieved significant reliability. The final category—the only category that had significant reliability in every dimension—including the last three dimensions in the table: liking, overall aesthetic appeal, and meaningfulness.
CHAPTER 4

DISCUSSION

Many researchers and music teachers suggest that teachers provide student composers with a source of conceptual or emotional inspiration such as literature, artwork, photography, events, or themes, to help them focus their thoughts and begin their creative compositions (Balkin, 1985; Campbell & Scott-Kassner, 2006; Ginocchio, 2003). In this study, students were broken into two separate groups in order to compare the effects of two stimuli on the creativity of group compositions. One stimulus was a piece of artwork depicting a winter scene, and the other stimulus was the printed word “winter.” Judges rated the compositions on 13 dimensions. Because of the vivid colors, the detail in the shapes and painting style, and the overwhelming winter feeling inspired by the artwork used, I expected for the visual stimulus group to be rated higher on creativity than the verbal stimulus group. There had not been any research done to support either stimulus group.

Independent t-tests calculations showed no significant difference between the groups for any of the 13 dimensions rated. This might be explained by the fact that the students were trained in the same composition techniques for 5 weeks prior to exposure to the two stimuli. The subtle difference between the types of stimuli in combination with the identical composition task and prior training may account for the lack of significant difference between the groups. Because the students were not experienced in composition or in evaluating artwork, the students in the visual artwork group were likely not able to interpret the painting (in a meaningful way such that it might impact their composition) without my help through guided discussion. Also, similar discussion occurred with the verbal group thereby minimizing the differential treatment effect. If the students had been more experienced with art and composition, I could have provided the
artwork and the written theme stimulus, then left the students to discuss the stimulus on their own, possibly resulting in a larger difference between the two groups. The results also may have shown a larger difference if the “winter theme” presented to both groups in the study instead had been a contrasting theme between the two groups.

Though there were no significant differences between the two stimulus groups, both stimuli functioned successfully as inspirational tools for the composing task. The students responded during verbal discussions in class with multiple ideas in relation to both verbal and visual stimuli. Students in the verbal stimuli group were asked to share their ideas and comments about a winter theme during a brainstorming session. Students shared suggestions for melodies, instrumentation, form, and theme development in addition to their winter stories and sounds. In the visual description group, students studied a painting of a winter snow scene. They were asked to describe the painting as well as thoughts for music that would accompany the scene. They described the color, emotion, sound, and message evoked by the painting in great detail. They had many suggestions for instruments that could be used in making music to represent the painting. They also shared their own winter stories and memories stimulated by the painting. In the majority of the eight classes, every student shared at least one idea, with most students sharing multiple ideas. I had to stop the brainstorming session before every idea was shared so that they would not run out of composing time. Both stimuli inspired the students significantly with a multitude of ideas with which to develop their compositions.

Teaching young students to compose is often a time-consuming and messy task. There are many directions in which students can take their compositions that do not lend themselves to opportunities for cut and dry assessment. Teachers are apprehensive to grade these creative experiences because of the lack of consensus on what constitutes quality creative work (Starko,
2005). For these reasons, among others, teachers rarely include composition as part of their regular curriculum. Amabile (1996) strongly supports the assessment of creativity because there is much we can learn from it. The Consensual Assessment Technique (CAT) has been used by several music researchers to assess compositional creativity in pre-college students. Modified versions of the CAT have been used to assess compositions of young children on keyboards (Daignault, 1997; Hickey, 1995, 2001a) and their motivation for composition (Bangs, 1992) as well as with high school students (Brinkman, 1999), all with a high degree of reliability. The CAT had not yet been used for instrumental group composition at the elementary age before this study.

Three judges, all music teachers with general elementary music teaching experience, rated the 34 composition groups on all 13 dimensions. High and significant reliability coefficients ranging from .48 to .83 were found among the three judges on all dimensions with the exception of timbral interest and accuracy of performance. There were several contributing factors that could have caused these two dimensions to be unreliable. The definition for accuracy of performance on the assessment form read as follows: the degree to which the composition is technically performed (not mishitting instrument bars, good tone quality on gongs). During the exploration stage of the composition process, students were encouraged to create new sounds by playing the traditional instruments in innovative ways. These musical decisions may or may not have been interpreted by the judges as incorrect technique. Another reason for the lack of reliability could be attributed to the interpretation of the amount of detail each judge used to compare the A section. The A sections of the compositions were intended to be the same; however, some groups did not play their A section on the repeat exactly as it was played during the original A section. For example, one group may have played combinations of the same three
notes for an improvised melody for both A sections, but maybe in a different order or with a different rhythm. This would cause the A sections to sound very different to a trained ear, while sounding completely as intended to a third grade music student. Another example may be that students designed the contrast of the A and B sections around instrument choice, so the parts may not have been exactly the same rhythms or order both times during the A section, but there was a definite switch of instrument texture from A to B as intended by the students. Different interpretations of whether or not this was inaccurate performance could have affected the reliability. A third possibility for the lack of reliability could be the influence of the “student conductor.” In many of the groups, a prominent student acted as the conductor of the group. He would often motion, point, or make a noise to let someone know they were supposed to play. When someone did not play correctly or on time, the student conductor would frantically wave at him or her to get their attention. The sight of a frazzled student quickly pointing back and forth, even when the students were playing the piece as they intended it, may have led a judge to believe the performance was inaccurate.

For the timbral interest dimension, the definition read: the degree to which combinations of instruments were used to create pleasing instrumental and timbral variety. A close look at the scores for this dimension suggests that the word combination may have caused confusion among judges. Combination referred to both groups of single instruments playing in a soloist fashion one after the other as well as multiple instruments playing simultaneously. A better definition would read: the degree to which the instruments chosen create pleasing instrumental and timbral variety throughout.

The sectional variation dimension had the highest reliability rating of .83. The mean raw scores were 33.65 for the visual stimulus group and 30.79 for the verbal stimulus group out of a
possible 63. Even though the reliability was high, the means were fairly low, scoring between 49-53% of the total possible score. This may be partially attributed to the fact that the judges did not always utilize the full range of the rating scale. Two of the judges did not assign any group the highest number of possible points on the scale for this particular dimension. To be in accordance with Amabile’s theory, at least one of the groups should have been assigned the highest rating since the judges were rating the compositions against each other and not against a predetermined standard. The highest scored group theoretically should receive the highest number of points possible. The assessment rating sheet instructions should be modified to include the following: Utilize the entire rating scale when rating compositions. This happened with several of the dimensions and could be a possible reason why some of the mean raw scores were in the low 30’s. One of the judges had prior experience teaching composition to gifted high school students. This prior experience may have influenced the judge’s expectations of the tasks and resulted in fairly low raw scores. A third possibility for the low means could be explained through the different definitions of musical patterns between the judges. A combination of pitches played repeatedly in a free rhythmic style may be interpreted as a musical pattern to one judge, whereas another may feel the lack of rhythmic structure prevents it from being considered a pattern. Previous teaching experience likely drives these personal musical opinions.

The means of all 13 dimensions ranged from 30.62 to 42.35 indicating that the judges scored all of the groups between 48.6% and 67.22% of the total 63 points available. Dimensions focused on the most throughout the composition unit lessons included creativity ($M=38.13$), timbral interest ($M=37.13$), form ($M=35.36$), and theme ($M=31.86$). The five dimensions that had the highest combined mean scores were effort evident, accuracy of performance, creativity, meaningfulness, and timbral interest. It is worth noting that even though timbral interest
($M=37.13$) and accuracy of performance ($M=40.62$) were the only two dimensions that did not achieve significant reliability, they both had higher mean scores than many of the other dimensions. The lowest three dimensions were sectional variation, complexity, and theme.

A possible reason scores were relatively low for theme could be because the judges were not able to hear the explanations of the pieces. After their performance, the students were given an opportunity to share anything they wanted to about their piece with the class. Judges were not privy to these explanations. If they had been able to hear the student explanations of musical form and the reasoning behind specific instrument choices, theme scores might have been higher. The students had elaborate stories that followed the winter theme in minute detail. Without knowing the stories behind the music, it was difficult for the judges to discern the theme. Perhaps in future research, a transcription of such composer-intention stories should accompany the performances.

Sectional variation scores may have been low for several reasons. Some groups devised ways to vary the A and B sections that were very well organized but undistinguishable to the audience/judge. For example, one group played the A section in reverse for the B section. Although creative and clear to the group itself, this retrograde section was too similar for judges to recognize as a variation. Another reason that may have contributed to the low scores was the way in which sectional variation was taught during the lessons. I had the students choose at least one way to change the A from B sections, so some groups that were less developed chose only one way to vary their sections while others chose many in their final composition. If given more time than just three short classes, these students may have revised their compositions to include more contrasting ideas suggesting higher scores in the complexity dimension as well.
The significant reliability scores on 11 out of the 13 dimensions suggest that this method of assessing creativity of musical compositions is both successful and functional. The number of dimensions used for this study would be impractical for a teacher in the music classroom, but a few simple modifications to the form and process could prove worthwhile. One modification would be to use only two or three of the most reliable dimensions. A teacher would not have time to tape and then watch all of the performances, so a live, on the spot assessment would be more suitable. The CAT has been shown to be reliable, so one teacher could administer the assessment alone. With practice, this technique could be performed quickly so as not to waste valuable class time.

Composition and improvisation are considered two of the most common creative music experiences. Throughout the study, the students explored a little of both. When students composed their first mini-composition, they did not know how to develop a theme, a melody, or an idea. Most mini-composition attempts consisted of students making noise together on instruments that they arbitrarily chose for an extended period of time until someone in the group told everyone to stop. There were no distinguishable rhythmic lines or ostinatos. The same improvisation trend developed with the melodies as well. For the first three or four weeks, students just played random notes on the melodic pitched percussion instruments in an improvisatory style for their melodies. After they heard a few examples from the more experienced musicians in the class and developed a sense of what a melody was, more of the groups began to compose melodies with discernable patterns that repeated rhythmic or melodic motives. Most of the melodies were short and repetitive, but noticeably more developed than in the first few weeks. An analysis of the performances showed 26 groups out of 34 had a distinguishable melodic pattern of three or more pitches played in a rhythmic pattern.
recognizable in both A sections. Some groups changed the pitches of the melody during the repeat of the A section, but they retained the same melodic contour and rhythmic pattern. In the final performances, more students demonstrated an awareness of the sounds they were making. The students had control over volume and tempo and would use ritardandos and dynamic changes. Several of the children who played metal instruments such as the triangle or finger cymbals would wait for the ringing to stop before putting the instrument down or before striking it again. Other students would spend time choosing an appropriate sounding mallet to strike a gong or suspended cymbal. The initial immature eagerness to make new noise was replaced over the nine weeks with a slightly more mature musical responsiveness.

Many elementary teachers have a strong tendency to focus primarily on the lowest levels of educational objectives even though students at the elementary age are capable of functioning at higher levels of cognition. Some teachers may have difficulty designing lessons that incorporate higher level thinking skills such as analysis, synthesis, and evaluation- the three highest levels of Bloom’s (1956) taxonomy- in a way that young students can achieve success while enjoying learning. The composition tasks in the present study provided students with an engaging opportunity to practice using their low level knowledge and skills while at the same time developing their abilities to function at high levels of thinking. In the third stage of the composition process, Response Generation, students were asked to use the information they gathered during exploration to make decisions about new composition ideas involving timbre, rhythm, texture, melody, and more. During the Compose stage, they synthesized their own musical composition to share with the class. They spent time revising and practicing the composition, constantly analyzing and evaluating their choices and in turn making better, more appropriate ones. During the Perform stage, they exhibited well-developed listening behaviors.
and analysis techniques as they readily identified specific musical elements we had been studying. Students organized their thoughts and provided one another with feedback for further revision. These multiple opportunities to develop upper level thinking skills were both challenging and exciting for the students. The educational benefits can be easily transferred to other problem solving activities in the elementary classroom.

Some teachers are reluctant to have students work in small groups because they are worried about social issues that could potentially arise. Wiggins (2003) said that once students become focused on the project itself and learn to value and enjoy the process of creating their own music, social issues become secondary to music issues. This was definitely the case with the students in this study. The few students who were reluctant to work together in the beginning became cooperative and contributing members of their groups as the compositions developed. In most groups, the attitudes towards each other became helpful rather than competitive. In many groups, one or more individuals pushed the group forward and involved those that were reluctant to share ideas. In the final performances, 24 of 34 groups had a single prominent individual who led the group through the composition by pointing to the “music,” to each other, motioning for entrances and releases, and reminding the other group members of small details.

By keeping an extensive observation journal throughout the teaching portion of this study, I was able to study some the habits and preferences of classes, groups, and even some individual students. The regular music teacher and I observed a very interesting detail after two weeks of the unit. The instruments were placed on two open cabinets in the back of the classroom in no particular order. After observing eight classes in a row, we found that despite the variety and abundance of instruments, students were choosing all the instruments that were on the two eye-level shelves. Even when we put different instruments that students were not likely
to choose on those two shelves, students still chose them first before going to other shelves. After noticing that students were not utilizing the entire selection of instruments, like families of percussion instruments were then repositioned onto two round tables and four shelves where the students could see everything spread out in front of them. I also had the students plan what instruments they wanted to use according to what sound they were looking before they were allowed to go to the shelves and tables. There was a noticeable difference in instrument variety after these changes were implemented.

Instrument choices for the final compositions were examined for trends by watching the DVDs. There were several instruments that seemed to be the favorite choice, most of which were instruments new to the students. Sixteen groups chose to use sleigh bells, not surprising given the winter theme. The following instruments were each chosen by 11 groups: rainstick, castanets, bongos, and tubanos. Ten groups chose to use sandpaper blocks, wind chimes, and a variation of a cymbal including suspended, finger, or crash. Nine groups chose to use a slapstick, cabasa, and tambourine. The rest of the instruments chosen included a variety of melodic percussion instruments, recorder, various sizes of gongs, goat hoof rattles, ratchet, thundertube, triangle, cow bell, ocean drum, piccolo temple blocks, log drum, caxixi, maracas, bell tree, stir xylophone, frog guiro, and the kokiriko. Each group chose a completely different combination of instruments for their composition. Groups 1, 7, and 17 chose the most instruments for their composition totaling 11. Groups 13 and 25 used the least amount of instruments totaling only 4.

Summary

In an attempt to increase the knowledge available concerning the effect of verbal and visual stimuli, and creative assessment in the music classroom, this study employed Amabile’s (1996) Consensual Assessment Technique to rate the original compositions of 34 groups of third
grade students. Three judges rated the compositions on 13 musical and creative dimensions after watching performances of each groups’ composition. Conclusions regarding the stimulus effects as well as the reliability of the CAT with elementary music compositions were drawn. Even though both stimuli served as successful compositional motivators for their respective groups, the small differences in stimuli types over a short period of time as in this study were not influential enough to affect the creativity scores of student compositions. No significant differences were found between the two groups for any of the dimensions. Evidence is offered to support the use of the CAT with elementary composition tasks. Inter-judge reliability scores achieved significance, with coefficients ranging from .48 to .83 on 11 of the 13 dimensions rated. Hopefully this finding can offer encouragement for music teachers to not only include creative music experiences in their classrooms, but to gain confidence with the assessment and the development processes involving creativity in music.

Recommendations For Future Research

In her studies with artistic and verbal creativity, Amabile (1996) used various types of judges including but not limited to teachers, artists, professors, and students. The student judges were all at various stages of obtaining a college degree. They were chosen to be judges for whatever content area they were receiving training in. For example, student-artist judges were studying art. Experience in the content area rather than age was the qualifier for judging. There is currently no research examining the use of the technique using elementary age students as judges. Even though much younger, could elementary children who were moderately experienced in music composition rate each other’s compositions on creativity and possibly other dimensions? With enough modification to the form to include fewer dimensions, and proper knowledge and experiential background gained through regular music class activities,
elementary age students could use this technique in assessing music composition. The National Standards for Arts Education include not only creative music activities such as improvisation and composition, but also the development of analysis and evaluation skills. The listening skills and musical knowledge required for the analysis of musical compositions needs to be included in the regular curriculum. A simplified version of the CAT could help teach and practice those very skills. The CAT could possibly be used to assess other creative music activities as well. Further research aid in testing the reliability of the CAT with elementary age students in the music classroom in regards to creative music experiences including but not limited to composition and improvisation. Factors including various stimuli types such as visual artwork, movement, verbal description, literature, and folk material, as well as using combinations of similar and contrasting “themes” when comparing stimulus groups remain considerations for future research.
REFERENCES


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230(4730), 1111-1118.


APPENDIX A

IRB EXEMPTION FORM

Application for Exemption from Institutional Oversight

Unless qualified as meeting the specific criteria for exemption from institutional Review Board (IRB) oversight, ALL LSU research projects using living humans as subjects, or samples or data obtained from humans, directly or indirectly, with or without their consent, must be approved or exempted in advance by the LSU IRB. This form helps the PI determine if a project may be exempted, and is used to request an exemption.

Applicant, Please fill out the application in its entirety and include the completed application as well as parts A-E, listed below, when submitting to the IRB. Once the application is completed, please submit two copies of the completed application to the IRB Office or to a member of the Human Subjects Screening Committee. Members of this committee can be found at http://acpi003.lsu.edu/opsp/osp.nsf/$Content/Humans+Subject+Committee?OpenDocument

A Complete Application Includes All of the Following:
(A) Two copies of this completed form and two copies of parts B thru E.
(B) A brief project description (adequate to evaluate risks to subjects and to explain your responses to Parts 1 & 2)
(C) Copies of all instruments to be used.
   - If this proposal is part of a grant proposal, include a copy of the proposal and all recruitment materials.
(D) The consent form that you will use in the study (see part 3 for more information.)
(E) Certificate of Completion of Human Subjects Protection Training for all personnel involved in the project, including students who are involved with testing or handling data, unless already on file with the IRB.
   Training link: (http://oma.cancer.gov/institutional/training/human/participant-protections.asp)

1) Principal Investigator: Katie Toups
   Dept.: Music Education  Ph: 985-864-4108  Email: ktoups4@lsu.edu

2) Co-Investigator(s) please include department, rank and e-mail for each
   If student, please identify and name supervising professor in this space
   Jane W. Cassidy  Ph: 578-3058  O: 332 Holche Hall
   Email: jessclsd@lsu.edu

3) Project Title:
   The Effect of Visual Artwork and Verbal Description of Creative Stimuli on the Musical Compositions of Third Grade Students

4) LSU Proposal? Yes or no: No
   If Yes, LSU Proposal Number:__________
   Also, If YES, either
   C This application completely matches the scope of work in the grant
   OR
   C More IRB Applications will be filed later

5) Subject pool (e.g. Psychology Students) third grade students
   • Circle any "vulnerable populations" to be used (children <16, the mentally impaired, pregnant woman, the aged, other). Projects with incarcerated persons cannot be exempted.

6) PI Signature: ___________________________  Date: 3/5/08  (no per signature)
   ** I certify my responses are accurate and complete. If the project scope or design is later changed I will resubmit for review. I will obtain written approval from the Authorized Representative of all non-LSU institutions in which the study is conducted. I also understand that it is my responsibility to maintain copies of all consent forms at LSU for three years after completion of the study. If I leave LSU before that time the consent forms should be preserved in this Departmental Office.

***Effective August 1, 2007, all Exemptions will expire three years from date of approval, unless a continuation report, found on our website, is filed prior to expiration date***

Screening Committee Action: Exempted X  Not Exempted Category/Paragraph
Reviewed: ___________________________ Signature: ___________________________ Date: 3/1/08
Part 1: Determination of "Research" and Potential For Risk

This section determines whether the project meets the Department of Health and Human Services (HSS) definition of research involving human subjects, and if not, whether it nevertheless presents more than "minimal risk" to human subjects that makes IRB review prudent and necessary.

1. Is the project involving human subjects a systematic investigation, including research, development, testing, or evaluation, designed to develop or contribute to generalizable knowledge?
   (Note: some instructional development and service programs will include a "research" component that may fall within HSS' definition of human subject research).
   ☑ YES
   ☐ NO

2. Does the project present physical, psychological, social or legal risks to the participants reasonably expected to exceed those risks normally experienced in daily life or in routine diagnostic physical or psychological examination or testing? You must consider the consequences if individual data inadvertently become public.
   ☑ YES Stop. This research cannot be exempted—submit application for IRB review.
   ☐ NO Continue to see if research can be exempted from IRB oversight.

3. Are any of your participants incarcerated?
   ☑ YES Stop. This research cannot be exempted—submit application for IRB review.
   ☐ NO Continue to see if research can be exempted from IRB oversight.

4. Are you obtaining any health information from a health care provider that contains any of the identifiers listed below?

   A. Names
   B. Address: street address, city, county, precinct, ZIP code, and their equivalent geocodes. Exception for ZIP codes: The initial three digits of the ZIP Code may be used, if according to current publicly available data from the Bureau of the Census: (1) The geographic unit formed by combining all ZIP codes with the same three initial digits contains more than 20,000 people; and (2) the initial three digits of a ZIP code for all such geographic units containing 20,000 or fewer people is changed to '000'. (Note: The 17 currently restricted 3-digit ZIP codes to be replaced with '000' include: 036, 050, 063, 102, 203, 556, 692, 790, 821, 823, 830, 831, 878, 879, 884, 890, and 893.)
   C. Dates related to individuals
i. Birth date
ii. Admission date
iii. Discharge date
iv. Date of death
v. And all ages over 89 and all elements of dates (including year) indicative of such age. Such ages and elements may be aggregated into a single category of age 89 or older.

D. Telephone numbers;
E. Fax numbers;
F. Electronic mail addresses;
G. Social security numbers;
H. Medical record numbers; (including prescription numbers and clinical trial numbers)
I. Health plan beneficiary numbers;
J. Account numbers;
K. Certificate/license numbers;
L. Vehicle identifiers and serial numbers including license plate numbers;
M. Device identifiers and serial numbers;
N. Web Universal Resource Locators (URLs);
O. Internet Protocol (IP) address numbers;
P. Biometric identifiers, including finger and voice prints;
Q. Full face photographic images and any comparable images; and
R. Any other unique identifying number, characteristic, or code; except a code used for re-identification purposes; and

S. The facility does not have actual knowledge that the information could be used alone or in combination with other information to identify an individual who is the subject of the information.

☐ YES Stop. This research cannot be exempted—submit application for IRB review.
☐ NO Continue to see if research can be exempted from IRB oversight.

Part 2: Exemption Criteria For Research Projects
Can be found on the next page.
Part 2: Exemption Criteria For Research Projects

Please select any and all categories that relate to your research. Research is exemptible when all research methods are one or more of the following five categories. Check statements that apply to your study:

1. In education setting, research to evaluate normal educational practices.

2. For research not involving vulnerable people [prisoner, fetus, pregnancy, children, or mentally impaired]: observe public behavior (including participatory observation), or do interviews or surveys or educational tests:
   The research must also comply with one of the following:
   a) The participants cannot be identified, directly or statistically;
   or that
   b) The responses/observations could not harm participants if made public:
   or that
   c) Federal statute(s) completely protect all participants’ confidentiality.

3. For research not involving vulnerable people [prisoner, fetus, pregnancy, children, or mentally impaired]: observe public behavior (including participatory observation), or do interviews or surveys or educational tests:
   All respondents are elected, appointed, or candidates for public offices.

4. Uses only existing data, documents, records, or specimens properly obtained.
   The research must also comply with one of the following:
   a) Subjects cannot be identified in the research data directly or statistically, and no-one can trace back from research data to identify a participant;
   or that
   b) The sources are publicly available
APPENDIX B

PRINCIPAL LETTER OF CONSENT

3775 Hemlock Street
Zachary, LA 70791
225-654-4036
Fax 225-654-8746
www.zacharyschools.org

To Whom it May Concern:

Katie Toups has discussed with me her Master's thesis, "The Effect of Visual Artwork and Verbal Description as Creative Stimuli for the Musical Compositions of Third Grade Students." This project has been approved by the Louisiana State University Institutional Review Board. It was also approved as a site based decision and did not require approval by the school's governing board, the Zachary Community School Board.

I hereby give my permission for Katie Toups to teach eight third grade classes for a total of nine weeks in the Spring semester under the supervision of our music teacher Melanie Alexander. I also give my permission to video record the students' final composition performances for data collection provided each child's parent or guardian has signed the consent form.

Sincerely,

[Signature]

Jennifer Marangos

Jennifer Marangos, Principal

Trudy Johnson, Assistant Principal
APPENDIX C

PARENT CONSENT FORM AND LETTER HOME

Study Title: The Effect of Visual Artwork and Verbal Description as Creative Stimuli for the Musical Compositions of Third Grade Students

Performance Site: Zachary Elementary School

Investigators:  | Faculty Supervisor | Master’s Candidate |
---------------|-------------------|--------------------|
Jane W. Cassidy| Katie E. Toups     |
578-3258       | 985-859-4708      |
T/TH 10:30-12  | MWF 12:30-2       |

Purpose of Study: To compare the effects of visual artwork and verbal description stimuli on the creativity of third grade students’ music compositions.

Student Inclusion: All children from eight third grade classes at Zachary Elementary School will participate in a nine week composition lesson utilizing regular teaching methods of composition.

Study Procedures: With signed consent your child has permission to participate in a nine week investigation where they will be working in cooperative groups to write musical compositions. Some children will be writing music compositions inspired by class discussions on themes and others will be asked to look at a scene painting for inspiration. They will be videotaped on the last week of the investigation while performing their compositions, but the identity of the children will be confidential. The videos will be assessed for creativity and musical techniques by three elementary music teachers. At the completion of the study, copies of the video will be destroyed. The original footage will be kept by the faculty supervisor Jane Cassidy at the School of Music, LSU.

Benefits and Risks: This study hopes to find information that will be useful in designing music composition activities that will enhance children’s creativity in the classroom. There are no risks.

Alternatives: Each class will be participating in these composition activities during their regularly scheduled music class. Students who have not given consent will not be videotaped for the study, but will be allowed to participate in the weekly music lessons without consequence.

Right to Refuse: Parents and the children participating in the study have the right to choose not to participate at any time during the investigation.

Privacy: The results of the study may be published. The privacy of the children will be protected and their identities will remain confidential unless release is legally compelled.

Financial Information: There is no cost for participation in this investigation, nor is there compensation.
Thank you for your time and consideration of this investigation. Please return this from to your child’s teacher whether or not you wish for your child to participate.

**Signature:** This investigation has been explained to me, and any questions have been answered. I may direct any additional questions regarding study specifics to the investigators. If I have questions about subjects’ rights or other concerns, I can contact Robert C. Matthews, Chairman, LSU Institutional Review Board, (225) 578-8692. I acknowledge the researcher’s obligation to provide me with a copy of this consent form upon request if signed by me.

Yes, I give my permission for my child to participate.

____________________  ____________________  _____________
Parent Signature     Parent Name (print)     Date

____________________
Child’s Name (print)
To: Third Grade Parents

For the next several weeks, Mrs. Alexander has been gracious enough to allow me into her music classroom to do research on music composition in the elementary classroom for my thesis project at LSU. The students will be working on creating their own instrumental music compositions during their regular music class time. I am using traditional music teaching techniques addressing musical skills that Mrs. Alexander would normally be using in her regular lessons. I am also bringing in many new and exciting instruments for them to use. There are no risks involved; however, because the students will be videotaped performing their final compositions, parental consent is required. Thank you for your time and consideration. If you have any questions, please feel free to contact me.

Sincerely,

Katie-Beth Toups
ktoups4@lsu.edu
APPENDIX D
STUDENT ASSENT FORM

I, ______________________________, agree to be in a study to find ways to learn about how children compose music. I will be doing special work for the teacher’s aide in my classroom. Sometimes I will work in small groups to create music with other students in my class. I have to follow all the classroom rules, even when I am working with the teacher’s aide. I can decide to stop being in the study at any time without getting in trouble.

Child’s Signature: _______________________________ Age: _____ Date: __________

Witness: ______________________________ Date: __________
(Witness was present for the assent process.)
APPENDIX E

CREATIVE COMPOSITION UNIT LESSON PLANS

Creative Compositions
Lesson/Week 1
30 minutes

Objectives: Students will define the words composition, compose, composer, and timbre through class discussion. They will compare unpitched percussion instruments with similar and contrasting timbres. They will explore sounds and playing techniques on all of the unpitched percussion instruments by composing a “mini-composition” to demonstrate their knowledge of timbre choice.

Materials/Set-up: variety of unpitched percussion instruments on five separate tables, vocabulary word cards for composition, composer, compose, and timbre

Introduction:
Teacher is (T) introduced to the class by the regular music teacher as a visiting music teacher from LSU studying how students (S) write their own music. T leads discussion on what students know about the words compose, composer, and composition. T asks S if they know anyone who has written any music and if they have every made up a song or melody. They define the words together on the board.

Task Analysis:
1. T tells S that the first thing they will begin with is comparing the sounds that instruments make. T has S close their eyes and listen to two instruments. S decide if the instruments (a triangle and finger cymbals) sound similar or different. T has S raise hands to answer. T asks S to make a guess as to which instrument was played first by looking at them and seeing what they are made of, and then by imagining the sound they could make.
2. T chooses another two instruments and has S close eyes again. T repeats process with contrasting instruments (stir xylophone and a hand drum) and has S answer same two questions by raising their hands.
3. T writes the word Timbre on the board and has S echo back the pronunciation. T defines timbre as the unique sound of an instrument.
4. T asks S to look around the room at the instruments on the tables. T shows S how to play the various instruments that they have never seen before and reviews several instrument names they have learned over the year.
5. T has S form their previously assigned color coded groups at the surrounding instrument tables. T tells S they have two minutes to explore the instrument sounds at their table. They must compare sounds and decide as a group if they are similar or different timbres. They are also encouraged to come up with multiple sounds on one instrument by inventing new ways to play them (that are not harmful to instrument.)
6. T reviews rules and practices the cue for S to stop playing (8 quick drum hits) and wait for instructions. T signals them to begin instrument exploration for two minutes. After
time is up, T guides S to next table and repeats process until all groups have visited all instrument tables.

7. After S have explored all instrument possibilities, T and S brainstorm lists of similar and contrasting timbres on the board. T leads S in a discussion about which combination of instrument timbres sound interesting together.

8. S choose instruments (one per group member) to play a short 30 second “mini-composition” that includes examples of both similar and different timbres. S work in groups for five minutes to choose instruments and compose a short piece.

9. S perform pieces for the class and S discuss the similar and different timbre choices.

**Closure:** T has S imagine other timbres that could be added to the instruments to make pleasing sounds. T asks S their favorite combinations of similar and contrasting timbres and allows them to try larger combinations of four to five instruments at a time. S put instruments away.

**Assessment:** T assesses S understanding of similar and contrasting timbres through class discussion and individual observation during small group exploration time. Are S able to accurately label similar and contrasting timbres? Are S familiar with the traditional playing techniques of the instruments as well as their names?
Creative Compositions
Lesson/Week 2
30 minutes

Objectives: Students will review the words composition, compose, composer, and timbre. T introduces and defines the term texture. S demonstrate an understanding of similar and different timbres through question, answer, and discussion. S explore improvising melodies on the pitched orff instruments. S compare and contrast rhythm and melody with examples played by T on the instruments.

Materials/Set-up: unpitched percussion instruments, orff instruments including AG, SG, BM, BX, AM, AX, SM, SX, and contra bass bars, word cards for vocabulary

Introduction:
T reviews terms from last week and introduces new term for the day- texture. T defines texture as the layers in a piece of music. T uses Land of the Silver Birch as an example because S previously learned this folk song with many layered ostinatos in music class. T has S list all the different parts in Land of the Silver Birch. T discusses with S how music can have as many layers as a composer wants. Today they will be composing a short little composition including a melodic texture as well as an unpitched rhythmic texture.

Task Analysis:
1. T reviews names of orff instruments with S and proper playing technique.
2. T and S compare/contrast melodies and rhythms with examples on the instruments.
3. S break into small groups and choose both unpitched and pitched percussion instruments to compose a “mini-composition” that includes multiple layers.
4. T guides their choices with open-ended questions about timbre and texture.
5. T and S discuss how texture can also be different numbers or combinations of instruments that change throughout a piece.
6. S perform their “mini-compositions” for each other and S discuss and comment on each performance.

Closure: T asks S to describe the texture and timbre choices of fellow groups. S put instruments away. T and S review vocabulary words.

Assessment: T assesses S understanding of similar and contrasting timbres and texture through class discussion and individual observation during small group exploration time. Are S able to accurately label similar and contrasting timbres and changing textures? Are S familiar with the traditional playing techniques of the instruments as well as their names? Are S playing melodies on the pitched orff instruments or using them as sound effects? Are S playing rhythmic patterns or just making noise?
Creative Compositions
Lesson/Week 3
30 minutes

Objectives: Students (S) will review the words composition, compose, composer, timbre, and texture. Teacher (T) introduces and defines the terms theme and form—specifically ABA. S demonstrate an understanding of similar and different timbres, texture, theme, and form through participating in a class composition. S use correct playing technique and names for instruments. T introduces the first four steps of the composition process: Identify, Explore, Compose, and Perform.

Materials/Set-up: unpitched percussion instruments, orff instruments including AG, SG, BM, BX, AM, AX, SM, SX, and contra bass bars, word cards for vocabulary, poster with composition process steps on it, dry erase board

Introduction:
T tells S that today, they are going to write a giant composition that everyone in the class gets to help with. T reviews vocabulary and musical concepts from previous weeks. T writes two new concepts on the board—theme and form. S and T brainstorm definitions for both words. T defines theme as an idea the music expresses. S share themes from the school year that they have dressed up for or celebrated. T defines form as the order of parts in a piece of music.

Task Analysis:
1. T writes theme Day and Night on the board. T has S close their eyes. T tells them to imagine they are asleep in their beds. The sun is rising in the window. What is the very first sound that you hear? Is it mom making breakfast? Dad in the shower? The alarm clock ringing? Imagine that sound in your head right now. T continues in the same manner having the kids imagine sounds they hear throughout the day. S open their eyes.
2. S and T brainstorm to describe all of the sounds they hear during the day. T asks open-ended questions like what happens at school, what is your favorite part of the day, etc. to help kids share ideas. T has S think of instruments that could play the parts of the day sounds. T has S decide what kind of melodies would be played during the day and on what orff instruments.
3. T asks S what the first sound should be in our music, how long or what rhythm it should be and on what instrument. S answers and gets instrument, bringing it back to his/her seat. T leads S in writing the day music on the board in symbols and words. T draws pictures of instruments, rhythms, names, number of seconds, etc.—whatever the students need to help them remember when to play.
4. Repeat until the day music is finished, or until about half of the S have instruments.
5. T leads S in a performance of their day music, pointing to the “music” on the board to help them if they need. T practices preparing the students in silence before beginning and coaches those not playing into being a good listening audience.
6. T allows S to share their comments/feelings about the music so far.
5. T suggests to S that they label this first part in their composition. T tells S that in music, we label different parts with letters of the alphabet. T asks S, if this is the first part in our
composition, what letter should we assign to this first part? S answer A and T draws capital A next to the beginning of the line of day music.
6. T reviews the theme and asks S to compare day and night. T leads class in a discussion to discover that night and day sounds are different.
7. T asks S if A was our day music, what will come next? S answer B for night music. T labels a B underneath the A. T asks S if the music for B will be the same or different as A? S answer different.
8. T leads class in same method as above to explore night sounds and choose instruments.
9. T asks S to point out similarities and differences in the A and B sections. T leads discussion in ways that the sections can be different musically including tempo, layers, dynamics, instrumentation, etc. EX) loud car music during day and soft lullaby music at night. T asks S to identify these specific differences in their composition.
10. T tells S that they are going to add a finishing touch to the music before the final performance. T draws an A underneath the B. T asks S what they think we should do after the B section is over. S answer play the A music again.
12. T asks S to share their comments and ideas about the piece. T asks S to share additional ideas that could have been used in this composition (leading to revision process) to make it more interesting or to have more contrasting sections.
13. T asks S to describe the melody in the composition and to identify any rhythm patterns used.

Closure: T introduces the composition “process.” (uses poster visual) T labels Identify, Explore, Compose, and Perform with help of S. T tells S that the last step, Revise, means to make changes. Just like we talked about adding or changing ideas in our composition today, when we revise, we put those changes in and perform it again to see if we like it. When you write your own group compositions next week, you will have the opportunity to make changes to your compositions until it is just the way you like it. S put instruments away.

Assessment: Are S able to accurately label similar and contrasting timbres and changing textures? Are S familiar with the traditional playing techniques of the instruments as well as their names? Are S choosing ideas that are related to the theme? Are S able to correctly label the sections? Are S able to play their parts at the right time?
Creative Compositions  
Lesson/Week 4  
30 minutes

Objectives: Students (S) will choose a theme from one of three provided and compose the A section. S will fill out the composition worksheet guide for the A section and write out their composition on the back of the worksheet. S will follow the composition process and steps from previous classes while working in small cooperative learning groups. S will perform the A section for the class.

Materials/Set-up: unpitched percussion instruments, orff instruments including AG, SG, BM, BX, AM, AX, SM, SX, and contra bass bars, composition process poster, poster with ways A can be different from B, vocabulary poster, composition worksheet guide, pencils, clipboards, theme sentence strips

Introduction:
T reviews the composition process with S from previous week referring to the poster. T reviews vocabulary and instruments as needed. T has S sit with small groups (previously assigned). Each group selects a S to be recorder. T hands each group a clipboard, pencil, and worksheet.

Task Analysis:
1. T tells S that today they will be beginning their first composition. T hangs theme sentence strips on pocket chart and reads them aloud with S. Themes are: The Butterfly, The Weather, and The Life and Death of a Mosquito. T gives S one minute to discuss which theme they would like to compose for.
2. T has recorders fill out top of worksheet and theme choice. T reviews steps to begin composing with S referring back to the class composition. T leads S through first step- Identify. T goes over criteria for composition- pick a theme, must have a melody and rhythm patterns, both similar and contrasting timbres, at least one texture change, and be in ABA form. T tells S today they will be writing the A section only.
3. T tells S that they will begin exploring (step two) ideas and sounds. They should think of all the ideas, patterns, and sounds they want in their piece first and then orchestrate it with instruments. EX) what happens to the mosquito during its life? How does it die? What sounds would that make? What kind of melody would be playing while the mosquito is chasing someone? How can your music tell that story? Etc.
4. S work in small groups brainstorming and writing down ideas for A section. T goes around to each group as they have questions or when they signal they are ready to get instruments. T lets each group choose instruments and begin practicing.
5. 15 minutes into class, T stops and discusses with S their ideas to this point. T reminds S to write down their ideas and record their composition on the back of the worksheet just like we recorded it last week on the board. T instructs them to practice performing their A section together when they are finished. They have five minutes left to finish the A section.
6. S continue to work for five minutes until T calls time. T reviews behaviors of listening audiences with S. T tells S that each group will play their A section for the class. While you are listening, notice which instrument timbres are similar or different, notice texture changes,
and notice if they have a melody. After each group plays, I will ask for comments about those specific things.

7. Each group performs their A section for the class. After each performance, the T leads S in answering the above questions. T also makes positive comments to each group about their ideas.

8. T leads review of first four steps of the composition process referring to poster.

**Closure:** T allows S to brainstorm ideas for how the B section and write them down as each group picks up their instruments.

**Assessment:** Are S able to work together, share ideas, and compromise on instruments in order to compose the A section? Do compositions have similar and different timbres, a variety of rhythm patterns, and a clear beginning and end? Does the music relate to the theme? Are the S able to record their ideas down on the back of the composition worksheet?
Creative Compositions
Lesson/Week 5
30 minutes

Objectives: Students (S) will complete their compositions. S will identify the main musical elements required for their composition. S will revise compositions as needed to include missing criteria. S will write out their composition on the back of the worksheet and perform it for the class.

Materials/Set-up: unpitched percussion instruments, orff instruments including AG, SG, BM, BX, AM, AX, SM, SX, and contra bass bars, composition process poster, poster with ways A can be different from B, vocabulary poster, composition worksheet guide, pencils, clipboards, theme sentence strips

Introduction:
T and S discuss ways that A can be different than B using specific examples from their compositions. T refers to poster when S need help. T reviews all the musical elements that should be present in their composition (listed on worksheet.) T calls each group to get instruments as they begin to work on the B section.

Task Analysis:
1. T allows S to work for 15 minutes on their B sections. T guides those groups that need help by asking open-ended questions instead of making personal suggestions. T helps S write down ideas if they have trouble recording them in a way that is easy to understand.
2. T calls time and all S freeze and listen. T goes over the checklist of musical elements that are on the worksheet. As the class reads each one together, each group decides if they have included that element and check it off.
3. After they have reviewed the list, T gives them 5 more minutes to make any additions or changes to their composition and to practice performing the entire ABA composition.
4. S continue to work and practice. S write down their compositions on the back of the sheet.
5. T calls time. S review appropriate listening audience behaviors.
6. T calls on each group to perform their composition.
7. After each performance, the class discusses the differences between the sections and makes positive comments about what they enjoyed about each composition.
8. S are given the opportunity to explain their musical choices and the meaning behind their composition.

Closure: T has all S pick up instruments. T asks S what they would change if they were given an opportunity to revise their compositions. What didn’t work out the way you planned it to? What was missing? What seemed like it didn’t belong in your piece? How could the sections sound more different? How could you develop the idea in the melody further?
Assessment: Are S able to work together to compose a musical piece? Do their compositions include: similar and different timbres, a variety of rhythm patterns, a melody, a clear beginning and end, music that relates to the theme, and a texture change? Are the S able to record their ideas down on the back of the composition worksheet and perform them accurately? Are S able to make educated suggestions for revisions based on class discussion?
Objectives: Students (S) will compose the A sections of their winter theme compositions. Compositions will include all the musical elements discussed in class and practiced in the last composition task. S will write down their compositions on the back of the worksheet.

Materials/Set-up: unpitched percussion instruments, orff instruments including AG, SG, BM, BX, AM, AX, SM, SX, and contra bass bars, recorders, composition process poster, poster with ways A can be different from B, vocabulary poster, new composition worksheet guide, pencils, clipboards

Introduction:
Teacher (T) and S review composition process, vocabulary, and ideas from previous weeks as needed. Students brainstorm within small groups of a winter music theme. Each group shares ideas for a winter piece.

Task Analysis:
1. T instructs S to decide now what the different A and B sections of their winter music composition will be. S write ideas down on worksheet guide.
2. S are given the rest of the class period to complete their A sections and practice playing them. S are allowed to go freely to the instrument shelf if they go quietly.
3. T walks around monitoring and helping those S who need assistance. T monitors noise level and reminds S to work cooperatively and quietly.
4. With 5 minutes left to class, T stops group work. All S go over worksheet together to make sure they have included everything they need for the day.
5. T poses several reflection questions for S to discuss for the remainder of the class. What do you want to include in your piece that you haven’t already? Do you have a melody? Do your instrument timbers work well together? Does your music relate to your winter theme?

Closure: T has all S pick up instruments. T has one S pick up worksheets.

Assessment: Are S able to work together to compose a musical piece? Do their compositions include: similar and different timbres, a variety of rhythm patterns, a melody, a clear beginning and end, music that relates to the theme, and a texture change? Are the S able to record their ideas down on the back of the composition worksheet and perform them accurately? Are S able to make educated suggestions for revisions based on class discussion?
Creative Compositions
Lesson/Week 6
30 minutes
VISUAL ARTWORK GROUP

Objectives: Students (S) will compose the A sections of their winter theme compositions. Compositions will include all the musical elements discussed in class and practiced in the last composition task. S will write down their compositions on the back of the worksheet.

Materials/Set-up: unpitched percussion instruments, orff instruments including AG, SG, BM, BX, AM, AX, SM, SX, and contra bass bars, recorders, composition process poster, poster with ways A can be different from B, vocabulary poster, new composition worksheet guide, pencils, clipboards, artwork displayed in classroom

Introduction:
Teacher (T) and S review composition process, vocabulary, and ideas from previous weeks as needed. T leads class in discussion on how some musicians use various things for inspiration. T allows S to share their ideas on inspiration. T reveals painting and has S study it for possible theme ideas for their composition. T has S share their ideas, which revolve around winter/snow, etc.

Task Analysis:
1. T and S discuss all the elements of the painting, including colors, feelings it evokes, other ideas it brings to mind, memories it brings up, and sounds it inspires. S share what they think about a winter theme in small groups. S decide what type of winter music this painting could inspire.
2. T instructs S to decide now what the different A and B sections of their winter music composition will be. S write ideas down on worksheet guide.
3. T allows S to work for 15 minutes on their A sections. T guides those groups that need help by asking open-ended questions instead of making personal suggestions. T helps S write down ideas if they have trouble recording them in a way that is easy to understand.
4. S are given the rest of the class period to complete their A sections and practice playing them. S are allowed to go freely to the instrument shelf if they go quietly.
5. T walks around monitoring and helping those S who need assistance. T monitors noise level and reminds S to work cooperatively and quietly.
6. With 5 minutes left to class, T stops group work. All S go over worksheet together to make sure they have included everything they need for the day.
7. T poses several reflection questions for S to discuss for the remainder of the class. What do you want to include in your piece that you haven’t already? Do you have a melody? Do your instrument timbers work well together? Does your music relate to your winter theme?
Closure: T has all S pick up instruments. T has one S pick up worksheets.

Assessment: Are S able to work together to compose a musical piece? Do their compositions include: similar and different timbres, a variety of rhythm patterns, a melody, a clear beginning and end, music that relates to the theme, and a texture change? Are the S able to record their ideas down on the back of the composition worksheet and perform them accurately? Are S able to make educated suggestions for revisions based on class discussion?
Creative Compositions  
Lesson/Week 7  
30 minutes  
VERBAL DESCRIPTION GROUP

Objectives: Students (S) will compose the B sections of their winter theme compositions. Compositions will include all the musical elements discussed in class and practiced in the last composition task. S will write down their compositions on the back of the worksheet.

Materials/Set-up: unpitched percussion instruments, orff instruments including AG, SG, BM, BX, AM, AX, SM, SX, and contra bass bars, recorders, composition process poster, poster with ways A can be different from B, vocabulary poster, composition worksheet guide, pencils, clipboards

Introduction:
Teacher (T) and S review composition process, vocabulary, and ideas from previous weeks as needed. S immediately begin working on their B sections in small groups.

Task Analysis:
1. T instructs S to review the A sections and brainstorm again for ideas of how B can be different but related to A and related to the theme.
2. S are given the rest of the class period to complete their B sections and practice playing them. S are allowed to go freely to the instrument shelf if they go quietly.
3. T walks around monitoring and helping those S who need assistance. T monitors noise level and reminds S to work cooperatively and quietly.
4. With 5 minutes left to class, T stops group work. All S go over worksheet together to make sure they have included everything they need for their composition. They review the checklist and objectives of the composition task.
5. T poses several reflection questions for S to discuss for the remainder of the class. What do you want to include in your piece that you haven’t already? Have you developed a melody? Do your instrument timbers work well together? Does your music relate to your winter theme? Are your sections different but related?

Closure: T has all S pick up instruments. T has one S pick up worksheets.

Assessment: Are S able to work together to compose a musical piece? Do their compositions include: similar and different timbres, a variety of rhythm patterns, a melody, a clear beginning and end, music that relates to the theme, and a texture change? Are the S able to record their ideas down on the back of the composition worksheet and perform them accurately? Are S able to make educated suggestions for revisions based on class discussion?
Creative Compositions
Lesson/Week 7
30 minutes
VISUAL ARTWORK GROUP

Objectives: Students (S) will compose the B sections of their winter theme compositions. Compositions will include all the musical elements discussed in class and practiced in the last composition task. S will write down their compositions on the back of the worksheet.

Materials/Setup: unpitched percussion instruments, orff instruments including AG, SG, BM, BX, AM, AX, SM, SX, and contra bass bars, recorders, composition process poster, poster with ways A can be different from B, vocabulary poster, composition worksheet guide, pencils, clipboards, artwork displayed in classroom

Introduction:
Teacher (T) and S review composition process, vocabulary, and ideas from previous weeks as needed. T and S review the artwork together, sharing ideas of how their A and B sections illustrate a winter theme like the picture. S immediately begin working on their B sections in small groups.

Task Analysis:
1. T instructs S to review the A sections and brainstorm again for ideas of how B can be different but related to A and related to the theme.
2. S are given the rest of the class period to complete their B sections and practice playing them. S are allowed to go freely to the instrument shelf if they go quietly.
3. T walks around monitoring and helping those S who need assistance. T monitors noise level and reminds S to work cooperatively and quietly.
4. With 5 minutes left to class, T stops group work. All S go over worksheet together to make sure they have included everything they need for their composition. They review the checklist and objectives of the composition task.
5. T poses several reflection questions for S to discuss for the remainder of the class. What do you want to include in your piece that you haven’t already? Have you developed a melody? Do your instrument timbers work well together? Does your music relate to your winter theme? Are your sections different but related?

Closure: T has all S pick up instruments. T has one S pick up worksheets.

Assessment: Are S able to work together to compose a musical piece? Do their compositions include: similar and different timbres, a variety of rhythm patterns, a melody, a clear beginning and end, music that relates to the theme, and a texture change? Are the S able to record their ideas down on the back of the composition worksheet and perform them accurately? Are S able to make educated suggestions for revisions based on class discussion?
Creative Compositions
Lesson/Week 8
30 minutes

VERBAL DESCRIPTION GROUP
And
VISUAL ARTWORK GROUP

Objectives: Students (S) will perform their compositions for the class. S will analyze and provide feedback to each other. Compositions will include all the musical elements discussed in class and practiced in the last composition task. S will revise their compositions and write them down on giant poster paper.

Materials/Set-up: unpitched percussion instruments, orff instruments including AG, SG, BM, BX, AM, AX, SM, SX, and contra bass bars, recorders, composition process poster, poster with ways A can be different from B, vocabulary poster, composition worksheet guide, giant poster paper, markers

Introduction: T calls one group at a time to get all of their instruments for their piece. T reviews with all S the good listening audience behaviors and proper performance behaviors. S are given 4 minutes to practice performing their entire ABA winter compositions before performing them for the class.

Task Analysis:
1. T reviews with S what they should be listening for as each group performs.
2. After each performance, S are allowed to share their positive comments with the class as long as they are “musically specific.” (I like it because the instrument timbers are similar)
3. T provides each group with positive feedback and at least one thing to think about in their revisions. (Think about developing your melody so that it is a little longer so that we can enjoy it, or I really like those soft metal timbers, but I am not sure that you could hear it over the louder drums during the A section…)
4. After all of the groups have performed, T instructs S to work together to make revisions based on their observations and the comments they received.
   a. Revisions can include but are not limited to choosing a more appropriate instrument sound, rewriting a pattern, adding a melody, changing the volume or tempo, etc.
5. After making their revisions, they are given a giant piece of poster paper and a marker to write their final composition out large enough for all of them to see for their final performance.
6. The rest of the class is spent revising, recording, and practicing.
Closure: T has all S pick up instruments. T has one S pick up worksheets and poster paper.

Assessment: Are S able to work together to compose a musical piece? Do their compositions include: similar and different timbres, a variety of rhythm patterns, a melody, a clear beginning and end, music that relates to the theme, and a texture change? Are the S able to record their ideas down on the back of the composition worksheet and perform them accurately? Are S able to make educated suggestions for revisions based on class discussion?
Creative Compositions
Lesson/Week 9
30 minutes
VERBAL DESCRIPTION GROUP
And
VISUAL ARTWORK GROUP

Objectives: Students (S) will practice and perform their revised winter compositions. They will be videotaped for use with the consensual assessment technique in the present study.

Materials/Set-up: unpitched percussion instruments, orff instruments including AG, SG, BM, BX, AM, AX, SM, SX, and contra bass bars, recorders, giant poster paper, markers

Introduction:
T calls one group at a time to get all of their instruments for their piece. T allows S to add the finishing touches to their poster composition as the groups get their instruments.

Task Analysis:
1. S are allowed 10 minutes to finish revising and practice their compositions. Some groups will have to make last minute adjustments for absences.
2. T reviews listening audience behaviors as well as performance behaviors.
3. T sets up camera and has S set up instruments for performance.
4. Each group performs their composition for the camera. If the group is not satisfied with their performance (it does not reflect their written composition), they are allowed to be taped again. Whichever composition they feel best represents their composition is used for the study.

Closure: T has all S pick up instruments. T has one S pick up worksheets and poster paper.

Assessment: Do S compositions include: similar and different timbres, a variety of rhythm patterns, a melody, a clear beginning and end, music that relates to the theme, and a texture change? Do S exhibit proper audience and performance behaviors? Do S perform their pieces accurately from their composition posters?
Composition Worksheet Guide

What theme did you choose? ___________________________

What instruments are you using for the A section? Who is playing each instrument?

What instruments are you using for the B section? Who is playing each instrument?

How is the A section different from the B section?

Does your composition have: (check the box)

☐ Theme
☐ ABA Form (Are A and B different from each other?)
☐ At LEAST 4 Timbres (can have more!)
☐ Different Textures
☐ Melody
☐ Title
☐ Does everyone have a part?

On the back of this page, draw or write anything that will help you to remember how your composition is supposed to be played next week. Label the A and B. Raise your hand if you need some help.
<table>
<thead>
<tr>
<th>A</th>
<th>Brand</th>
<th>Cole</th>
<th>Jayla</th>
<th>Jacob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hannah</td>
<td>Bells</td>
<td>himself</td>
<td>snowball fight</td>
<td></td>
</tr>
<tr>
<td>Bells</td>
<td>wolf</td>
<td>zipline</td>
<td>drum</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- (melody)
- 5 shakes
- finger taps
- Santa down chimney
- rainstick
- 2 turns
- Play drum
- 10 seconds
- all people
- hit the drum once
- bells
- 5 seconds
- choce
- 8 seconds
- 10 seconds
Katie Toups Traxler is a candidate for the degree of Master of Music in music education at Louisiana State University, where she obtained a Bachelor of Music Education degree and Louisiana Teaching Certificate in 2005. She achieved Level I and Level II Orff Certifications from Belmont University in Nashville, Tennessee. She taught elementary music to grades K-5 at County Day School in Baton Rouge, Louisiana, during the 2004-2005 school year. During the spring of 2006, she taught elementary music for grades Pre-K through 5 for the East Baton Rouge Parish Public School System. During the 2006-2007 and 2007-2008 school years, she served as the assistant band director at St. Jude Elementary School in Baton Rouge, Louisiana, where she taught 4th through 8th grade instrumental music. She served as director of the Louisiana Youth Orchestra Percussion Ensemble for the Baton Rouge Symphony for the 2006-2008 seasons and served on the Baton Rouge Symphony Education Committee for the 2006-2007 season. She taught percussion and piano lessons through her private studio for 8 years, and percussion lessons for the LSU Music Academy for 6 years. She has been invited as a guest presenter for elementary music in Vermillion Parish, Caddo Parish, and at Southeastern Louisiana State University in Hammond, Louisiana. She is a member of the American Orff-Schulwerk Association, MENC: The National Association for Music Education, Percussive Arts Society, and Pi Kappa Lambda. Her areas of special interest include integrating early literacy skill training in the music curriculum and assessment in the elementary music classroom. She recently married Jude Traxler and will be moving to New York to pursue a music education career in the fall of 2008.