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# Creative thinking in elementary general music: a survey of teachers' perceptions and practices

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## CHAPTER I INTRODUCTION

Creative thinking has the potential to play an integral role in the development of students' musicality. Children who engage in creative thinking activities possess higher levels of musical achievement (Azzara, 1993; Swanwick & Franca, 1999), demonstrate increased levels of motivation (Csikszentmihalyi, 1996), and possess better conceptualization of elements such as melody, harmony, rhythm, and form (Swanwick & Franca, 1999). Additionally, many musical activities provide a unique opportunity for cultivating the creative thinking skills of students through the artistic medium of sound (Reimer, 2005).

Creative thinking in the music classroom may take many forms. For example, students might engage in composing, arranging, improvising, or choreographing music. They may invent their own notation or create listening maps of musical compositions. According to Peter Webster (1990a), notable scholar in the area of creative thinking in music, all of the aforementioned activities require both convergent and divergent thinking. Convergent thinking is best described as an orientation towards identifying a single, correct, or factual answer (recognizing an instrument during a listening activity, for example). Divergent thinking, on the other hand, is the act of inventing solutions to a given problem for which multiple answers may exist (such as composing a melody based on a minor scale). Creative thinking occurs when one combines both the convergent and divergent thinking processes (Csikszentmihalyi, 1996; Webster, 1990b).

Curriculum design in the United States is currently changing to reflect an increase in the value of creative thinking as an outcome of K-12 education. Daniel Pink (2005), Richard Florida (2002), and Sir Ken Robinson (2009), among others, argue that creative

thinking is considered a key factor for social, personal, and economic prosperity in the twenty-first century. In fact, several states have adopted the *Partnership for Twenty-First Century Skills Framework*, which promotes creative thinking and innovation, through the arts, as well as traditional academic subjects.<sup>1</sup>

While creative thinking is most often conceptually associated with the arts, music educators have traditionally emphasized music-reading and performance skills, rather than facilitating tasks which encourage creative thinking (Swanwick, 1988). Campbell (1991), Kratus (2007), and Hargreaves (1999) all concur that the dominant tradition of Western music education—at all levels—focuses on “re-creative” musical skills, such as reading staff notation, and developing technical performance skills, which are often rigidly dominated by a teacher-centered approach.

Yet, through creative thinking, teachers can lead students to greater depths of musical understanding by allowing students to create new compositions, and engage in improvisation, in a student-centered environment (Brown, 2008). Growing evidence suggests that creative thinking is becoming a more common aspect of music education (e.g., Strand, 2006; Webster, 1990b; Whitcomb, 2005).

The purpose of this chapter is to acquaint the reader with a background of the concept of creative thinking in the elementary general music curriculum, as well as factors that led to its inclusion in the curriculum. The chapter also provides an in-depth discussion of the construct of creative thinking as a theoretical basis for this study. The chapter also examines a need for further research on creative thinking in elementary

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<sup>1</sup> States that have adopted the *Partnership for Twenty-First Century Skills Framework* (as of October 2010) include Arizona, Illinois, Iowa, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Nevada, New Jersey, North Carolina, Ohio, South Dakota, West Virginia, and Wisconsin. More information is available at [www.p21.org](http://www.p21.org).

general music. Finally, it concludes with a statement of the purpose and significance of the study, as well as the research questions and definitions that guide this particular investigation.

### Background of the Study

For nearly two centuries, music education in the United States has emphasized singing, playing instruments, and music appreciation, but only within the last few decades has attention been given to the development of student's abilities to engage in musical creative thinking (Kaschub, 1997). Several factors led to an interest in creative thinking as part of the general music curriculum in U.S. schools, including: (a) two foundational studies of children's creative thinking in music, (b) the development of twentieth century art music, (c) the educational reforms of the 1950s, (d) the inclusion of Orff Schulwerk, Kodály, and Dalcroze in elementary school settings, and (e) composition and improvisation as part of the National Content Standards for Music Education (Glover, 2000; Mark, 1996). This section briefly examines each of these historical influences on the inclusion of creative thinking in U.S. school music curriculums.

#### **Foundational Studies on Children's Musical Creative Thinking, 1930-1950**

The first published studies on children's creative thinking in music appeared in 1941 and 1942. These investigations (Moorhead & Pond, 1941, 1942, 1951; Doig, 1941, 1942a, 1942b) set the stage for subsequent research by typifying two research methodologies still widely used today. Moorhead and Pond utilized a naturalistic setting, while examining the process of creative thinking in children. Conversely, Doig's research focused primarily on the quantifiable aspects of children's compositional

products. These two approaches, observing process or quantifying product, typify many of the research designs still widely used to examine creative thinking in music.

*Moorhead and Pond: An Investigation of Children's Thinking Processes*

Educator Gladys Evelyn Moorhead and composer Donald Pond conducted an ethnographic study from 1937 to 1944 of young children's spontaneous music-making. The study took place at the Pillsbury Foundation School (Pond, 1980). Moorhead and Pond were interested in observing the musical play of typical children, rather than those children thought to be musically talented; Moorhead and Pond hypothesized that all children were capable of obtaining high levels of musical achievement, given the opportunity to engage in a rich musical environment. They provided a variety of musical instruments, including rattles, bells, gongs, drums, cymbals, marimbas, temple blocks, and a guitar. Instruments were freely available for children to use, at any time, so students moved them about the school at will. Teachers encouraged freedom of exploration, and creative thinking with instruments and voices. Children also had access to toys, a phonograph, and a curtained stage for informal productions. Pond and his colleagues shared the findings of eight years of work at the Pillsbury school in a series of publications entitled, *Music of Young Children* (Moorhead & Pond, 1941, 1942, 1951)<sup>2</sup>.

In *Volume I: Chant* (Moorhead & Pond, 1941), the authors described and notated children's spontaneous creation of chant, which differed from singing, because it had a strong rhythmic quality. Large physical movements, such as dancing, running, climbing,

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<sup>2</sup> *Volume III: Musical Notation* (Moorhead & Pond, 1942) is excluded from this discussion due to the lack of creative thinking activities described within the volume.

and marching, often accompanied this chant. The children's movement often influenced quality and speed of their chant. Melodically, chants frequently used the interval of the descending minor third (sol-mi), and on occasion, the addition of an upper tone (la).

*Volume II: General Observations* (Moorhead & Pond, 1942), focused on the environment, which was intended to provide complete freedom of the child's interests and individual pursuits. Moorhead and Pond described how adult assistance was always available, but never imposed, on the children's free play. As a result, the children accumulated a variety of musical experiences and guided their own learning.

In *Volume IV: Free Use of Instruments for Musical Growth* (Moorhead, Pond, & Sandvik, 1951), the authors described three case studies of children and their use of instruments. The authors observed that children often played instruments socially, but liked to experiment individually as well. The researchers noted that children chose instruments based on tone quality, portability, interesting construction, and ease of play. During the children's use of free play with such instruments, they discovered how to produce differences in timbre, volume, pitch, and duration of tone.

In Donald Pond's (1980) reflection of the experience, he stated that he was very careful not to impose his own will upon the children, but he was always willing to participate in their music-making, if asked to join in. Pond mentioned that the children's processes of sound exploration were rooted in "wonder and delight" and that their process had "nothing to do with music as we commonly know it, but everything to do with music as it actually exists—nakedly primeval at the roots" (p. 40). He suggested that we could not fully comprehend their exploration unless we tried to understand what children perceived when they engaged in music-making.

Pond discovered that often children began making music through very chaotic encounters with sound. However, he noted that “out of the chaos can emerge created sound...without the chaos, no creation can be possible” (p. 40). He also described children’s rhythm, not in terms of counting, as adult musicians often conceptualize, but rather in movement, like skipping or running. He theorized that this impulse for motion was in part reflective of muscular stresses and relaxation, but also noted that the children seemed to delight in discovering rhythmic articulation.

A common thread ties together Moorhead and Pond’s reflections: an emphasis on the interactive and social nature of children’s creative music-making, as it materialized into song, chant, movement and/or instrumental works. Pond (1980) stated, “The young child’s discovery of sound (apart from solo song) did not remain a private, self-oriented activity. Everything that could be useful to the whole class was absorbed speedily into their everyday lives and instantly became community property” (p. 41). According to this line of thought, the young child’s world of creating music is a social endeavor, enhanced by freedom and play.

*Doig: A Study of Children’s Compositional Products*

Dorothea Doig, a contemporary of Moorhead and Pond, conducted a separate series of studies examining children’s creative musical products (Doig, 1941, 1942a, 1942b). Doig’s goal was to discover the elements of music that children would employ before receiving formal training in musical composition. She then examined the compositions of children ages 6 to 16 and analyzed them for their musical properties of melodic characteristics, form, key, and rhythmic structures.

In a small group setting determined by age, children composed songs based on a

given text. Children would vocally improvise a melody for each phrase, allowing other children to revise their ideas. A music facilitator would then play the revised phrases on a piano, and show the children how to notate the phrases. This process would repeat until the children had a complete composition with which they were satisfied.

Doig's investigation indicated that children had great enthusiasm for composing. On a social level, she observed the children readily engaging in group cooperation and interaction with one another. Children easily accepted insight from their peers to revise their compositions. Musically, she found that the children naturally used cadential material, and that they primarily sang their compositions in major keys. The participants used repetition and contrast to create formal musical structures. The children in this study often wrote pieces based on typical musical genres of the time, such as waltzes and marches.

The published material of Moorhead and Pond (1941, 1942, 1951) and Doig (1941, 1942a, 1942b) provided some of the earliest pictures of children's creative music-making. They reported that children, regardless of experience level or giftedness, were capable of creative musical thought, as long as they were given a rich, musically stimulating, and supportive environment. Both studies observed that children often composed music in conjunction with one another, and that the social environment contributed to student success.

### **The Development of Twentieth Century Art Music**

During the twentieth century, art music in the United States and Europe underwent substantial innovation (Walker, 2007). Composers experimented with new uses of dissonance, chromaticism, serialism, electronic music, soundscapes, and new



forms of musical notation. Beginning in the 1950s and 1960s, music educators incorporated contemporary music and innovative teaching practices into their classrooms. Evidence of this exists in publications such as Murray Schafer's *The Composer in the Classroom* (1965) and *Ear Cleaning* (1967), George Self's *New Sounds in Class* (1967), and John Paynter and Peter Aston's *Sound and Silence: Classroom Projects in Creative Music* (1970). Each of these books suggested the importance of incorporating creative thinking into the music curricula in order to develop a deeper understanding of conceptual elements, the ability to express one's self through sound, and an appreciation of contemporary art music (Walker, 2007).

However, while a number of new materials emphasizing musical exploration and creative thinking were developed in the 1960s, a number of influential scholars in music education (e.g., Arnold Bentley and Bernarr Rainbow) expressed suspicion over these new fads, believing them to be dubious and passing trends. As a result, such pedagogical techniques were never fully adopted by the music education community (Plummeridge, 2000).

### **Educational Reform of the 1950s**

In the 1950s, educational reform in the United States became important to the national agenda. The drive for reform was fueled, in no small measure, by the sense of urgency, fear, and competition caused by Russia's launch of Sputnik (Mark, 2008). Americans worried that if they were to lose their technological dominance over Russia, another war could occur. As a result, many American leaders looked towards education as one answer to national security. Such concerns prompted the federal government to increase its spending on education ten-fold (Labuta & Smith, 1997). Thus, in 1958,

Congress passed the National Defense Education Act, designed to improve curricula and instruction in foreign languages, mathematics, and science (Abeles, Hoffer, & Klotman, 1994).

The initial emphasis placed on academic subjects (e.g., English, science, mathematics, foreign language, and history) by educational reform in the 1950s caused many educators, administrators and scientists to voice concern over the dangers of an unbalanced curriculum (Mark, 1996). In 1959, the American Association of School Administrators (AASA) stated that subjects such as music, drama, dance, and poetry were integral, rather than secondary, to general education (AASA, 1959). Labuta and Smith (1997) suggested that despite the emphasis on the so-called “academic subjects,” music education eventually benefited from the education reform movement of the 1950s. Evidence of this is seen in several large-scale arts-based projects funded by philanthropic organizations, as well as the U.S. Department of Education, such as the Young Composers Project and the Contemporary Music Project (Mark, 1996). These projects eventually led to the promotion of music education as an integral part of the school curriculum, as well as improvement in instruction in all subject areas.

### **Creative Thinking Based Curriculum Initiatives, 1950s-1960s**

The first educational reform project dedicated to music education was the Young Composers Project, established in 1959, and funded by the Ford Foundation. Between 1959 and 1968, over 70 young composers participated as artists-in-residence for schools throughout the United States. While in residence, composers wrote musical selections for school music ensembles; they also worked closely with the ensemble directors and

students in performance preparation, and describing their compositional processes. This program eventually expanded into the Contemporary Music Project for Creativity in Music Education (CMP). CMP included seminars, workshops, and pilot programs for training teachers in approaches for fostering creative tasks for students and increasing educators' understanding of contemporary composition (Joio, Mailman, Halgedahl, Fletcher, Beglarian, & Wersen, 1968; Mark, 1996).

In 1965, the U.S. Department of Education funded the Manhattanville Music Curriculum Project (MMCP). The goal of MMCP was to engage children in music through an active, creative, and expressive curriculum. MMCP began with a thorough investigation of the quality of music programs throughout the United States (Thomas, 1970). The MMCP's research revealed that most schools offered a bland, mediocre music education program. Ronald Thomas (1970), author of the *MMCP Final Report*, painted a bleak picture in his introduction:

It didn't make any difference where you went, it was almost always the same...music education was a straitjacket where everyone was expected to do, be, think, respond, learn, hear, reject and act in the same way. Little children in Oregon, Vermont, Texas or Iowa all took out their standardized music series books...and did the same thing in the same way for about thirty minutes. Why? Because this was the way it was done with little children. (p. ix)

In his report, Thomas stated that K-12 music education resulted in a systematic way of perceiving music that required everyone to hear, perceive, and enjoy it in the same way. There was little room for students to explore sound, examine differences in musical taste, or make aesthetic decisions.

However, the MMCP's research (Thomas, 1970) also identified 92 innovative school music programs throughout the U.S. An in-depth look at these programs led to the development of the MMCP curriculum through three stages:

1. *Phase one* was primarily an experimental phase, in which the investigators explored the effects of various educational strategies. The primary goal was to develop insight into students' personal involvement in music, and to consider new, yet effective, ideas for teaching and learning this subject.
2. *Phase two* was devoted to revising and synthesizing information into a feasible curriculum for grades one through twelve.
3. *Phase three* focused on refinement and field-testing of curriculum items, teacher education programs, and an assessment instrument for measuring student growth.

While MMCP yielded an innovative and active music curriculum, funding for the program ended in 1970. However, MMCP's effects are still evident in current music education practices, as reflected by the continuing emphasis on composition, improvisation, and active participation on the part of the student.

### **Three European Pedagogies: Dalcroze, Kodály, and Orff Schulwerk**

The emphasis of active and creative music making on the general music curriculum, as exemplified by the MMCP, continued to grow throughout the 1960s and 1970s. Around that same time, American music educators were introduced to the teaching approaches of Émile Jaques-Dalcroze (1865-1950), Zoltán Kodály (1882-1967), and Carl Orff (1895-1992). Although the respective techniques differed, all three pedagogies emphasized creative thinking in children (Abeles, Hoffer, & Klotman, 1984; Carder, 1990). American music educators found these pedagogies exciting because of their active and child-centered nature (Mark, 1996). These approaches still permeate

music educators' practices today (Campbell & Scott-Kassner, 1995; Peddell, 2005).

### *Émile Jaques-Dalcroze*

In his books, *Rhythm, Music, and Education* (1921), and *Eurhythmics, Art, and Education* (1972), Jaques-Dalcroze explained how he developed his pedagogy by observing particular shortcomings in his conservatory students' preparation. He observed that these adult students often had trouble performing rhythms correctly, yet he was struck by the fact that his students demonstrated excellent rhythm and steady beat in ordinary physical movements, such as walking and skipping. Additionally, he wanted his students to have a greater sense of the interrelatedness of musical concepts, such as sight singing, form, and harmony, rather than experiencing these elements of musicianship as individual components.

The Dalcroze approach is comprised of three primary elements: eurhythmics (rhythmic training using the body), solfège, and improvisation. Many people associate eurhythmics with the Dalcroze approach, though solfège and improvisation are equally important aspects. Eurhythmics often dominates early experiences with the approach because Jaques-Dalcroze believed that "rhythm was the fundamental motivating force in all of the arts, especially music" (Landis & Carder, 1990, p. 11). After sufficient training in eurhythmics, Jaques-Dalcroze advocates improvisation for developing freedom at one's instrument, as well as a chance to synthesize the elements of music. While Jaques-Dalcroze focused his efforts on keyboard improvisation, music educators can apply the same principles of instruction in improvisation by using available classroom instruments (Campbell & Scott-Kassner, 1995).

In a typical introductory Dalcroze lesson, students respond kinesthetically to

music using quick reaction games. The “follow” is the simplest of these, in which students physically react to music as it changes. During the follow, students listen for changes in music improvised by the teacher, usually played on a piano. The student then reacts to the change as quickly as possible. An example of this might be skipping to music in compound meter or marching in duple meter. Classes occur in a group setting, allowing students to develop the nonverbal communication skills necessary for music and movement, as well as providing the opportunity for them to learn from one another (Mead, 1994).

As students progress, musical stimuli become more complex, addressing such elements as pulse, subdivision, meter, polymeter, anacrusis, crasis, metacrusis, canon, counterpoint, phrase, and form. Creative thinking is pervasive throughout the lesson, as students are encouraged to create movement from imagery described by the teacher. “Plastique Animée” (often referred to as “plastique”) is often the culminating experience in a Dalcroze lesson. Using prior experiences, students create movement that is physically expressive of a musical composition (Frego, Gillmeister, Hama, & Liston, 2007).

The Dalcroze approach continues to influence the teaching of elementary general music (Carder, 1990), although few educators recognize its origin. Beat competency and creative movement in response to sound, both attributable to Dalcroze, are considered important in teaching music to children, and are a primary emphasis for practitioners’ pedagogy (Peddell, 2005). Additionally, elementary teachers frequently use eurhythmic techniques, such as the “follow,” although they may not recognize the technique as a Dalcroze device.

### *Zoltán Kodály*

Zoltán Kodály was a dedicated musician, composer, teacher, and nationalist, who recognized his country's diminished interest in the knowledge and performance of Hungarian folk music. From 1906-1908, Zoltán Kodály and Béla Bartók wandered the Hungarian countryside collecting native folk songs. They assembled their collection of authentic folk music in the *Folk Music of Hungary* (Kodály, 1960) to help re-establish their country's nationalistic pride (Mark, 1996).

Kodály was skeptical of music education in Hungary because he had observed that: (a) the quality of song literature in the public schools was unsatisfactory, (b) teachers overused the piano in the classroom, which in turn, kept children from understanding the beauty of the voice and melodic line, and (c) music classes were often boring and passive experiences for children. So, following their journey, Kodály developed a pedagogical system for children, intended to reawaken the musical spirit of the Hungarian people (Kraus, 1990). He wrote an article outlining his goals for music education in Hungary entitled "The Hundred Year Plan," which was subsequently published in *The Selected Writings of Zoltán Kodály* (Kodály & Bónis, 1974).

Features of a Kodály-based lesson include the use of authentic folk music, an emphasis on singing and the use of solfège, music literacy skills, and pursuit of active and pleasurable music-making. In a Kodály-based lesson, the teacher uses a three-stage method to present individual musical concepts: prepare, present, and practice. Students employ creative thinking as a culminating experience that demonstrates learned concepts. For example, students might be asked to compose a rhythmic pattern to play on a tambourine using newly learned rhythms, such as quarter notes and eighth notes (Choksy,

1981).

Kodály's pedagogical influence on the general music curriculum in America is still evident in teachers' use of singing, solfège, and the Curwen hand signs. A number of studies suggest educators commonly use the Kodaly approach, although not necessarily to the exclusion of other teaching methods (Brophy, 2002; Frego & Abril, 2003; Peddell, 2005).

### *Carl Orff*

The Orff Schulwerk approach, developed by Carl Orff and Gunild Keetman (1904-1990), is often associated with pitched and un pitched percussion instruments such as xylophones, glockenspiels, triangles, and hand drums. However, playing instruments comprises only a small part of the total philosophy. The primary foundation of Orff Schulwerk is based on the development of "elemental building blocks" as a basis of musical knowledge, and creative thinking, in the form of improvisation and composition (Carder, 1990).

Improvisation is the primary process through which the Orff media (singing, speaking, moving, body percussion, and playing instruments) are experienced. Students learn basic rhythmic and melodic patterns, then explore and improvise with them. This process generally occurs in a social and interactive environment, where students develop fluency and originality of musical ideas (Steen, 1993).

A typical Orff lesson includes three stages: imitation, exploration, and improvisation. During the first stage, students imitate musical patterns provided by the teacher such as rhythmic clapping, echoing melodic patterns, or imitating a song by rote. Next, the student is given an opportunity to explore and manipulate these patterns,



leading to a unique creation. The final stage in the lesson is to improvise or compose a pattern that will fit into a larger musical form (Steen, 1993).

Carl Orff discusses the use of musical notation in his book *The Schulwerk* (1978). While the use of formal musical notation is not discouraged in the Orff method, its use is typically delayed until it becomes necessary. Students sing, play, compose, and improvise complex music before learning musical notation. He believed that musical symbols should only be introduced when students expressed a desire to notate music.

The Orff approach is common throughout the United States and continues to gain popularity among elementary general music teachers. Hoffer (1981), Nelson (1988), and Rasor (1988) suggests that Orff is the most widely used European-based approach, with over 60% of the teachers in her survey reporting that they use the Orff approach to some degree. The use of Orff instruments is considered an important and frequent part of the general music curriculum (Peddell, 2005). However, the American model of Orff Schulwerk has changed significantly since its arrival in the U.S. during the 1960s. The modern American Orff-trained teacher places a greater emphasis on musical notation, world music, and found sounds (Frazee, 2006).

### **National Standards for Arts Education**

By the end of twentieth century, the influences of projects such as the MMCP, CMP, and pedagogies such as Dalcroze, Orff, and Kodály, were visibly evident in the development of music education curriculum. From 1992 to 1994, MENC: the National Association for Music Education (MENC), in conjunction with the Consortium of National Arts Education Associations (CNAEA), developed educational standards for achievement in music education, theater, visual art, and dance. The United States

Congress adopted the *National Standards for Arts Education*, in 1994 as part of the *Goals 2000: Educate America Act* (CNAEA, 1994). The passage of these standards represented an important milestone for music education as a subject of the core curriculum of American education. The national standards also represented a paradigm shift for music educators, as composition, improvisation, arranging, and evaluating music became an integral part of the written curriculum.

### **Lack of Creative Thinking in the Music Classroom**

Between the publication of the *National Standards for Art Education* and the beginning of the twenty-first century, many state departments of education adopted, and in some cases adapted, the national standards for music education. Yet, current research indicates that elementary general music teachers still express concern regarding their ability to implement the national standards, especially as they relate to teaching creative thinking skills (Brophy, 2002). Some scholars have even gone so far as to say that music education is still dominated by traditional music appreciation, focusing on a disinterested and disembodied stance toward music listening and analysis (Regelski, 2006). Additionally, research on in music education suggests that while curriculum reflects a greater interest in creative thinking, the majority of music classrooms still lack in-depth emphasis on music creation (Strand, 2006).

In-service teachers report that they regard the pedagogy of improvisation, composition, and singing as the weakest component of their collegiate training (Brophy, 2002). Furthermore, a study by Bell (2003) indicated that participants were inconsistent in their application of the national standards. The participants reported being inadequately trained to teach all aspects of the national standards, and that composition

and improvisation were the most difficult standards to implement. Other challenges reported by practitioners included lack of time, equipment, and space, as well as a fear of loss of classroom control (Strand, 2006; Whitcomb, 2005).

### The Construct of Creative Thinking

The term “creativity” is ambiguous and often misunderstood both inside and outside the profession of music education. This conundrum is perhaps best summarized by Bohm (1998) who states, “Creativity is, in my view something that is impossible to define in words” (p. 1). Many philosophers, psychologists, and educators have similar conclusions, that the lack of a definition for creativity creates problems for both research and pedagogical practices (Plucker, Beghetto, & Dow, 2004).

In *Creativity: Flow and the Psychology of Discovery and Invention* (1996), Mihaly Csikszentmihalyi discussed the importance of domain specificity to the creative process. Csikszentmihalyi theorized that creative thinking is different in every subject area, and therefore, requires a different set of enabling skills. Because composing a symphony requires different prior knowledge than inventing a new technological device, he suggested that one must have a sizable command over the knowledge of their domain in order to make a creative contribution to their field of interest.

Csikszentmihalyi (1996) theorized three elements that comprise creative thinking. First, it must be domain specific. Second, other members of the field must accept it as creative and valuable. Lastly, a person must have an act, idea or product that contributes something new and significant to the existing domain. When all three criteria are met, we have what he refers to as “Creativity with a Capital C” (p. 22).

Moreover, Csikszentmihalyi (1996) added, “Creative thinking does not happen in

people's heads, but in the interaction between a person's thoughts and a socio-cultural context" (p. 23). While creative thinking requires thorough understanding of one's domain, ultimately, other people, not the creator, make the determination as to how creative a particular idea or product rates within the community.

Csikszentmihalyi suggested that children cannot be creative because they lack sufficient command over a particular domain, and therefore are incapable of producing something that could make a significant impact. However, he acknowledged that while children cannot typically make a creative contribution to a body of knowledge they know little about, they can engage in creative thinking, as well as experience "flow." Flow refers to the state of effortless concentration and enjoyment, which only arises from deep engagement in creative thinking. Children, like adults, can reap the benefits of flow by feeling joyful, involved, purposeful, and motivated, when they are fully engaged in a particular activity. Thus, Csikszentmihalyi theorized that students could practice creative thinking before they acquired sufficient domain knowledge.

Other scholars disagree with Csikszentmihalyi's limited view of creative thinking, which focuses almost entirely on large-scale creative contributions. A number of theorists recognize two other categories of creative thinking, called "little-c" and "mini-c" (Amabile, 1996; Plucker et al., 2004; Kaufman & Beghetto, 2009). Little-c focuses on the use of creative thinking in everyday situations, such as a high school musician improvising in a jazz band, or a painting a work of visual art for a friend as a gift. Mini-c, on the other hand, refers to the intrapersonal and developmental nature of creativity, and is defined as the "novel and personally meaningful interpretation of experiences, actions, and events" (Beghetto & Kaufman, 2007). Examples of mini-c creativity include

a young art student's sketch-pad full of shadowing examples or a song created by a young child for their own amusement.

According to Elliott (1995) and Hickey (1995), not all artistic endeavors use creativity. Consider members of an orchestra performing Beethoven's Fifth Symphony. The act of performing this symphony requires extreme technical facility, great attention to detail, and the ability to translate standard musical notation into aesthetically pleasing and expressive sounds. Musical performance in this sense is sometimes referred to as re-creative, because it does not produce an original product.

Yet, other scholars would maintain that yes, artistic endeavors, by their very nature, are creative. In particular, John Paynter (1992) bases his approach to music in the curriculum on a "belief that *all* musical activity – listening, composing, and performing is essentially creative" (p. 93). Bennett Reimer (2005) also agrees that listening, composing, and performing are all ways in which one can be musically creative. Webster (1990a) acknowledges the confusion of the term creativity:

For instance, a ten year old child's Sunday piano recital might be termed a milestone of creativity by some, while others might view the same child's Orff improvisation during Monday's music class in the same terms. Some view the very presence of music in the schools as an example of educational commitment to creativity, while others gauge creativity solely by the products of these programs or by the awards they win. Some regard creativity as a term best reserved for geniuses, while others look to the spontaneous songs of the three year old or the daydreams of the adolescent. (p. 22)

In addressing this confusion, Webster suggests that for the purposes of educating children in music, our profession may have more success using the term "creative thinking," rather than creativity. According to Webster, the term creativity has lost much of its meaning and power. When using the term creative thinking, Webster suggests the emphasis shifts to the process of creating, rather than on other external influences, such

as creative potential, or giftedness where creativity is a natural outcome. By using the phrase creative thinking, educators are challenged to figure out how the mind works to produce innovative results (Webster, 1990b).

### Need for the Study

Despite the difficulty in defining the construct, creative thinking is considered a critical outcome of K-12 education (Amabile, 1996; Kampylis, Berki, & Saariluoma, 2009). Additionally, the use of creative thinking in the music curriculum can help children develop their musical understanding (Blair, 2007; Kratus, 1994), increase student motivation (Csikszentmihalyi, 1996), and allow for personal expression (Reimer, 2005).

The importance of creative thinking as part of the music curriculum is evident in current teaching practices such as Dalcroze, Orff Schulwerk, Kodály (Carder, 1990), national and state standards (CNAEA, 1994), as well as emerging curriculum frameworks, such as the *Partnership for Twenty-First Century Thinking Skills*. Elementary general music teachers play an important part in the development of musical creative thinking, because they act as role models and mentors, and are responsible for children's musical development when in school (Gardner, 1993).

However, evidence suggests that teachers struggle to implement creative thinking activities such as composing and improvising, citing challenges such as lack of time (Whitcomb, 2005), loss of control over the classroom (Strand, 2006), and insufficient undergraduate training in this subject area (Brophy, 2002). Additionally, while creative thinking often stated to be an important outcome of music education, it is, paradoxically, often the most neglected aspect of music learning (Orman, 2002; Webster, 1990a;

Whitcomb, 2005).

Teachers' perceptions of creative thinking deserve attention from the research community for several reasons. Teachers play a crucial role in the development of students' creative thinking potential (Gardner, 1993). They can enhance children's ability to think creatively, or unknowingly hamper it (Amabile, 1982a). Additionally, teachers often hold a negative view of creative thinking, reporting that the personality traits of creative children, and the messy process of creating, are not conducive to a well-managed classroom. Increased insight with respect to teachers' perceptions and practices of creative thinking may help music scholars and practitioners address the inherent confusion of the ambiguous term creative thinking, as well as better understand the challenges elementary general music teachers face when planning pedagogical strategies for creative thinking activities in the classroom.

#### Purpose Statement

The purpose of this study is to investigate the perceptions and teaching practices of elementary general music teachers' (EGMTs) facilitation of students' creative thinking. This study examines: (a) EGMTs' perceptions regarding the value of creative thinking as part of the elementary general music curriculum, (b) how EGMTs implement creative thinking activities, (c) the extent to which creative tasks are included in their classrooms, and (d) the degree to which they feel successful in guiding children's creative thinking. To that end, the following research questions guide this study.

#### Research Questions

1. *What are EGMTs' perceptions of creative thinking and its role in music education?*

- a. *To what extent do EGMTs value creative thinking as part of the general music curriculum?*
  - b. *Are EGMTs aware that the skills of extensiveness, fluency, originality, and syntax contribute to increased creative thinking skills in music?*
  - c. *To what degree do EGMTs think they are sufficiently trained to incorporate creative thinking experiences in music?*
  - d. *What are EGMTs' perceptions regarding learning conditions that may inhibit or enhance students' creative thinking products?*
2. *In what manner do EGMTs incorporate creative thinking experiences into their lessons?*
- a. *What creative thinking activities do EGMTs design for their students?*
  - b. *How frequent are creative thinking experiences in the elementary general music classroom?*
  - c. *What techniques, if any, do EGMTs use to assess students' creative products?*
  - d. *What challenges, if any, do EGMTs face when incorporating creative thinking experiences into their lessons?*
3. *Do the variables of years of experience, level of education, or professional development training in elementary general approaches have an impact on EGMTs' perceptions or teaching practices of creative thinking?*

#### Significance of the Study

The findings of the present study provide both researchers and EGMTs an important baseline of information regarding the current state of creative thinking instruction throughout the U.S. The present study furthers the dialogue among teachers



and researchers regarding the purpose of creative thinking in music education, the practices of implementing such activities, and the desired outcomes. Such a dialogue is important in refining EGMTs' teaching practices of implementing creative thinking tasks. EGMTs have reported a need for ideas to help them overcome the practical challenges of daily teaching, such as lack of time, equipment, and space.

Additionally, the present study provides an understanding of the kinds of creative activities that currently occur in classrooms. Examining EGMTs' practices reveals trends in the use of certain types of creative thinking activities, and whether or not creative thinking activities are indeed overlooked, or neglected. This study also examines the frequency of creative thinking activities, to aid in determining the depth of students' experiences.

Finally, the present study makes an important contribution to the research base of creative thinking. As will be discussed in Chapter II, few data-based investigations contribute to scholars' understanding of how teachers perceive creative thinking as part of the music curriculum. Additionally, only a few studies have addressed music educators' practices of facilitating creative thinking tasks. The present study provides information to increase quality research on creative thinking and instruction in music education.

### Definitions

For the purposes of this study, the following definitions are used:

Creative thinking:	The process of using both convergent and divergent cognitive skills, for the purposes of evaluating an existing, or creating a new, idea or product (Guilford, 1950)
Creative thinking in music:	The process of using both divergent and convergent cognitive skills, for the purposes of evaluating an existing, or creating a

	new, musical product (Webster, 1990b)
Creativity:	Any process or product that is the result of creative thinking (Hickey, 1995)
Divergent thinking:	The ability to imagine or develop multiple ideas (Guilford, 1950)
Convergent thinking:	Orientation towards one single factual or correct answer (Guilford, 1950)
Composition:	A pre-planned musical performance of original ideas (Wiggins, 2003)
Improvisation:	A spontaneous performance of original musical ideas, occurring within a given context, in real time (Wiggins, 2003)
Invented Notation:	A graphic representation of musical sound, which is non-standard and unique to its creator (Upitis, 1990)
Listening Map:	A graphic representation of a musical work, intended to illustrate one or more musical elements (Blair, 2006)
Plastique Animée:	An improvised movement or dance piece associated with the Dalcroze method (Frego et al., 2004)

#### Organization of the Study

This research study contains five chapters. Chapter I describes the basis for this research investigation, including the background of the study, a discussion of the constructs of creative thinking, need for the study, purpose statement, research questions, significance of the study, and definition of terms.

Chapter II presents a review of literature focusing on empirical studies of creative thinking. The chapter begins with an historical overview of the theories and definitions that shaped early research on creative thinking. The chapter also contains discussions of investigations focusing on teachers' perceptions of creative thinking, measurement of creative thinking, children's creative thinking process and products in music, and the

teacher's facilitation of creative thinking in music.

Chapter III describes the methodology employed during this research study. It contains information on development of the questionnaire, selection of participants, the process of data collection, and a description of the methods used to analyze the data.

Chapter IV presents the results of the study, including demographic information of participants, and data analysis of questionnaire information as it pertains to the research questions. Chapter V provides a summary of the entire study, discussion of the findings, implications for practice, recommendations for further research, and conclusions.