

ABSTRACT

**THE COMPARATIVE EFFECTS OF THE TRADITIONAL TAIWANESE CURRICULUM AND A CURRICULUM BASED ON MUSIC LEARNING THEORY ON THE DEVELOPMENTAL MUSIC APTITUDES AND SINGING PERFORMANCE OF FIRST GRADE STUDENTS IN TAIWAN**

By

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The purpose of the study was to investigate the effects of the use of the traditional music instruction and a Music Learning Theory-based instruction on the development of the music aptitudes and singing performance of Taiwanese first grade students. The problems were: (a) to determine whether Taiwanese first grade students who receive a

**A DISSERTATION**

Music Learning Theory-based curriculum will have different tonal aptitude scores on PMMA than students who receive instruction using the traditional Taiwanese curriculum.

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(b) to determine whether Taiwanese first grade students who receive a Music Learning Theory-based curriculum will have different rhythmic aptitude scores on PMMA than

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students who receive instruction using the traditional Taiwanese curriculum, (c) to

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determine whether Taiwanese first grade students who receive a Music Learning Theory-based curriculum will demonstrate different levels of singing achievement than students

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who receive instruction using the traditional Taiwanese curriculum, and (d) to compare Taiwanese first grade students' PMMA scores to those of standardization norms as reported in the PMMA Manual

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## ABSTRACT

Four intact Taiwanese first grade classes were the sample for this study. Two classes were randomly assigned to the control group and the other two to the experimental group.

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Music Learning Theory. All students were pre- and post-tested using PMMA.

Instruction occurred for 12 weeks. By consisted of one 40-minute class period per week. At the end of the instructional period, in addition to the PMMA posttest, students were audio-taped performing one criterion song. Students' singing performances were rated by three independent judges using an investigator-designed rating scale.

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Students who received instruction based on Music Learning Theory achieved significantly greater gains in their developmental rhythm aptitude than students who received instruction using the traditional Taiwanese curriculum. There was no significant difference between the control group and the experimental group for developmental tonal aptitude and singing performance of Taiwanese first grade students. The problems were: (a) to determine whether Taiwanese first grade students who receive a Music Learning Theory-based curriculum will have different tonal aptitude scores on PMMA than students who receive instruction using the traditional Taiwanese curriculum; (b) to determine whether Taiwanese first grade students who receive a Music Learning Theory-based curriculum will have different rhythm aptitude scores on PMMA than students who receive instruction using the traditional Taiwanese curriculum; (c) to determine whether Taiwanese first grade students who receive a Music Learning Theory-based curriculum will demonstrate different levels of singing achievement than students who receive instruction using the traditional Taiwanese curriculum; and (d) to compare Taiwanese first grade students' PMMA scores to those of standardization norms as reported in the PMMA Manual.

Four intact Taiwanese first grade classes were the sample for this study. Two classes were randomly assigned to the control group and the other two to the experimental group. The control group received music instruction primarily based on the traditional Taiwanese curriculum. The experimental group received instruction based on Music Learning Theory. All students were pre- and post-tested using PMMA.

Instruction occurred for 12 weeks and consisted of one 40-minute class period per week. At the end of the instructional period, in addition to the PMMA posttest, students were audio-taped performing one criterion song. Students' singing performances were rated by three independent judges using an investigator-designed rating scale.

Students who received instruction based on Music Learning Theory achieved significantly greater gains in their developmental rhythm aptitude than students who received instruction using the traditional Taiwanese curriculum. There was no significant difference between the control group and the experimental group for developmental tonal aptitude and singing performance. Taiwanese first grade students scored significantly lower on the PMMA tonal subtest than American first grade students, as reported in the PMMA Manual. The developmental rhythm scores for Taiwanese first grade students were lower than American first grade students. However, the difference was not significant.

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## CHAPTER 1

### RESEARCH BACKGROUND

In 2001, the Taiwanese educational system for elementary and junior high schools experienced a dramatic reform, changing the structure that had been maintained since Japanese colonialism. The elementary and junior high systems adopted a nine-year mandatory educational plan based on American K-12 education models of curricular integration. In the new Taiwanese educational reform, adoption of an integrated curricular format resulted in educational disciplines being grouped into seven separate domains. Fine arts disciplines, including music, visual arts, and theatre, were integrated into a single educational discipline, named the Arts and Humanities Domain. As a result of this integration, music is no longer viewed as an independent, fine art subject of study (Ministry of Education, 2000).

Music instruction before the development of the Arts and Humanities Domain education format consisted of two forty-minute lessons per week and had an independent content and teaching sequence. With the integration of fine art disciplines into an inclusive domain, music instruction manuals were combined into a collective Arts and Humanities curriculum, and the content of music lessons was designed based on a main theme of the



integrated curriculum. Also, music classes were reduced to one forty-minute lesson per week. The purpose of this study is to explore the effect of the new Taiwanese fine arts curriculum as well as the effect of Edwin Gordon's Music Learning Theory on the music development of Taiwanese first grade students.

### Music Aptitude

Both Gordon (1997a) and Suzuki (1983) believe that all children are capable of learning music if appropriate guidance and instruction are provided. Suzuki deems that the musical environment, as created by parents and teachers, is the most crucial element in a child's success in learning music. However, Gordon provides a more in-depth explanation. He suggests "how much and how well individual students learn depends on their individual levels of music aptitude" (p. 25). Music aptitude is "a measure of a child's potential to learn music" (Gordon, 1997b, p. 9). Gordon suggests that music aptitudes are a product of both nature and environment and can be affected by the environment during the first nine years of life.

As with general intelligence, every child is born with a certain level of music aptitude. Yet, environmental influences affect one's level of music aptitude until one is approximately nine years old. Before age nine, music aptitudes are developmental and fluctuate as a result of one's environment. Music aptitude during this period of time is

called “developmental,” because it can either “increase, decrease, or remain the same but will never be higher than that with which one was born” (Gordon, 1997b, p. 10). After approximately age nine, the child enters into a “stabilized music aptitude” stage, because the child’s aptitude has stabilized and will remain at that level throughout his/her life. Both developmental and stabilized aptitudes primarily consist of tonal and rhythm aptitudes, but stabilized music aptitude includes a music sensitivity component as well (Gordon, 1997b).

Schleuter and DeYarman (1971) contend that there is no systematic evidence to support Gordon’s statement concerning music aptitude. However, studies conducted in recent years have supported that music instruction at an early age may have positive influences on the development of music aptitude (DiBlassio, 1984; Dittmore, 1968/1969; Dowdy, 1996; Flohr, 1981; Jarjisian, 1981; Taggart, 1997). The type of music instruction, including instructional methods and techniques, administered at an early age, may affect how those music aptitudes develop.

#### The Difference between “Method” and “Technique” in Music Education

Method and technique are often used synonymously. However, Gordon (1997a) suggests that method and technique must be clearly distinguished from each other. Method, as defined by Webster (1996), is “a procedure, technique, or way of doing something in accordance with a definite plan” (p. 1209). Gordon (1997a) defines “method” as a

procedure for accomplishing something. Method is used to describe the order “in which sequential objectives are introduced in a curriculum to accomplish a comprehensive objective” (p. 28). “Technique,” on the other hand, is a process of instruction that operates on a smaller scale and is also defined as a teaching aid, which “is employed to achieve one or more sequential objectives” (p. 28). Method takes on significance when the teacher becomes concerned with how a child acquires knowledge from the information transmitted in relationship to the sequence of objectives in a course of study. It is framed in questions such as why, what, and when to teach something. Technique, on the other hand, is framed in how. To best describe the interrelationship between method and technique in the music classroom, Gordon (1988) wrote that “the most important part of a music curriculum is an appropriate method and when it is supported by appropriate techniques and materials, the result is ideal music education” (p. 31).

Generally, current methods used in general music instruction can be traced to a number of individuals whose philosophy of education incorporated the nature of music, the learner, and a particular approach to instruction. Among these individuals were Johann Pestalozzi, who contributed to the ideas of sequence, repetition, and rote; Lowell Mason, who advocated the Pestalozzian principles and their importance in the education of the child; and John Dewey, who advocated the discovery method for the solving of problems

(Costanza & Russell, 1992). Methods used in general music today incorporate many principles of Pestalozzi, Mason, and Dewey, but have evolved into specific approaches as advocated by such individuals as Jaques-Dalcroze, Carl Orff, Zoltan Kodály, and Edwin Gordon.

Mark (1996) discusses the seven predominant music education methods used in the United States: Dalcroze, Orff, Kodály, Orff and Kodály combined, Suzuki Talent Education, Comprehensive Musicianship, and Gordon's Music Learning Theory. *Music Educator Journal* in 1986 devoted an entire issue to the theme "Major Approaches to Music Education." In this issue, Kodály, Gordon's Music Learning Theory, Dalcroze, Suzuki, and Orff *Schulwerk* were discussed as the foremost music methods in the United States.

Shehan (1986) called the current approach of the typical music teacher "eclectic." She believes that "there are no universally acceptable methods in music, but rather variety of adaptations as diversified as the skills and interests of the multitude of music specialists"

(1986, p. 31). In her investigation of middle school general music programs, Ardrey (1999) did not find a comprehensive practice of the Kodály, Dalcroze, or Orff approaches.

However, she found that the most effective teachers naturally gravitated toward the principles of these approaches. The incorporation of these methodologies combined with

an awareness of the developmental needs of students, Ardrey suggested, provides a greater effectiveness in general music programs. Runfola and Rutkowski (1992) point out that the “eclectic” ideal for some music educators has become the rationale for an activities-dominated curriculum, because only activities and techniques are extracted from many approaches. They suggest that, in an eclectic curriculum, the techniques and activities should be organized and managed to match educational objectives. In other words, techniques and activities should function within the framework of a method. Mark (1996) indicates that the eclectic approach most commonly used in general music instruction today is a blend of Orff and Kodály. Goodlad (1967) suggests that “children should be introduced to the structure of music through a carefully planned, sequential curriculum as rigorous and well-organized as the best curriculum” (p.2). However, some published music curricula available today, both in United States and Taiwan, lack a well-grounded theory to substantiate the sequences of objectives suggested in music series books (Byrd, 1989; Chang, 1991).

#### The Philosophies and Methods of Major Music Approaches: Dalcroze, Orff, Kodály, and

Gordon

The traditional Taiwanese music component of the Arts and Humanities Domain used in this study represents an eclectic instructional approach, which mainly adapts the

philosophies and teaching techniques of Dalcroze, Kodály, and Orff. For example, the use of Orff tonebar instruments, hand signs and rhythm syllables of Kodály, and the fixed-Do solfège system, which are a part of Dalcroze instruction, are prevalent in Taiwanese elementary music classrooms. An overview of these approaches is necessary in order to fully understand the essence of the traditional Taiwanese music curriculum.

### The Dalcroze Approach

Emile Jaques-Dalcroze (1865-1950) was born in Vienna and lived there ten years before his family moved to Geneva. While teaching in the Geneva Conservatory, Dalcroze noted that students were often unable to play music with rhythmic accuracy and free emotive style. He also identified several problems with conservatory-based music instruction. Music history, theory, and other aspects of the discipline never came together in a comprehensive way during a student's course of study. He believed that students tended to approach harmony, theory, and performance in much the same way that they approached academic disciplines—as a set of rules to memorize and symbols to manipulate. Jaques-Dalcroze saw the weakness involved in a separation of musical learning. In response, he designed a form of instruction to develop students' musicianship that not only focused on accurate performance, but also called for an internalizing of the elements of musical expression. Also, Jaques-Dalcroze interwove musical elements into

numerous successive and concurrent experiences to lead the student towards musical understanding and technical skill. Campbell (1989) writes: "Dalcroze eurhythmics on the whole, Jacques-Dalcroze maintained that the body is the mediator between musical sound and its mental construct. He established an approach to music instruction that coordinated the ear, the brain, and the kinesthetic self in response to rhythm, pitch, form, and the expressive elements of music. Jacques-Dalcroze sought to awaken a feeling for natural body rhythms and to help students develop an agility and coordination that they could apply to the realization of music rhythms through movement (p. 302).

Solfège, improvisation, and eurhythmics serve as tools to establish students' musicianship and are emphasized in order to develop the inner ear, inner muscular sense, and creative expression. The main influence of the Dalcroze approach on Taiwanese music education is the use of fixed-do system of solfège. It is used to develop students' aural and oral skills and is the dominant syllable system in use from the elementary level through college. Improvisation focuses on the capacity for free invention; eurhythmics is intended to give students a feeling for musical rhythm expression through movement (Carder, 1990). However, lacking an appropriate Dalcroze training program in Taiwan, most general music teachers are not capable of employing the Dalcroze approach to teach improvisation and eurhythmics. Moreover, because of the insufficient classroom space and large class sizes,



movement activities such as eurhythmics are difficult to incorporate into instruction.

Crumpler (1983) examined the effects of the use of Dalcroze eurhythmics on the melodic musical growth of first grade students. The results suggested that eurhythmics had a positive effect on students' melodic discrimination. Joseph (1983) investigated the effects of eurhythmics on rhythmic movement and improvisation of kindergarten children. Findings of the study suggested that eurhythmics deserved consideration for the inclusion in early childhood curricula.

### The Orff Approach

The German-born composer, Carl Orff (1895-1982), like Dalcroze, believed that rhythm was the most important element of music. The core of Orff's music philosophy centers on the idea that music, movement, and speech are inseparable (Carder, 1990). Together, they form a unity Orff referred to as *elemental music*, which refers to the starting point for musical development and the manner in which children naturally express themselves through music at various phases of development. Movement and speech are inseparable elements in Orff and are initially derived from childhood experience. The goal of the Orff approach to music education is the development of individuals who are comfortable with active music making through singing, moving, playing instruments, chanting, dramatizing, and improvising.

Orff published his five-volume music instruction manual *Music for Children* between 1950 and 1954. His approach, called *Schulwerk*, was intended to facilitate the exploration of music and develop musicianship. After years of teaching experience, Orff confirmed his belief in the inseparable nature of music and dance, and his works culminated in an instructional approach based on his theory of elemental music. The materials used in Orff-*Schulwerk* are simple, basic, and natural. The Orff method approaches music teaching with simple concepts and simple chants and songs, which he believed to be the most suitable for young children. First, children are taught to sing and create pentatonic songs and ostinato patterns. These flow naturally out of speech patterns that begin with single words and progress towards more complex activities, such as speech canons. They also flow out of movement.

As with the Dalcroze method, improvisation is an important goal of the Orff approach. The design of sequential learning experiences within the Orff approach follows: (1) exploration—the discovery of the possibilities available in both sound and movement; (2) imitation—the development of basic skills in rhythmic speech, body percussion, rhythmic movement through space, singing, and playing instruments; (3) improvisation—the extension of acquired skills to the point at which one is able to initiate new patterns and combinations, as well as contribute to group activities, and (4) creation—the combination