Assessing Elementary School Students' Creative-Thinking Abilities in Music

by
Colleen Wong

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Abstract

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Music education has been part of Malaysian elementary school students and the implementation of it has been going on for many years in the school. Throughout the years, children have been fostered with creative-thinking skills that are considered one of the main components in the learning process. Music has linked students to be part of activities such as improvisation, composition, and instrument playing and collaborating with divergent and convergent thinking.

This study was conducted in 1 government elementary school in Perak, Malaysia. Fifty students from 2 classes participated in this study; 21 nonintervention students and 29 intervention students. The Measure of Creative Thinking in Music (MCTM) was used to test 10-year-old students' creative-thinking skills in music. Four factors were used in scoring the measures: musical extensiveness, musical flexibility, musical originality, and musical syntax.

Results of the MCTM showed a significant improvement in 3 of the 4 factors: (a) musical flexibility ($p = 0.0089$), (b) musical originality ($p = 0.008$), and (c) musical syntax ($p = 0.0047$). Musical extensiveness scored $p = 0.02737$. The overall research in creative thinking skills has concluded that the creative thinking skills can be enhanced through the implementation of an effective teaching and learning process.

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Chapter 1: Introduction

Creative thinking in music is a demanding discipline that encourages students to use their imagination to be creative during music classes. Creativity needs both originality and effectiveness (Runco & Jaeger, 2012), and it is important for the development of children's understanding and appraising of music (Koutsoupidou & Hargraves, 2009). Creatively nurtured students often create music in ways that go beyond their existing knowledge (Garner, 2009).

There are many ways in which children's creative-thinking skills can be cultivated. Students who are exposed to creative thinking in the classroom are able to develop their musicality. Besides developing musical abilities, students can improve their motivational levels when they participate in music classes (Criss, 2008; McPherson & Hendricks, 2010; Portowitz, Moreno, & Hendricks, 2010).

Creating music in the classroom also helps students explore sounds, improvise, and compose music using their creative-thinking skills. According to Webster (1990b), creative thinking in music happens when both divergent and convergent thinking are used. These thinking styles are applied in music activities that require students to exercise their creative-thinking skills to solve problems or to find solutions (Webster, 2002a). Throughout this process, students learn to appreciate and understand music learning even more. Creative thinking is considered to be important because it helps individuals think uniquely and divergently. In other words, students devise new ideas and solve problems they encounter during activities (Sternberg, 2007).

Statement of the Problem

Observations conducted by the researcher indicated that music students in Malaysian public schools were given minimal chances to explore their personal interests

and capabilities. Realizing the need to develop students' creative-thinking skills in formal education, administrators reconstructed the national curriculum syllabus in Malaysia for elementary schools in 2012 in such a way that it would provide the students with more learning experiences to achieve the objectives in the music discipline. The objectives in the music curriculum were implemented to help students to think creatively to the utmost and to guide them to be innovative in composition, improvisation, and exploration (Kementerian Pendidikan Malaysia, 2012).

The topic. This study assessed creative-thinking skills abilities in music among elementary school students in Malaysia for which the national curriculum of Malaysia had been implemented. It evaluated four main components: extensiveness, flexibility, originality, and syntax using the Webster (1994) Measure of Creative Thinking in Music (MCTM).

The research problem. Creativity needs to be implemented in the classrooms because it will help to spark children's reasoning power by teaching them to think beyond their initial imagination (Fairfield, 2010; Forehand, 2005; Kiehn, 2003; Koutsoupidou & Hargraves, 2009; Running, 2008). According to Ghazali and McPherson (2009), although a music curriculum was implemented in public elementary schools 25 years ago, the active implementation is still lacking in many schools because of two main factors: lack of music facilities and lack of adequate resources for music, which has resulted in poor musical experiences in school. The implementation of music in school is important to provide children with multiple opportunities for learning (Chan & Kwan, 2010). However, due to the above factors, children's level of thinking during music classes cannot be nurtured to the maximum.

Students should be given more time to explore the learning of music and to

construct their personal understanding of music. According to Beegle (2010), children should be provided with extra time to explore and develop their musicality during a specific period allocated in the school day. Students need to be exposed to more learning experiences in music, either theoretically or practically. According to Ghazali and McPherson (2009), practical approaches to music learning need to be cultivated among school children to enhance the benefits of formal music learning. When practical or active hands-on activities are implemented, children learn even faster because they understand better (Goodkin, 2002).

This study determined how music activities are able to nurture students' creative-thinking skills. The activities in the study led the students into exploring their abilities in thinking. As Webster (2002a) mentioned, creative thinking occurs at many levels and can result in a product of the greatest minds in music.

Justification. The researcher's primary concern in this study was to understand and assess the creative-thinking skills of elementary school students. Although there were various studies that presented the positive effects of students being exposed to creativity, such as being able to improvise, compose, and stay motivated (Beegle, 2010; Fairfield, 2010; Guderian, 2012; Hickey & Webster, 2001; Kiehn, 2003; Koutsoupidou & Hargraves, 2009; Runco, 2004), there was limited research conducted on this subject in Malaysia. There had been no research conducted using the MCTM in Malaysian elementary public schools.

Even though creativity is one of the major components of the music syllabus in the Malaysian curriculum, little effort has been made to nurture students up to their music level, especially their creative-thinking skills. A creative approach must be encouraged because it can contribute to the development of decision-making skills and problem-

solving abilities of the children (Koutsoupidou & Hargraves, 2009). According to Ahmad (2012), music is a challenging subject because it is designed to help students fulfill education goals that are based on four aspects: aesthetic perception, musical experience, creative expression, and appreciation of aesthetics.

Deficiencies in the evidence. Research indicated the importance of nurturing children at a young age with music and providing ways to train children to improvise, create music, and become creative thinkers (Beegle, 2010; Fairfield, 2010; Forehand, 2005). However, in Malaysia, very little research had been conducted on creative thinking. Chan and Kwan (2010) stated the direction of music education and music appreciation in Malaysia is still low due to unavoidable circumstances, such as the public's low perception of music education. This has resulted in a lack of appreciation and enthusiasm for music.

It is important to study the level of creative-thinking skills in music among students. An understanding of students' deficiencies can be used to help them in their studies. With an understanding of the level of the students' creative-thinking skills, teachers can create music activities to enhance their creative thinking. Therefore, the present study determined the level of Malaysian children's creative-thinking skills.

Audience. This study measured students' creative-thinking ability, and the findings demonstrated how music can make an impact on the students. By looking into the objectives of creative-thinking skills, as presented by Webster (1988, 1990a, 1990b), the researcher was able to recognize the problems and areas of weakness better among the students. Teachers, students, schools, and policy makers should benefit from this research. This research will also help students think creatively by using their knowledge and understanding. As mentioned by Ali, Aziz, and Majzub (2011), activity in the class

can provide new ideas and experiences and encourage communication and problem solving.

Purpose of the Study

The purpose of the present study was to assess the creative-thinking abilities of 10-year-old students in music classes at one public school in Perak, Malaysia. The independent variable was music activities in which ensembles of percussion playing, singing, and improvisation were implemented according to the Kurrikulum Bersepadu Sekolah Rendah syllabus (Kementerian Pendidikan Malaysia, 2000, 2012). The dependent variable was the creative-thinking abilities, which were measured by the MCTM (Webster, 1994).

Definition of Terms

Definitions of the following terms varied from author to author. The study supported the following definitions.

Audiation refers to the ability to hear and to comprehend music for which the sound is not physically present (Hiatt & Cross, 2006).

Convergent thinking refers to an orientation toward identifying a single, correct, or factual answer, such as recognizing an instrument during a listening activity (Fairfield, 2010).

Creative thinking in music refers to a dynamic mental process that alternates between divergent (i.e., imaginative) and convergent (i.e., factual) thinking, moving in stages over time (Webster, 1990b).

Creativity refers to the interaction among aptitude, process, and environment by which an individual or group produces a perceptible product that is both novel and useful as defined within a social context (Plucker, Beghetto, & Dow, 2004).

Divergent thinking refers to 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 (Fairfield, 2010).

Extensiveness refers to the length of time that is involved in the musical response (Webster, 1994).

Flexibility refers to the range of musical expression of three musical parameters: low to high as related to pitch, slow to fast as related to tempo, and soft to loud as related to dynamics (Webster, 1994).

Improvisation refers to a spontaneous performance of original musical ideas that occur within a given context in real time (Wiggins, 2003).

Musicality carries many meanings. Jaffurs (2004) said,

> It can be applied to the skill of a small child who chants a nursery rhyme, to a harmonica player who plays by ear, or to a conductor such as Toscanini. Some educators and philosophers believe that musicality is manifested in the technical achievements of musicians. Others believe that technique is secondary and musicality is the level of expression a musician is able to bring to a work. (p. 3)

Musical originality refers to the way in which a child manipulates musical phenomena in a unique fashion (Webster, 1994).

Musical syntax refers to the extent to which a child manipulates musical phenomena in a logical and inherently musical manner according to patterns of musical repetition, contrast, and sequencing (Webster, 1994).

Chapter 2: Literature

The first part of the chapter provides an overview of the conceptual framework of the research that forms the foundation from many current research studies in music and music education. The researcher looked into the four-step process of creative thinking in humans by Wallas (1926). Therefore, the review of related research on the theoretical framework of the Wallas model is discussed from selected studies. The research investigated the ideas of other creative thinking theorists, such as Guilford (1897-1987) and Torrance (1925-2003), who were also among the first few theorists to provide the fundamental tools for identifying the element of creative thinking.

The second part of the chapter examines the current studies and tests on the application of creative thinking in the general elementary music classroom. The research investigated how educators use different approaches to present their music research in creative thinking in the aspects of improvisation, composition, and instrument playing when facilitating with the students. The purpose of this research was to assess the level of creative-thinking skills among elementary school students in Malaysia. The Wallas (1926) model was implemented in the process throughout the activities of improvisation, composition, and instrument playing. The MCTM was used to measure the level of creative thinking in music among the students. There were four elements on which the MCTM assessed the students: originality, flexibility, extensiveness, and syntax.

Finally, the literature review includes a discussion of how music education, music curriculum, and music activities affect and support creative-thinking skills among students. The categories of research (e.g., person, product, process, music, and music education) that were reviewed and proposed through the aspects of creative thinking in music or other fields have expanded in scope since the introduction to creativity by

Guilford (1950).

Theoretical Framework

Processes that enhance the development of creative thinking connect well with many psychologists' theories. One of the difficulties faced when a researcher is conducting research on creative thinking is the absence of a concrete definition of creative thinking (Maslow, 1959). Some of the earliest scholars who defined creative thinking include Graham Wallas (1858 to 1932), Joy Paul Guilford (1897 to 1987), and E. Paul Torrance (1915 to 2003). These psychologists played an important role in leading others into discovering what creative thinking is about. The researcher will be discussing the implementation of the Wallas model of theory and how this model can guide the students into engaging themselves during music activities. Later, Guilford's structure of intellect will be explained because it also plays an important role in Webster's test.

Graham Wallas. Wallas (1926) presented the first model in his work through his book entitled *The Art of Thought*, which presented four stages in the creative-thinking process. He believed these four stages need be in a particular sequence but may be changed due to circumstances faced during the process. Wallas' theory suggests knowledge as a necessary position. By this, he means that musical knowledge is important. In order to go through the model, the student must, at a minimum, have knowledge about music education that will enable the student to find ways to take part in the process. The acquisition of knowledge is the key foundation of the model. According to Runco and Chand (1995), knowledge can be declarative or procedural. Declarative knowledge means factual information gained and procedural knowledge represents know-how, according to the authors. Procedural knowledge is the ability to influence creative thinking, meaning it can be facilitative in the process if the plan works.

On the other hand, procedural knowledge can restrain reactive thinking if the procedure does not work. In such an instance, the process would keep repeating and not come to a conclusion. Knowledge is different from intelligence or information. Information is the objective body of conceptual and relational items that are gained through observation, reading, and watching that forms the base on which an individual builds knowledge (Runco & Pritzer, 1999). In music activities, information can be gained during observing and participating. Students gain knowledge and experience through their active participation in composing, improvising, and playing instruments.

Although Wallas' model of creative processing was developed from his perspective rather than appropriate observation, this model has been acknowledged by many theorists and researchers of creativity (Rothenberg & Hausman, 1976). The basic model has been used by many researchers as a background for their research. This model has been revised by researchers to fit current practices. Webster (1990b), who used Wallas' model, believed many studies have revealed the significance of creative thinking progression through all of the four stages. Guilford (1950) implemented the model in his structure-of-the-intellect model, which has also been reconstructed as explained later in the chapter.

The four steps of the Wallas (1926) model are known as (a) preparation, which is the first process in which the definitions of issues, observation, and study are implemented; (b) incubation, in which problems are analyzed after preparation; (c) illumination, in which the implementation of a new idea finally emerges; and (d) verification, which is the final process of identifying, elaborating, and applying. According to Torrence (as cited in Plsek, 1996), the Wallas model of creativity forms the basis of all creative-thinking training programs. The processes in the Wallas model are

not designed intentionally at the beginning; the outcome of the process turns out to be naturally creative. Wallas believed the outcome of this theory would guide students to think in depth, and solving each of the steps would help the students to continue to another level (Cairns, 1997)

Preparation. The first process in the Wallas model prepares the person to work on a problem, which means to focus on or identify the problem while examining the dimensions of it. According to Rothenberg and Hausman (1976), preparation is a time when the creative thinker receives and gathers raw materials. Subsequently, the person submerges in the information that he or she has received. This process is usually temporary because the individual will slowly shift to another phase (Aldous, 2007). If a solution is found during this stage, the remaining three stages will not be needed (He'lie & Sun, 2010).

The preparation stage prepares students to use their minds by observing things happening in the class. For example, the first steps can be comparable to how a student needs a teacher's assistance during the learning process. This is partly because some students cannot connect and transfer the new information they have just received. Peterson and Madsen (2010) and Traxler (2008) found that a teacher's guidance is important at the very beginning of all activities in the class to ensure that a student understands what was instructed. Children typically learn through observing, and it follows with an imitation (Criss, 2008).

To make the information clearer, activities are blended into teaching. When the new applications are blended into the activities, only then will students understand, little by little, the application being taught to them before. Webster (1990a) mentioned that the solution to educational problems lies in engaging children in active, structured, and

imaginative thinking without limit. It is important to make sure that students understand the process of learning and connecting themselves during the class in order for them to create a product or even become spontaneous on their own after they understand the whole sequence in learning. It is important for the students to identify and work on the problems they are facing.

Incubation. When problems have been identified, they will be internalized and moved to the unconscious mind. A person who is experiencing incubation will put the issues aside for a period of time. According to Aldous (2007) and Rothenberg and Hausman (1976), most individuals incubate their ideas and these ideas are accompanied by emotions. These ideas normally have not found the right formula and are being expressed unclearly. Many students are not sure or not confident with what they have in mind because they are worried the ideas proposed by them are wrong or do not fit into the situation. Students reported that incubation consists of ideas that keep occurring over a certain time, perhaps minutes to years (Aldous, 2007).

According to Rothenberg and Hausman (1976), "A mood or idea is being incubated when it involuntarily repeats itself with more or less modification during a period when the subject is also thinking of another topic" (p. 77). According to Wallas (1926), there are two stages in incubation: (a) the negative fact in which, during the process, individuals do not voluntarily or deliberately think on a specific error and (b) the positive fact, when a series of unconscious and involuntary mental activities will take place. Wallas mentioned that the first stage normally gives a better result because it saves time. During this stage, it is best if an individual gets to free the mind from working on unconscious or partially conscious processes of the mind.

Rothenberg and Hausman (1976) also mentioned that during Wallas' incubation

process, a certain amount of physical exercise is needed, meaning that a thinker cannot be forced into producing or thinking about a product. The thinker needs to be given sufficient time for relaxation. Wallas (as cited in Rothenberg & Hausman, 1976) gave an example on how, at times, individuals need a certain amount of physical exercise. There are many approaches in music that use physical exercises in their activities, such as the approach introduced by Carl Orff (1895 to 1982). Orff created activities called Orff Schulwerk that are based on what a child does in his or her daily life (Splitter & Splitter, 2006). Some of the activities use the body to create and express what the person would like through clapping, patting, snapping, and stamping (Goodkin, 2002). These activities are known as body percussion.

The holistic approach introduced by Orff also combines singing, movement and dance, speech, and instrument playing. It also uses creative approaches in teaching and learning. Wallas (1926) foresaw that in order to trigger a child's creative thinking, a stagnant approach would not work. He designed the process in a way that, during incubation, for example, the method of trying out is applied to redefine the mood or ideas that are kept aside. This is when improvisation can be used to help children explore what they have been keeping inside their minds. It is important not to direct students into doing too many things at one time because this will create confusion (Criss, 2008). An example of the incubation process is when the students have finally understood what the teacher requires in improvisation activities. The improvisation activities mentioned could be an activity of questioning and answering, using the Orff approach in which body percussions are implemented. The teacher asks a question using body percussion, and the student needs to devise another body percussion to answer the teacher. Unfortunately, the student has many ideas that he or she is not sure which to present.

Illumination. In this stage, new ideas emerge from the preconscious processing stage in conscious awareness. It is something to which a person connects or an idea suddenly emerges. The problem-solving phase happens in this process. Illumination occurs when the ideas that have been incubating become related to a specific goal for the person (Rothenberg & Hausman, 1976). Wallas (1926) explained that, in order to achieve this stage, the mind must be relaxed and not exhausted. Ideas tried and used during incubation can be multiplied into more results. However, the user knows and understands which ideas are acceptable and pushes away those that are not connected.

He'lie and Sun (2010) stated three main elements could be found in illumination. First, illumination is a transition that has a major impact on the problem solver's conception of the problem. Second, illumination usually happens suddenly and the person will experience immediate change that he or she does not realize at the knowing stage. Third, even though illumination does not point directly to the thinker in finding a solution, it leads to collecting necessary highlights of the problem that were not noticed before. As mentioned in incubation, during which the students are still choosing the right rhythms to show with few ideas in their mind, the mind suddenly figures out which body percussion can be demonstrated to the class.

Verification. The last stage, verification, closely resembles the first stage. In this last process, the ideas that have been obtained from illumination need to be emerged, elaborated, and revised. Although revision happens, the important structure is seldom changed. This step is vital because these ideas come about based on the three steps that the person has experienced. Verification means that ideas are ready to be put together and shown to others. The student is finally sure which body percussion he or she would like demonstrate to the classmates and the teacher after the process is completed.

According to Rothenberg and Hausman (1976), these four stages, which can be distinguished in creative thought, may overlap, meaning that, throughout the processes, "incubation often occurs along with preparation, and revision may begin during the period of illumination" (p. 78). During preparation stage, while an individual is still receiving new ideas, another idea might be incubated and happen again from time to time. Even though the phases in verification and preparation are clearly seen as conscious activity, the phases of incubation and illumination are marked as nonconscious activity (Aldous, 2007). Wallas (1926) believed that, in any form of activity, it is best to follow the steps that he proposed in order to obtain a better result.

The impact of Wallas' (1926) work is still noticeable in the works of scholars such as Barron (1988), Csikszentmihalyi (1996), Fritz (1991), and Hickey (2002), although they created alternate models of the creative-thinking process. Nevertheless, the basic foundation in Wallas' characteristics are still referred to and blended into their approaches. The authors also mentioned that Wallas' work helped to describe the process of creative thinking. Another philosopher, J. P. Guilford, examined creativity in a different aspect in which he identified personality characteristics of an individual that showed high levels of creative thinking (Fairfield, 2010).

J. P. Guilford. Guilford's musical creativity theory, the structure of intellect model, was designed to assess many types of intelligence. According to Cairns (1997), Guilford described eight creative abilities: (a) sensitivity to problems, in which an individual has the ability to identify subtle structures of a problem; (b) fluency, which is the ability to present several ideas at a time; (c) novelty, which involves answers that are unusual but normally can be accepted; (d) flexibility, which means being able present new ideas rather than having the same direction in thinking; (e) analyzing and

synthesizing, which means to analyze and to configure a new structure; (f) redefinition, which means to build or create a new dimension from the existing one; (g) complexity, which means being able to think continuously on connected concepts; and (h) evaluation, which means being able to identify the difference between appropriate and inappropriate ideas.

Among all eight, four of these creative abilities, known as divergent thinking abilities, have stood out as strong indicators of creativity. They are known as fluency, flexibility, originality, and elaboration in the MCTM assessment (Hickey, 2002). Webster (1994) used these four abilities in his MCTM model, and they fell under the category of divergent thinking that is used in the process to assess creative-thinking skills in music. Webster did not use Guilford's last creative ability, known as evaluation (Hickey, 2002). Instead, he added a MS in MCTM factors in order to suit the component of the assessment in music he was assessing.

Webster's measurement in creative thinking for music. Webster (1994) developed a creative aptitude test to measure early elementary children's creative-thinking skills in music. This test was influenced by the Wallas model of creative process and the Guilford structure-of-intellect model (Hickey, 2002), and flexibility and originality aptitudes were integrated into the supporting skills of Webster's model. The test was divided into the three parts of exploration, application, and synthesis, and the scoring was based on four elements in creative thinking: (a) musical extensiveness (ME), which was also known as fluency; (b) musical flexibility (MF); (c) musical originality (MO); and (d) musical syntax (MS). During the MCTM administration, students were tested on a simple task at the very beginning and then they progressed to a higher level of difficulty in terms of behavior. There were no correct or wrong answers expected.

All three parts of this test required the students to connect themselves with instrument playing, composing, and improvisation. Creative thinking skills were assessed based on four criteria: fluency, flexibility, originality, and syntax. Scholarly research in music education indicated that students exposed to music activities in classes were more likely to progress when the MCTM was given to them. A nurturing of musical creativity will enhance students' creative-thinking abilities (Koutsoupidou, 2010; Koutsoupidou & Hargraves, 2009). The application of Wallas' approach, along with the use of the MCTM as a measuring tool in the study, determine whether students' creativity thinking abilities are likely to be seen, although research has proven the significance of the method.

Creative Thinking

Creativity has been a highly discussed topic in many fields. Different theorists offer different definitions regarding what constitutes creativity. Two questions that have arisen in finding the meaning of creativity are as follows: What is creativity? Who has the gift of creativity? These questions can lead the reader to researchers who have the answers. In 1950, Guilford was the first person to call for scholarly work on creativity. Since then, more research regarding creativity has been conducted. Tan (2007) edited *Creativity: A Handbook for Teachers* containing essays on the subject from a wide variety of scholars, such as Kim, Runco, Craft, and Ward. Running (2008) compiled and laid a foundational groundwork on creativity and music education.

Kim (2007), Peterson and Madsen (2010), Rozman (2009), Runco (2012), Runco and Pritzer (1999), and Webster (1990a, 1990b, 1994, 2002a, 2009) also wrote articles explaining their thoughts regarding creativity and how creativity had given students a new way to explore music learning. Harding (2010) examined how fostering creativity is related to leadership and change. Webster presented several articles and discussed

creative thinking in music, which involves composing, performance (i.e., improvisation), and analysis.

Guilford (1950) defined *creativity* as "the abilities that are most characteristic of creative people. Creative abilities determine whether the individual has the power to exhibit creative behavior to a noteworthy degree" (p. 444). It means that creativity depends on a person's motivational and temperamental traits. According to Guilford, traits in this context mean "any relatively enduring way in which one person differs from another" (p. 444). A person's behavior can be organized under categories of aptitudes, interests, attitudes, and temperamental qualities. An aptitude means that individuals are ready to do certain things through either their innate determination or environmental determination. Interest refers to a person's willingness to engage in activities in which he or she is involved.

Attitude determines whether the child or adult is willing to participate or not. Temperamental qualities describe a person's emotional disposition, such as self-confidence, optimism, or nervousness. All of these categories produce originality in the process (Guilford, 1950). Runco and Jaeger (2012) emphasized two main cores in creativity: originality and effectiveness. The product created by children is tempered by the creativity they exhibit. Runco and Jaeger also agreed that originality and effectiveness play an important role in creativity. In addition, creativity is simply a process through which an individual needs to in order to get a product after trial and error.

Hickey and Webster (2001) believed that creativity could be understood better by examining four different perspectives: person, process, product, and place. Each of the elements in this perspective can describe the creativity of a person. According to the authors, a creative person is at least someone who is able to take the risk, have a sense of

humor, and is open minded. Personality affects the outcome of the product worked upon. Martinsen (2011) found seven characteristics related to the personality in creativity: associative orientation, instability, motivation, ambition, need of originality, flexibility, and agreeableness. These seven factors of creative personality were identified using the Creative Person Profile. Martinsen found each characteristic could describe creative people, although not everyone has all seven characteristics.

The second perspective is called creative process, which can be described as thinking (Hickey & Webster, 2001). This takes place while a person is planning to develop a creative product. This process can be identified from the four-step processes taken from Webster's model, which were adapted from the Wallas model of preparation, incubation, illumination, and verification. According to Kokatsaki (2012), the creative process starts with an idea or intention. By the end of the total process, a creative product should be the outcome.

The third perspective, known as creative product, is something that is original and valuable (Hickey & Webster, 2001). It is a final product achieved after creating a process. This can be witnessed during music classes in musical composition or improvisation in which creations by students are produced during the creative process. For example, creations used by students include rhythm activities in the Orff approach in which question-and-answer activities, as well as call-and-respond games, are used with recorders or Orff musical instruments. Students can also use body percussion to create rhythm to develop a product.

The final perspective, creative place, refers to classrooms and environment in a study place. When students are provided with a proper environment, they will be encouraged to be more confident and adventurous. They will accept the challenges of

learning and trying new techniques because they feel more comfortable. Hickey and Webster (2001) mentioned that the two main supporting conditions for creative thinking in music are a supportive environment and motivated participants. Students need to know they are safe and free to create and share their ideas in music. They need not worry about being technically right or wrong or proper during their sharing. In this way, students will not rush but will have ample time to develop a satisfactory creative product while feeling good about it (Hickey & Webster, 2001).

According to Hickey and Webster (2001), with a good and positive environment, students find they are not being influenced by others during the activities that require them to compose, improvise, or analyze while listening. They are motivated to create and give creative input in their music classes. Normally, the process of divergent thinking happens when they are motivated (Starko, 2010), which means students are able to discover new ideas and are willing to go into exploration. Starko (2010) also mentioned that the environment mentioned must be sustained in order to provide students with broader inventive product and musical range because directive and positive impacts are conveyed to them.

When children think and behave creatively, they will demonstrate an existence of creative thinking (Chronopoulou & Riga, 2012). Generating creativity in children unlocks the door into exploring, learning, and gaining knowledge in every part of children's developmental areas (Dischler, 2010). In addition, creative exploration can lead to solving problems and gaining new ideas about the tasks they are facing. Children need to be given the opportunity to experience and explore (Kim, 2007). In letting children practice the transformation, they learn to use their personal ability in the task given to them. By implementing creativity in their everyday learning, children learn to think

creatively rather than waiting for the answer or for further instructions from the teacher. Teachers are encouraged to use the approach of student-centered learning rather than teacher-centered learning.

Examples of learning rhythm syllables in a creative way include approaches introduced by Orff (Goodkin, 2002) or Kodaly (Chosky, 1999) during activities such as composing, improvising, and playing music instruments. These learning processes will help children to learn to interact, to work in groups, to have a better understanding of the information, and to master the learning as they learn from their peers. Peer learning has been identified as the gaining of knowledge and skills with help and support from each other (Bertucci, Johnson, Johnson, & Conte, 2012; Guderian, 2008, 2012; Topping, 2005). Creativity brings out the inner feeling of fulfillment in intellectual, emotional, and physical terms, and it touches on having communication with others (Csikszentmihalyi, 1998). Dischler (2010) also mentioned that, when children were supported in their creative work, they are able to engage themselves in the learning process.

Goodkin (2002) asserted that movement and mental development could connect well and foster students' enthusiasm and interest in learning. Barbot and Lubart (2012) and Chronopoulou and Riga (2012) proved that music and movement activities can enhance the growth of children's creative thinking. Even approaches by Orff, Kodaly, Gordon, and many others showed the progress of children's learning in music using music and movement activities (Chosky, 1999; Garner, 2009; Locke, 2009; Sogin & Wang, 2008; Splitter & Splitter, 2006).

Incorporating creativity during music activities in the classroom indirectly encourages creative thinking, problem-solving skills, and critical-thinking abilities among students, as well as promotes high-level thinking within the context of solving problems