A COMPARISON OF THE EFFECTS OF ORFF SCHULWERK AND TRADITIONAL MUSIC INSTRUCTION ON SELECTED ELEMENTS OF MUSIC ACHIEVEMENT IN THIRD, FOURTH, AND FIFTH GRADE STUDENTS

by

SARA CHANDLER TROTMAN WOMACK

(Under the Direction of Roy Legette and Mary Leglar)

ABSTRACT

In light of the multitude of approaches to teaching musical concepts, it is a challenge to determine which approach is most effective in teaching these concepts. Although the Orff Schulwerk approach has gained a growing following in recent years, there is little evidence to support its positive effects on music achievement in comparison with other approaches, such as Dalcroze and Kodály. The purpose of this study is to compare the musical achievement of third, fourth, and fifth grade students taught using an Orff-centered approach with that of students taught using a more traditional music teaching approach, as outlined in the music textbook series *Share the Music*. For the control group, the study utilized two intact classes from each of the following grade levels: third grade (n = 32, 16 girls and 16 boys), fourth grade (n = 41, 19 girls and 22 boys), and fifth grade (n = 40, 24 girls and 16 boys) for a total of 113 subjects. For the experimental group, the study utilized three intact third grade classes (n = 46, 19 girls and 27 boys), three intact fourth grade classes (n = 59, 30 girls and 29 boys), and two intact fifth grade classes (n = 40, 21 girls and 19 boys) for a total of 145 subjects. The total number of subjects in the study was 258 students. All subjects in the experimental and control groups were administered a pretest and posttest with a treatment period of 13 lessons within five months. Test 1 of the *Music Achievement Tests* (*MAT*), including pitch, interval, and meter discrimination, developed by Richard Colwell served as the measurement tool. T-tests were utilized to determine

if a significant difference existed between the treatment methods. No significant difference was found in a comparison of pretest-posttest mean gain scores for students in each grade level, but collectively, statistical significance for students in all grade levels was found between the mean gain scores for the two groups on the pitch and meter discrimination subtests and the overall score in favor of the control group. No significant difference was found for the interval discrimination subtest.

INDEX WORDS: Orff, Orff Schulwerk, Music Achievement, Music Achievement Test, Music Textbook, Share the Music

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DEDICATION

I would like to dedicate the culmination of this research to my family. First, my parents' financial and emotional support enabled me to start my journey into education. They taught me to love learning and expected nothing but my best. My husband, Sean Womack, was an everlasting source of reason and sustenance. His optimism and respect inspired me to complete the dissertation process. I would also like to dedicate this work to my sons, Will and Mason, who were born during its completion. Hopefully, they will come to understand the importance of lifelong knowledge acquisition.

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"Surround yourself with only people who are going to lift you higher."

- Oprah Winfrey

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CHAPTER 1

INTRODUCTION

The number of instructional resources available to elementary music specialists has increased substantially over the last two decades (Maher, 1998). Although benchmarks of achievement have been detailed in such documents as *The National Standards for the Arts* (MENC, 1994), it is left to the teacher to determine which of the many available resources will be most effective in helping students meet the standards. The range of choice extends from traditional textbooks to technologically advanced cd-roms; from materials supporting the various eclectic approaches to those that are comprehensive and traditional. Research has offered some assistance in making these choices. In particular, a number of studies have investigated the effectiveness of eclectic versus traditional approaches.

Of the eclectic approaches, the work of Carl Orff has gained a marked following within the last two decades. According to Cindi Wobig (personal communication, December 23, 2004), former Executive Director of the American Orff Schulwerk Association (AOSA), from 1980 to 2004, the association posted a membership growth rate of 68.14% and a chapter growth rate of 72.22%. In contrast, the Kodály method has not shown a comparable growth rate. Joan L. Dahlin, Administrative Director for the Organization for American Kodály Educators (OAKE), reports that her organization's membership has held steady with about 1,600 members since 1980 (personal communication, April 14, 2005). Treasurer Kathy McLane, of the Dalcroze Society of America, did not have data available for comparison, but reported 399 people in the mailing database and four sanctioned chapters (personal communication, March 22, 2005).

The increased popularity of the Orff approach (Orff Schulwerk) over other eclectic approaches raises some basic questions. How does Orff Schulwerk differ from the more traditional comprehensive approach offered in music education textbooks? In terms of student learning, is Orff Schulwerk more effective than the traditional comprehensive approach used in music education textbooks?

Purpose and Need for the Study

While there is evidence that supports and illustrates the popularity of Orff Schulwerk, there is relatively little documentation addressing its effect on musical achievement. Specifically, there is need to develop a substantial body of research that addresses the issue of effectiveness. The purpose of this study was to measure the musical achievement of third, fourth, and fifth grade students instructed using an Orff-centered approach and those instructed using a more traditional music teaching approach as outlined in the music textbook series, *Share the Music* (Bond et al., 1998). The following questions were investigated:

1. Is there a significant difference in music achievement, evidenced by pretest/posttest mean gain scores, between students taught using an Orff-centered approach and students taught using a non-Orff-centered approach?
2. Is there a significant difference in music achievement among grade levels for students taught using an Orff approach and those taught using a non-Orff approach?

Definition of Terms

Music achievement: Student demonstration of current conceptual knowledge as measured by the *Music Achievement Tests* by Richard Colwell.

Musical concept: A general musical idea that can be transferred from one situation to another

as outlined in curriculum guides published by federal and state governments, as well as local school districts.

Orff Schulwerk: An approach to music education developed by Carl Orff and Gunild Keetman, in which students become immediate participants in the music making process through singing, moving, and playing instruments. The goal of Carl Orff's approach is independent musicianship for all students, which can be obtained through various means. Orff strongly believed that the speech and song of a child's native culture were natural starting points for a child's first experiences with music. This includes nursery rhymes, children's songs, and folk music, which together complements Orff's elemental style. Elemental style, breaking down music to the simplest components, is also a fundamental component of rhythmic education. One of Orff's primary tenets is "that rhythm is expressed constantly in the speech and movements of every child and that we must develop it through these mediums" (Hall, 1960, p. 6). Orff stressed the importance of experience before the introduction of abstract knowledge. He compares music education to our system of schooling. Teachers do not expect students to know how to read and write before they are able to communicate (Hall, 1960). From the beginning, Orff stressed the importance of students physically experiencing beat, tempo, pitch, and rhythm. Children should experience and explore music before formally learning about music. According to Orff, these musical experiences are best conducted in ensemble situations, where each student contributes to the group as a whole through canon, improvisation, rhythmic and melodic ostinati, body percussion, and instrument performance.

Traditional Method: An instructional process that merges various approaches including Kodály, Orff, and Dalcroze as outlined in the basic program of *Share the Music*. The text provides sequenced lessons in a child-centered program that incorporates a variety of learning modalities. *Share the Music* integrates Kodály, Orff, Dalcroze, and traditional music education in a comprehensive approach. Age-appropriate materials of the highest quality featuring a variety of musical styles are included. The series offers lessons that identify and encourage the formation of concepts through a variety of learning situations. Although *Share the Music* incorporates some aspects of Orff Schulwerk, the differences between the approaches utilized in this study are wide and varied (see Table 1). The differences in approaches may not generalize to all teaching situations due to strengths and weaknesses of the teacher.

Limitations

The study was limited in the following ways:

1. The study involved third, fourth, and fifth grade students in intact classes. Due to school constraints, random assignment was not possible.
2. Generalization of the results is limited by specific characteristics of the students and school where the study was conducted.

Organization of the Dissertation

Chapter 2 contains a discussion of the related literature. The presentation of research procedures is included in Chapter 3. The pretest and posttest data results are analyzed in Chapter 4. Chapter 5 contains a summary of the information presented in the study, a discussion of the results, the conclusions obtained, and the recommendations for further study of the topic. The appendix includes consent forms, detailed lesson plans for the control group and the

Table 1

Differences between the Instructional Approaches of Orff Schulwerk and Share the Music

Basic Program of *Share the Music* (Bond et al., 1998)*	Orff Schulwerk (Frazee, 1987; Hall, 1960; Steen, 1992)*
incorporates Dalcroze, Kodály, Orff, and traditional music education approaches	only utilizes Orff approach
highly organized and structured	more flexible depending on teacher's strengths and weaknesses, class size, ability level of the students, and materials
focuses on cognitive connection with music	focuses on experiential/emotional connection
more complex song materials in terms of key, meter, rhythm, melody, lyrics, and origin	less complex song materials in terms of key, meter, rhythm, melody, lyrics, and origin
rote learning shortly before or simultaneous with note learning and emphasis on symbols	rote learning long before note learning and emphasis on performing music
emphasis on group instruction	emphasis on group instruction, as well as individualized instruction dependent upon needs, abilities, and potential of each student
passive and active participation due to more listening and writing activities	primarily active participation
can be taught by music specialists or general classroom teachers	taught by music educators with specialized training
emphasis on singing	emphasis on instrument playing
greater use of written assignments for assessment purposes	greater use of informal observations for assessment purposes
integration with other subject areas	less integration with other subject areas
emphasis on listening to recorded music	less emphasis on listening to recorded music
emphasis on the use of technology	less emphasis on technology

* The characteristics outlined in the above table were formulated by the researcher based on her understanding and interpretations of each teaching approach provided in *Share the Music* and other respected Orff Schulwerk sources.

experimental group, resources for the experimental group lesson plans, and a rubric for determining equality between lesson plans for the groups.

CHAPTER 2

RELATED LITERATURE

The literature regarding the effects of Orff Schulwerk instruction on music achievement is extremely sparse. Of the few studies that exist, much of the research does not investigate the pure Orff Schulwerk approach. Instead, the Orff process is combined with other approaches to music education, such as Kodály and Dalcroze. Overall, the research details mixed results.

Orff Schulwerk and Music Achievement

With regard to the effect of Orff Schulwerk on the music achievement of elementary school students, the literature is inconclusive. Four studies found that the Orff approach had no significant effect on music achievement, while one found that the Orff approach significantly affected music achievement. Two reported that Orff Schulwerk had a positive effect on student attitudes toward music.

Hensley (1981) compared the musical achievement of 237 fourth and fifth grade students taught from the Memphis City Curriculum Guide, based on the Orff and Kodály philosophies of music education, and the musical achievement of students taught from the *Exploring Music* songbook series. After a treatment period of 18 weeks with one 30-minute lesson per week, significant difference in favor of the Curriculum Guide group was found for the melody recognition and instrument recognition subtests of the *Music Achievement Tests* on the fourth grade level and the feeling for tonal center and instrument recognition subtests of the *Music Achievement Tests* on the fifth grade level.

The results of an earlier study (Siemens, 1969) differed from Hensley's findings. In this comparison, 233 fifth grade students involved with the Orff instructional program showed a significantly greater improvement in interest and attitude on a questionnaire developed by the investigator, although the 225 fifth grade students instructed with traditional music education methods performed significantly better on the *Knuth Achievement Test*, which measures recognition of certain rhythmic and melodic characteristics. Enjoyment of classical and dinner music was greater with students in the traditional group, but enjoyment of part-singing, music instruction, and rhythmic activities was greater with students in the Orff group.

Hudgens (1987) investigated different approaches to teaching 121 first grade students to sing on pitch, echo clap rhythms, audiate tonal patterns, and audiate rhythm patterns. The approaches included the Kodály approach, the traditional approach, and two eclectic approaches, one emphasizing some Kodály techniques and another emphasizing some techniques of the Orff approach. On *The Primary Measures of Music Audiation* and a researcher-developed performance test, students taught using the Kodály approach scored slightly higher in their ability to echo clap rhythms, sing on pitch, and audiate rhythm patterns. No significant difference was found in the ability of students to audiate tonal patterns.

Boras (1988) explored the differences between students taught with the Orff Schulwerk approach and traditional music education in gross motor skill development, attitudinal enhancement, and music skill acquisition through quantitative and qualitative data analysis. The traditional method focused on the introduction of notation followed by the introduction of the associated response. The Orff Schulwerk approach encouraged development in speech, singing, playing instruments, listening, movement, and improvisation. After a treatment period of 12 weeks with three 40-minute music lessons per week, no statistically significant difference was

found for any of the variables between groups. In contrast, the qualitative data, collected through observations and interviews with participating students and teachers, showed that the Orff Schulwerk group displayed a better quality of movement and a more positive attitude toward music and the development of music skills than the traditional music education group.

Young (1967) sought to determine whether there was a significant difference in music appreciation and enjoyment between students taught using Carl Orff's *Music for Children* and those taught using traditional teaching procedures. The subjects included 59 fourth grade students in two intact classes. Data obtained using the *Kwalwasser Music Talent Test* and researcher-developed assessments revealed no significant difference in the effectiveness of the two treatment methods.

Movement Activities and Music Achievement

A few studies have focused on the movement aspect of the Orff approach and its effect on music achievement. The results are inconclusive, with three studies finding that movement significantly affects some aspects of music achievement and two studies reporting that it does not.

Douglass (1977) investigated the effect of rhythmic movement on the music achievement of fourth grade students who received music instruction for 60 minutes per week over a period of 28 weeks. Twenty minutes of each class period were designated for teaching the recorder. The study of rhythm was the emphasis for the remaining 40 minutes. The control group followed the same procedure, but the lessons did not involve movement activities. No significant difference was found between the control group and the experimental group on the *Iowa Tests of Music Literacy*, a researcher-developed test of recorder performance, and a researcher-developed test of

sight reading. However, a significant difference in favor of the experimental group was found between the treatments on a test of physical responses to rhythm.

A study by Moore (1984) investigated the effect of rhythm and movement on music aptitude in second and third grade students. The experimental group, consisting of four classes, was taught using rhythm and movement instruction, including the techniques of Orff and Weikart. Two control groups, also consisting of four classes each, were utilized. One control group was instructed using a traditional approach, while the second control group received no formal music education. Results revealed a significant difference in rhythm aptitude in favor of the experimental group. Some effect on music aptitude was also noted, although the difference was not statistically significant.

Lewis (1985) examined the effect of movement on music achievement and music listening skills. The subjects in the study, 61 first grade students and 52 third grade students in intact classes, were divided into experimental and control groups for 12 music lessons lasting 30 minutes each over a period of six weeks. A standard music textbook was used for both groups. The experimental group also participated in movement-based instructional activities. After an analysis of the data from a music achievement test and an assessment of music listening skills, the researcher found that first grade students in the experimental group performed significantly better on the aural perception of dynamics. Additionally, the third grade students in the experimental group performed significantly better on the aural perception of dynamics and melodic direction, as well as the composite measure of music achievement.

In addition to examining the relationship between Orff Schulwerk and self-concept, Cheek (1979) considered whether psychomotor experiences, based on the approaches of Orff and Kodály, would influence the music achievement of fourth grade students taught in three 30-

minute weekly sessions for 15 weeks. The control group, consisting of one intact class, received music instruction with listening, singing, performing on instruments, and creating and analyzing music. The experimental group, also consisting of one intact class, was taught with the same curriculum as the control group with the addition of psychomotor experiences, including creative movement, body rhythms, and hand gestures. The researcher found that students who received psychomotor experiences as a regular part of their music instruction scored significantly higher in the areas of meter discrimination, music reading skills, and rhythm response. In the areas of tonal center and major/minor mode discrimination, no significant differences were observed.

In contrast, Yen (1996) found that movement instruction, including conducting, clapping, snapping, patting knees, stomping, head movements, walking to the beat, dancing, and creative movements, does not significantly benefit the music education of third grade students. Subjects in this study consisted of 46 third grade students from a public school and 45 third grade students from a private school. An observation instrument was used over a period of eight weeks to record the frequencies and amount of time that students spent in movement activities. After administering portions of the *Silver Burdett Music Competency Tests*, the researcher concluded that movement instruction does not contribute to the musical development of dynamics, meter, tempo, and melodic direction.

Orff Schulwerk and the Development of Specific Musical Concepts

The literature provides mixed results regarding the effect of the Orff approach on specific music concepts. For melodic concepts, the effects of Orff Schulwerk have not been conclusively demonstrated: two studies found no relationship, while one other study found a link between the Orff approach and melodic progression. Two studies found Orff Schulwerk to have a positive effect on rhythmic concepts. In addition, the Orff approach was found to have a positive effect

on some areas of creativity and attitude, including musical flexibility and enjoyment of singing, moving, playing instruments, and composing songs.

Olson (1964) compared the Orff approach and a traditional music teaching approach in relation to their effectiveness in the development of melodic sensitivity of 52 sixth grade students. The traditional music approach featured minimal instrumental and composition experiences and an emphasis on singing and listening activities. After a treatment period of 18 lessons and an examination of the pretest and posttest data, the researcher found that both approaches contributed to the acquisition of melodic sensitivity, but neither was superior to the other.

In a similar study, Muse (1994) sought to determine the effectiveness of the Orff Schulwerk approach on improving primary school students' ability to sing a melody with accurate pitch within a group. The experimental group (n = 22) was instructed using the Orff Schulwerk approach, while the control group (n = 22) utilized standard elementary music textbooks. After the treatment period of eight lessons and a researcher-developed assessment, no significant difference between the groups was observed.

In contrast, Mueller (1993) investigated the effect of movement-based instruction on melodic perception. The control group consisted of two intact third grade classes, each receiving music classes without movement-based instruction. The experimental group, also composed of two intact classes, received instruction based on the philosophies of Dalcroze, Kodály, and Orff. After a treatment period of nine weeks with two 30-minute sessions per week, findings showed a positive effect for both groups on the perception of melodic register, direction, and progression as measured by Colwell's *Silver Burdett Music Competency Tests*. Although no significant differences were found between groups on the melodic register and melodic direction subtests,

results indicated a significant difference on the melodic progression subtest in favor of the treatment group.

Two studies examined the influence of Orff Schulwerk on rhythmic ability with conclusive results. Rohwer (1998) investigated the effect of movement instruction, including the approaches of Orff, Kodály, and Dalcroze, and traditional rhythm instruction on the perception, synchronization, and performance of steady beat in 70 sixth grade instrumental music students. For a period of 10 weeks, the control group used cognitive processes and traditional small-movement experiences to understand rhythm, while the experimental group focused on more locomotor movements. After the administration of three researcher-developed tests, Rohwer found that synchronization and performance of steady beat were positively affected by the movement instruction, although steady beat perception was not significantly different between the control group and the experimental group.

Another study investigated the effectiveness of a 10-week music and movement program, based on the Orff and Dalcroze approaches, on rhythmic ability of preschool children (Zachopoulou, Derri, Chatzopoulou, & Ellinoudis, 2003). The control group consisted of 38 children who participated in free-play activities for 35 to 40 minutes twice per week, while the experimental group, consisting of 34 children, participated in the music and movement program for 35 to 40 minutes twice per week. After analyzing the data from the *High/Scope Beat Competence Analysis Test,* the researchers concluded that the movement and music program had a significantly positive effect on the level of rhythmic ability.

The Orff and traditional music education approaches as they relate to student creativity were examined by Bishop (1991). Subjects included in the study were three intact classes of third grade students. Over a period of 12 weeks, the experimental classes were taught using Orff

Schulwerk techniques and the control class was taught using traditional methods outlined by a music textbook. The creativity of the students was assessed by the *Measure of Creative Thinking in Music*. Findings revealed that the experimental group made statistically significant gains in musical flexibility, although no difference was found between the groups in musical originality and musical syntax.

Wolff (1973) investigated the attitudinal effects of a traditional music education and an Orff Schulwerk teaching approach on second and fifth grade students ($N = 160$). A researcher-developed assessment, designed to measure attitudes toward participation in various music activities, was used as a pretest and posttest. After a treatment period of 20 sessions over nine weeks, findings revealed that the Orff approach significantly affected the attitude of students in the areas of singing, movement, playing instruments, and composing songs. Factors that reflected no significant attitudinal differences between groups were rhythm, listening, reading music, solo singing, small group singing, singing new songs, and music activities outside of the school setting.

Orff Schulwerk and Musical Preference

Much research has been conducted regarding music teaching methodologies and their influence on musical preference. The two studies of the effect of the Orff approach on preference of musical style show mixed results. One found that teaching approach affected preference, and the second found no relationship between instructional treatment and preference for specific styles of music.

Bondurant-Koehler (1995) investigated the effects of selected modes of instruction and gender on music preferences in third and fifth grade elementary school children. The methodologies included Orff, Kodály, and traditional music education. A total of 1,370 students

used a five-point Likert scale to rate their preference for eighteen 40-second musical excerpts. These data were then compared to their teachers teaching methodology. Overall preferences for the six music style categories—ethnic, art, avant-garde, jazz-improvisation, pop-rock, and country-western—differed significantly among mode of instruction, grade level, and gender. The Orff mode yielded significantly higher preferences for avant-garde and country-western music, while Kodály yielded significantly higher preferences for art, ethnic, jazz-improvisation, and pop-rock.

A study by McKoy (1998) focused specifically on the effect of an Orff Schulwerk-based and a traditional instructional approach on fourth-grade students' preferences for an untaught selection of indigenous folk music of Ghana. Subjects were 39 students enrolled in two intact fourth-grade classes in a North Carolina public elementary school. Each class was randomly assigned to receive music instruction based on Orff Schulwerk pedagogy or traditional music instruction. The researcher instructed both treatment groups. Results of the study revealed no significant difference between groups as a result of instructional treatment.

Orff Schulwerk and Non-Musical Concepts

Additional research has been conducted to determine the effect of the Orff approach upon non-musical concepts. Results are mixed. As the studies discussed below indicate, the Orff teaching approach seems to have positive effects on self-concept and mathematics and no significant effect on memory development and spatial ability. The research is inconclusive regarding the effects of the Orff teaching approach on reading.

Grant (1991) investigated the effect of Orff Schulwerk and traditional music education instruction on the memory development of 66 fifth grade students. After an analysis of the data

gathered by way of the *Visual Aural Digit Span Test*, Orff Schulwerk instruction was not proven to have a significant effect on memory development.

A study by Taetle (1999) examined the effect of three modes of instruction (e.g. Orff Schulwerk, active singing, and passive listening) on spatial ability. Kindergarteners were randomly assigned to three groups and attended music classes for 30 minutes twice per week for a treatment period of four months. No significant difference in spatial ability was found between groups.

A study by Whitehead (2001) was designed to determine the effect of music instruction, using the Orff Schulwerk process, on mathematics scores of secondary students in West Virginia. Twenty-eight students ranging from 11 to 17 years of age were randomly assigned to three groups. The full treatment group received music instruction for 50 minutes five times per week for 20 weeks. The limited treatment group received music instruction for 50 minutes once per week for 20 weeks. The third group received no music instruction. At the conclusion of the study, the full treatment group was found to have made a significant gain in mathematics scores over the other two groups.

Two studies examined the relationship between specific teaching methodologies and reading ability. Lu (1986) compared the reading performance of first grade students taught using a Kodály-Orff musical teaching approach with others taught only traditional reading instruction. The experimental subjects were taught reading using Kodály and Orff techniques by the researchers for one and a half hours per week over a three-month period within the total reading instruction time. The control subjects received an equal amount of time in the traditional reading context. No significant difference was found between posttest scores of both groups in total

reading achievement, letter recognition, letter "sound" recognition, vocabulary, and comprehension.

Kelley (1981) examined the effect of various instructional methods on the reading/language arts performance of first grade students. The students were randomly assigned to one of two treatment groups, Orff Schulwerk music instruction and visual arts instruction, and a control group. The music and art groups met for 30 minutes three times per week from December to May. Quantitative and qualitative findings revealed that Orff Schulwerk music instruction significantly enhanced reading and language development in first grade students in favor of the treatment group.

Two additional studies investigated the relationship between the Orff approach and self-concept. Barker (1981) sought to determine whether a significant difference in self-concept existed between learning disabled students taught using Orff Schulwerk and a traditional music education approach. Findings revealed a significant difference in favor of the experimental group in the areas of behavior, intellectual and school status, popularity, and total scores. A significant difference was not found between groups in the areas physical appearance and attributes, anxiety, and happiness and satisfaction.

Cheek (1979) sought to determine whether psychomotor experiences, based on the approaches of Orff and Kodály, would influence self-concept of fourth grade students. A significant difference was observed in self-concept for the experimental group.

Summary

Several limitations are revealed by the aforementioned research. Rather than using the Orff approach in isolation, many of the studies combined it with other approaches such as Kodály and Dalcroze, or focused on only one specific aspect of Orff Schulwerk, such as

movement. In addition, much of the research did not define the traditional approach to music education as practiced in elementary schools across the United States today. Finally, the previous studies had relatively short treatment periods and sampled a single grade level.

CHAPTER 3

RESEARCH DESIGN AND DEVELOPMENT

The study utilized an experimental and control group and is based on a nonequivalent control group design (Stanley & Campbell, 1963). All subjects in the experimental and control groups were administered a pretest and posttest with a treatment period of 13 lessons within a time span of five months. T-tests were utilized to provide more information about the data. The purpose of this study was to measure the musical achievement of third, fourth, and fifth grade students taught using an Orff-centered approach and those taught using a more traditional music teaching approach as outlined in the music textbook series, *Share the Music* (Bond et al., 1998).

Subjects

The study site was a public elementary school (K-5) in Hoover, Alabama, a suburb of Birmingham. Enrollment was 648 with 1% of the student population receiving free or reduced-price lunch. The ethnic composition of the school consisted of Caucasian (88%), Asian (6%), African-American (5%), and Hispanic (1%) students. Percentile ranks on the Stanford 10, a norm-referenced academic achievement test, for third grade students were 73% in math, 75% in language, and 68% in reading. For fourth grade students, percentile ranks were 82% in math, 89% in language, and 82% in reading and for fifth grade students, percentile ranks were 80% in math, 78% in language, 76% in reading, and 73% in science. All students had music class once per week for 30 minutes.

Because of instructional scheduling, both experimental and control groups consisted of intact classes. For the control group, the study utilized two classes from each of the following

grade levels: third grade (n=32, 16 girls and 16 boys), fourth grade (n=41, 19 girls and 22 boys), and fifth grade (n=40, 24 girls and 16 boys) for a total of 113 subjects. For the experimental group, the study utilized three third grade classes (n=46, 19 girls and 27 boys), three fourth grade classes (n=59, 30 girls and 29 boys), and two fifth grade classes (n=40, 21 girls and 19 boys) for a total of 145 subjects. The total number of subjects in the study was 258 students.

Music Achievement Test 1

The *Music Achievement Test 1* (*MAT*) developed by Richard Colwell served as the measurement tool. The *MAT* was designed to measure student musical achievement in grades three through college (Colwell, 1968). In addition, the *MAT* is well regarded in the field of music education for the purpose of assessing mastery of musical concepts (Boyle, 1995; Radocy, 1995). The *MAT* contains four tests with multiple parts, which can be administered as a whole or individually without affecting the reliability (Colwell, 1968). Because of grade level restrictions, only the first test was utilized in this study.

The first test, which spans approximately 18 minutes, assesses the knowledge of students in grades 3 through 12 in the following areas: pitch discrimination, interval discrimination, and meter discrimination. In the first part of the pitch discrimination subtest, which contains 15 items, the student indicates whether the second pitch sounds higher than, lower than, or the same as the first pitch. The second part of the pitch discrimination subtest contains 10 items, in which the student indicates the lowest pitch in a group of three pitches. The first part of the interval discrimination subtest contains 10 tonal patterns of 3 pitches each and the second part contains 18 phrases. In both parts, the student identifies whether the pitches move by steps or skips. The student may also indicate if he or she is unsure of the correct answer. The meter discrimination

subtest asks the student to specify whether a musical excerpt is performed in duple or triple meter. Again, the student may indicate if he or she is unsure of the correct answer.

Content validity for the *MAT* was determined by compiling a list of objectives and skills found in music textbooks, courses of study, curriculum guides, college music education textbooks, and texts on the psychology of music. A conference of school music authorities was held to determine the areas of basic proficiency to be included in the tests. Reliability coefficients for each grade level were computed by Kuder-Richardson 21 (Colwell, 1968). The first test using a sample of 1,683 fifth grade students yielded a reliability coefficient of 0.838 with a standard deviation of 10.81.

Procedure

Before beginning the study, the researcher met with the principal at Greystone Elementary School to discuss the possibility of conducting research with third, fourth, and fifth grade students enrolled in the school. The principal agreed to host the study and approval was granted from the Superintendent of Hoover City Schools. Permission to proceed with the study was then sought and granted from the Institutional Review Board at the University of Georgia (IRB). Consent forms were sent to parents or guardians and students in the third, fourth, and fifth grade requesting permission for the students to participate in the study during the first week of January 2007 (see Appendix A). The letters were signed and returned to the homeroom teachers and in turn, to the researcher.

The researcher administered a pretest to third, fourth, and fifth grade students during the first week of January 2007 in regularly scheduled music class. Every effort was made to create a quiet and effective testing environment. The treatment period began the following week and

continued through the second week of May 2007. Interruptions in the treatment included scheduled school holidays, sickness, and conference attendance. The posttest was completed immediately after the treatment period during the third week of May 2007. The procedures for administering the pretest were also utilized for the posttest.

Subjects in the control group were taught using a curriculum consisting of traditional, eclectic lessons found in a well-known basal text published by McGraw-Hill, *Share the Music* (see Appendix B, C, and D). This text integrates Kodály, Orff, Dalcroze, and traditional music education in the teaching of music concepts and skills through singing, listening, moving, creating, music literacy, critical thinking, and assessment (Bond et al., 1998). *Share the Music* was chosen for the study, because the text was adopted by the state in which the researcher teaches, is readily available to all students, and utilizes an eclectic curriculum.

Lessons were taught as specifically outlined in the teacher's edition of the series. The textbooks and the accompanying resource materials belonging to the school were utilized throughout the treatment period. A recorder belonging to each student was also used. The recordings for the series were an integral part of all lessons. Listening and music reading was a part of most lessons.

Treatment for the experimental group consisted of a teaching approach based on the philosophy of Carl Orff (see Appendix B, C, and D). Orff believed that participation in music should begin before or concurrently with the intellectual process of learning notation (Hall, 1960).

The primary resources included the five volumes of *Music for Children* by Carl Orff and Gunild Keetman and adapted by Margaret Murray (n.d.), as well as two well-respected Orff Schulwerk curriculum guides – *Discovering Orff* by Jane Frazee (1987) and *Exploring Orff* by

Arvida Steen (1992). In addition, materials obtained through Orff Schulwerk teacher training courses and Orff Schulwerk workshops served as lesson sources (see Appendix E). An Orff instrumentarium belonging to the school was utilized throughout the treatment period. A recorder belonging to each student and a guitar were also incorporated into the lessons. Singing, movement, and instrument playing were part of most lessons.

The researcher served as teacher for both groups in order to control for teacher effect. Further, each group received the same number of instructional minutes for each musical concept. Before the study began, three sample lesson plans were critiqued by a panel of three elementary music specialists using a rubric developed by the researcher to determine whether or not the same music concepts were being adequately addressed through the differing approaches (see Appendix F). The results were affirmative. The teachers agreed with an average of 7.67 out of 10 that each lesson was appropriate with respect to age and ability level. The teachers agreed with an average of 9.33 out of 10 that each lesson addressed the same musical concept. During the course of the study, detailed lesson plans were compiled, along with relevant field notes.

CHAPTER 4

ANALYSIS AND RESULTS

The purpose of this study was to measure the musical achievement of third, fourth, and fifth grade students taught using an Orff-centered music teaching approach and a more traditional approach outlined in the music textbook series, *Share the Music*. Comparisons of pretest/posttest scores were made with published norms for fourth and fifth grade. This chapter will also present comparisons between pretest and posttest data for each subtest.

On the advice of the Academic Computing Center through the College of Education at the University of Georgia, it was decided a priori that t-test procedures were most appropriate for the purposes of this study for analyzing the data. *The Statistical Package for the Social Sciences* (SPSS) version 15.0 was utilized in the analyses.

Pretest Data

The pretest data were derived from third, fourth, and fifth grade students' scores on the *MAT* prior to the beginning of treatment. This information allowed the researcher to compare levels of student musical achievement, prior to the start of the study, with the published norms and to compare the relative music achievement of the control and experimental groups in each grade level. Published *MAT* norms are not available for third grade. Mean scores were calculated for each subsection of the *MAT* by experimental and control group in all grade levels. T-tests for two independent samples were performed to determine if any significant difference existed between groups. The Bonferroni procedure was used to safeguard against the inflation of the error rate due to multiple test comparisons resulting in a significance level of 0.01.

Table 2 provides descriptive statistics for third grade students' performance on each subtest of the pretest by group. Subjects in the experimental group scored higher than the control group on the pitch discrimination subtest and the overall score, while the control group scored higher on the interval and meter discrimination subtests. A comparison of third grade pretest data is also provided in Table 2. T-test analysis revealed no statistical significant difference between the two groups on all variables.

Table 2

Descriptive Statistics and T-Test Comparisons of Third Grade Pretest Scores

	Control Group (n = 32)		Experimental Group (n = 46)			
Test	*M*	*SD*	*M*	*SD*	*t*	*p*
Pitch Discrimination	10.47	3.96	12.63	4.80	-2.10	0.039
Interval Discrimination	12.13	3.60	12.07	3.33	0.08	0.940
Meter Discrimination	14.50	4.95	13.39	4.97	0.97	0.335
Test 1 Total	37.09	9.09	38.30	7.78	-0.63	0.530

No significant differences.

Descriptive statistics for the fourth grade students' performance on each subtest of the pretest are provided in Table 3. T-test means comparison revealed no significant difference between groups on each subtest and the overall score for Test 1.

Table 3

Descriptive Statistics and T-Test Comparisons of Fourth Grade Pretest Scores

	Control Group (n = 41)		Experimental Group (n = 59)			
Test	*M*	*SD*	*M*	*SD*	*t*	*p*
Pitch Discrimination	13.78	4.48	12.27	4.39	1.68	0.097
Interval Discrimination	12.63	4.16	11.25	2.47	1.91	0.062
Meter Discrimination	13.37	3.67	12.44	4.09	1.16	0.249
Test 1 Total	39.78	8.85	35.97	5.89	2.59	0.011

No significant differences.

Table 4 provides the means for the experimental and control groups and for the published norms for fourth grade. Both groups of students scored below the published norms of the *MAT*.

Table 4

Group Means of Fourth Grade Students' Pretest Scores Compared to MAT Published Norms

Test	*MAT M*	Control *M*	Experimental *M*
Pitch Discrimination Subtest	14.97	13.78	12.27
Interval Discrimination Subtest	14.71	12.63	11.25
Meter Discrimination Subtest	15.34	13.37	12.44
Test 1 Total	45.02	39.78	35.97

T-test means comparisons of fifth grade students' pretest scores revealed no significant difference between groups. Descriptive statistics are provided in Table 5.

Table 5

Descriptive Statistics and T-Test Comparisons of Fifth Grade Pretest Scores

	Control Group (n = 40)		Experimental Group (n = 40)			
Test	*M*	*SD*	*M*	*SD*	*t*	*p*
Pitch Discrimination	13.80	4.03	15.53	5.41	-1.62	0.110
Interval Discrimination	12.13	3.64	12.65	2.99	-0.71	0.483
Meter Discrimination	13.20	3.32	14.10	4.53	-1.01	0.314
Test 1 Total	39.13	6.58	42.28	8.09	-1.91	0.060

No significant differences.

The mean scores for the fifth grade control and treatment groups, as well as the fifth grade published norms for the first test of the *MAT*, are given in Table 6. Students generally scored lower than the published norms, although the experimental group scored higher than the control group.

Table 6

Group Means of Fifth Grade Students' Pretest Scores Compared to MAT Published Norms

Test	*MAT M*	Control *M*	Experimental *M*
Pitch Discrimination Subtest	16.39	13.80	15.53
Interval Discrimination Subtest	15.18	12.13	12.65
Meter Discrimination Subtest	15.86	13.20	14.10
Test 1 Total	47.43	39.13	42.28

Posttest Data

The posttest data consisted of students' scores on the *MAT* following treatment. This information was used to compare student musical achievement with *MAT* norms for fourth and fifth grades and to compare the musical achievement of the experimental and control groups for third, fourth, and fifth grades. Mean gain scores were computed for each subsection of the test by group in all grade levels. T-tests were performed by grade level to determine whether a significant difference in music achievement existed between groups.

A comparison of third grade students' posttest scores by group is provided in Table 7. Students in the control group scored higher than the students in the experimental group on all subtests, as well as the overall score. Descriptive statistics for the third grade experimental and control groups are provided in Table 8. No statistical significance was found between the scores for the two groups on each subtest and the overall score for Test 1.

Table 7

Descriptive Statistics and T-Test Comparisons of Third Grade Posttest Scores

	Control Group (n = 32)		Experimental Group (n = 46)			
Test	*M*	*SD*	*M*	*SD*	*t*	*p*
Pitch Discrimination	13.94	4.91	13.85	4.58	0.08	0.934
Interval Discrimination	12.69	3.64	12.07	2.86	0.84	0.401
Meter Discrimination	13.81	4.86	12.83	3.99	0.98	0.329
Test 1 Total	40.44	8.47	38.74	7.44	0.94	0.352

No significant differences.

The difference between pretest and posttest scores for the third grade control and experimental groups is presented in Table 8. Mean gain scores were higher for the control group on all subtests and the overall score with the exception of the meter discrimination subtest, which exhibited a regression. The mean gain scores also indicated a regression in the meter

discrimination subtest for the experimental group, although the regression was not as great for the control group.

Table 8

Difference between Pretest and Posttest Means of the Control and Experimental Groups in Third Grade

Test	Control Group			Experimental Group		
	Pretest Mean	Posttest Mean	Mean Gain	Pretest Mean	Posttest Mean	Mean Gain
Pitch Discrimination	10.47	13.94	3.47	12.63	13.85	1.22
Interval Discrimination	12.13	12.69	0.56	12.07	12.07	0.00
Meter Discrimination	14.50	13.81	-0.69	13.39	12.83	-0.56
Test 1 Total	37.09	40.44	3.35	38.30	38.74	0.44

T-tests for paired samples were used to determine whether there was significant difference in mean gain scores from pretest to posttest for third grade students in the experimental and control groups. No significant difference was found for the mean gain scores between the two groups on each subtest and the overall score (see Table 9).

Table 9

Paired Sample T-Test Comparisons of Pretest-Posttest Mean Gain Scores for Third Grade Students

Test	Control Group Mean Gain	Experimental Group Mean Gain	*df*	*t*	*p*
Pitch Discrimination	3.47	1.22	76	2.38	0.020
Interval Discrimination	0.56	0.00	76	0.00	0.998
Meter Discrimination	-0.69	-0.56	76	-0.09	0.925
Test 1 Total	3.35	0.44	76	1.36	0.178

No significant differences.

Table 10 provides descriptive statistics for fourth grade students in the control and experimental groups on the posttest. T-test comparisons revealed no significant difference between groups on the pitch and meter discrimination subtests, but a significant difference was found for the interval discrimination subtest and overall score for Test 1 in favor of the control group.

Table 10

Descriptive Statistics and T-Test Comparisons of Fourth Grade Posttest Scores

	Control Group (n = 41)		Experimental Group (n = 59)			
Test	*M*	*SD*	*M*	*SD*	*t*	*p*
Pitch Discrimination	15.10	4.27	14.37	4.36	0.83	0.411
Interval Discrimination	13.80	3.69	11.31	2.78	3.86	0.000*
Meter Discrimination	16.49	4.26	14.64	4.11	2.17	0.032
Test 1 Total	45.39	8.74	40.32	6.98	3.22	0.002*

* $p < 0.01$

The difference between pretest and posttest scores for the fourth grade control group and experimental group are provided in Table 11. A gain from pretest to posttest is shown in all areas for both groups.

Analyses using t-tests for paired samples revealed no significant difference in mean gain scores between the two groups on each subtest and the overall score for Test 1 (see Table 12).

Table 11

Difference between Pretest and Posttest Means of the Control and Experimental Groups in Fourth Grade

Test	Control Group			Experimental Group		
	Pretest Mean	Posttest Mean	Mean Gain	Pretest Mean	Posttest Mean	Mean Gain
Pitch Discrimination	13.78	15.10	1.32	12.27	14.37	2.10
Interval Discrimination	12.63	13.80	1.17	11.25	11.31	0.06
Meter Discrimination	13.37	16.49	3.12	12.44	14.64	2.20
Test 1 Total	39.78	45.39	5.61	35.97	40.32	4.35

Posttest means and *MAT* norms for the fourth grade control and experimental groups are provided in Table 13. The control group scored higher than the *MAT* norms on the pitch and meter discrimination subtests, as well as the overall score. Students in the control and experimental groups scored lower than the published norms on all other subtests.

Table 12

Paired Sample T-Test Comparisons of Pretest-Posttest Mean Gain Scores for Fourth Grade Students

Test	Control Group Mean Gain	Experimental Group Mean Gain	*df*	*t*	*p*
Pitch Discrimination	1.32	2.10	98	-1.10	0.273
Interval Discrimination	1.17	0.06	98	1.61	0.110
Meter Discrimination	3.12	2.20	98	0.77	0.441
Test 1 Total	5.61	4.35	98	0.80	0.427

No significant differences.

Table 13

Group Means of Fourth Grade Students' Posttest Scores Compared to MAT Published Norms

Test	*MAT* Mean	Control Mean	Experimental Mean
Pitch Discrimination Subtest	14.97	15.10	14.37
Interval Discrimination Subtest	14.71	13.80	11.31
Meter Discrimination Subtest	15.34	16.49	14.64
Test 1 Total	45.02	45.39	40.32

Descriptive statistics for fifth grade students in the control and experimental groups on the posttest are provided in Table 14. T-test comparisons revealed no significant difference between scores on any subtest or the overall test.

Table 14

Descriptive Statistics and T-Test Comparisons of Fifth Grade Posttest Scores

	Control Group (n = 40)		Experimental Group (n = 40)			
Test	*M*	*SD*	*M*	*SD*	*t*	*p*
Pitch Discrimination	15.63	4.27	15.70	5.28	-0.07	0.945
Interval Discrimination	11.65	4.33	11.60	3.14	0.06	0.953
Meter Discrimination	16.25	4.40	15.55	4.61	0.70	0.489
Test 1 Total	43.53	8.05	42.85	9.27	0.35	0.730

No significant differences.

The difference between pretest and posttest scores for the fifth grade control group and experimental group is presented in Table 15. A gain in the mean scores was found from pretest to posttest in the areas of pitch and meter discrimination for both groups.

Table 15

Difference between Pretest and Posttest Means of the Control and Experimental Groups in Fifth Grade

Test	Control Group			Experimental Group		
	Pretest Mean	Posttest Mean	Mean Gain	Pretest Mean	Posttest Mean	Mean Gain
Pitch Discrimination	13.80	15.63	1.83	15.53	15.70	0.17
Interval Discrimination	12.13	11.65	-0.48	12.65	11.60	-1.05
Meter Discrimination	13.20	16.25	3.05	14.10	15.55	1.45
Test 1 Total	39.13	43.53	4.40	42.28	42.85	0.57

T-test analyses showed no significant difference in mean gain scores between the two groups on each subtest and the overall score (see Table 16).

Mean scores for fifth grade students on the posttest are compared to *MAT* published norms in Table 17. The control group scored higher than the published norms on the meter discrimination subtest. The control group and experimental group scored lower than the *MAT* norms on all other subtests.

Table 16

Paired Sample T-Test Comparisons of Pretest-Posttest Mean Gain Scores for Fifth Grade Students

Test	Control Group Mean Gain	Experimental Group Mean Gain	*df*	*t*	*p*
Pitch Discrimination	1.83	0.17	78	2.01	0.048
Interval Discrimination	-0.48	-1.05	78	0.76	0.448
Meter Discrimination	3.05	1.45	78	1.23	0.222
Test 1 Total	4.40	0.57	78	2.20	0.031

No significant differences.

Table 17

Group Means of Fifth Grade Students' Posttest Scores Compared to MAT Published Norms

Test	*MAT* Mean	Control Mean	Experimental Mean
Pitch Discrimination Subtest	16.39	15.63	15.70
Interval Discrimination Subtest	15.18	11.65	11.60
Meter Discrimination Subtest	15.86	16.25	15.55
Test 1 Total	47.43	43.53	42.85

T-tests for paired samples were used to determine whether there was significant difference in mean gain scores from pretest to posttest for all grade levels in the experimental

and control groups. A significant difference was found for mean gain scores between groups on the pitch and meter discrimination subtests and the overall score. No significant difference was found for the mean gain scores between groups on the interval discrimination subtest (see Table 18).

Table 18

Paired Sample T-Test Comparisons of Pretest-Posttest Mean Gain Scores for All Grade Levels by Group

Test	Control Group Mean Gain	Experimental Group Mean Gain	*df*	*t*	*p*
Pitch Discrimination	2.11	1.29	257	-6.96	0.000*
Interval Discrimination	0.42	-0.27	257	-0.13	0.895
Meter Discrimination	2.02	1.12	257	-4.11	0.000*
Test 1 Total	4.54	2.07	257	-6.30	0.000*

* $p < 0.01$

CHAPTER 5

SUMMARY, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to measure the musical achievement of third, fourth, and fifth grade students taught using an Orff-centered approach and a more traditional approach outlined in the music textbook series, *Share the Music*. All subjects in the experimental and control groups were administered a pretest and a posttest with a treatment period of 13 lessons within five months. The *Music Achievement Tests* (*MAT*) developed by Richard Colwell served as the measurement tool.

No significant difference was found between groups on the pretest for third grade students. While there was no significant difference between groups on any subtest of the posttest or the overall score, third grade students in the control group showed the largest gain on the pitch and interval discrimination subtests, as well as the overall score. A regression was noted for both groups on the meter discrimination subtest. No significant difference was found in a comparison of pretest-posttest mean gain scores for third grade students.

Students in the fourth grade scored lower than the published *MAT* norms on all areas of the pretest, but the control group scored higher than the experimental group on all subtests and the overall score for Test 1. No significant difference was found between groups on the overall score or any of the subtests. On the posttest, students in the control group scored higher than the *MAT* norms on the pitch and meter discrimination subtests, as well as the overall score. Neither group scored higher than the *MAT* norms on the interval discrimination subtest. The control

group scored higher than the experimental group on all subtests, as well as the overall score. A significant difference was found between groups on the posttest for the interval discrimination subtest and the overall score in favor of the control group. No significant difference was found between groups for the pitch and meter discrimination subtests. Students in the control group showed the largest gain from pretest to posttest on the interval and meter discrimination subtests, as well as the overall score. The experimental group showed the largest gain on the pitch discrimination subtest. No significant difference was found in a comparison of pretest-posttest mean gain scores for fourth grade students.

Students in the fifth grade scored lower than the published *MAT* norms on all areas of the pretest, but the experimental group scored higher than the control group on all subtests and the overall score for Test 1. No significant difference was found on the pretest between groups for any subtest or the overall score. On the posttest, students in the control group scored higher than the *MAT* norms on the meter discrimination subtests. Neither group scored higher than the *MAT* norms on the pitch and interval discrimination subtests, as well as the overall score. The control group scored higher than the experimental group on interval and meter discrimination subtests and the overall score. The experimental group scored higher than the control group on the pitch discrimination subtest. No significant difference was found between groups for any subtest or the overall score on the posttest. Students in the control group showed the largest gain from pretest to posttest on the pitch and meter discrimination subtests, as well as the overall score. A regression was noted for both groups on the interval discrimination subtest. No significant difference was found in a comparison of pretest-posttest mean gain scores for fifth grade students.

Third, fourth, and fifth grade students in the control group showed the largest increase in mean gain scores from pretest to posttest on all subtests, as well as the overall score. A regression was noted for the experimental group on the interval discrimination subtest. A significant difference in mean gain scores was found for students in third, fourth, and fifth grades on the pitch and meter discrimination subtests and the overall score in favor of the control group. No significant difference was found for the interval discrimination subtest.

Discussion

It was interesting to note the significant difference in mean gain scores between the two groups on the pitch and meter discrimination subtests and the overall score in favor of the control group. This result might be attributed to the fact that the types of activities provided for the control group were more similar to items on the posttest than those activities provided for the treatment group. It is conceivable that the knowledge derived from these in-class activities might have influenced control group performance on the posttest. The types of activities differed in five significant ways.

First, the control group utilized more printed music in their lessons (e.g., sheet music, notation in music textbook), while the experimental group learned music mainly through rote teaching. When written music was used with the experimental group, the notation was shown on a visual. Students were not provided with individual copies. In addition, the control group had more opportunities to write notation than the experimental group and, as a result, could read music with greater ease than the experimental group by the end of the treatment period. More experience with reading and writing notation might explain the higher mean gain scores for the control group, since these methods offer an advantage to visual and tactile learners, not available to the same type learners in the experimental group.

Second, the experimental group had fewer listening experiences than the control group. Listening activities provided for the experimental group primarily consisted of learning by rote and analyzing musical performances of the teacher and other classmates while the control group listened to recorded music and used listening maps. In that the *MAT* requires listening to prerecorded tracks in order to answer corresponding items, listening to recorded music may have influenced posttest findings, resulting in higher mean gain scores for the control group on the pitch and meter discrimination subtests and the overall score.

In addition, the genres of music experienced by the treatment groups varied greatly. The experimental group mainly utilized American folk music of one time period, while the control group experienced multicultural music and music of various time periods. This variation in styles and time periods, which encompassed a variation in keys, meters, rhythms, melodies, and lyrics, as assessed by the *MAT*, might have resulted in a difference in mean gain scores, in favor of the control group, on the pitch and meter discrimination subtests and the overall score.

Opportunities for instrument playing and movement were limited for students in the control group compared to students in the treatment group, who experienced instrument playing and movement consistently throughout the treatment period. Although instrument playing and movement offered students a different way to learn about musical concepts, the Orff approach did not focus on the development of music skills, such as singing, listening, reading, and writing, as measured by the traditional assessment tool or *MAT*. This might possibly explain the significant difference in mean gain scores in favor of the control group on the pitch and meter discrimination subtests and the overall score

Finally, small groups were utilized more in the experimental group than in the control group due to the variation in treatment. Whole group instruction was primarily used for the

control group in accordance with the lessons outlined in *Share the Music*. In the experimental group, students were taught movement or assigned instrument parts in small groups based on ability level, as prescribed by the Orff process. The effect of small or whole group instruction on music achievement was not within the scope of this study and its influence on the results is unclear.

The statistically significant difference found in favor of the control group on the pitch and meter discrimination subtests and the overall score could also be a possible result of additional practice by the control group. The objectives outlined for the experimental group took more time to achieve than the objectives for the control group, due to the types of activities undertaken with the experimental group. The Orff-based lessons were generally more in depth and took multiple weeks to teach, whereas the traditional music education lessons covered conceptual objectives on a more surface level and did not take as much time to complete. For example, preparing students to perform a piece on barred instruments took more time than singing along with a recording. While the amount of instructional time was the same for both groups, there were more opportunities for singing, playing, reading, notating, and listening, with varying materials for the control group.

Because the control group experienced several methods through *Share the Music*, both groups had familiarity with some aspects of the Orff process. However, the control group's experiences were extremely limited, since only the basic program, written for music teachers with non-specialized training or general education teachers, was utilized. When teaching from the teacher's edition, the basic program, noted by a pink triangle, were the only portions taught to the control group. Barred instruments were never utilized with the control group during the study. When teaching from the recorder masters, the procedures section was the only portion

taught to the control group. The supplemental Orff-based components or extensions included in the teacher's edition were not taught to the control group. *Share the Music* includes many opportunities for more participatory learning similar to the Orff process, which were not utilized in this study.

The use of intact classes was an unavoidable problem of the study due to scheduling and other constraints of the research site. The lack of random assignment might have affected the results, in regards to student attitude, outside of school music activities, and other factors.

In addition to quantitative findings, the attitudes and actions of school stakeholders towards the teaching approaches were observed. Other teachers, administrators, and parents were more receptive to the Orff approach than the traditional music education approach. Many times, classroom teachers and administrators would observe classroom performances on instruments with the treatment group when picking up their classes, but teachers and administrators did not stay to observe when the control group was being taught. This might be due to the performance aspect of the Orff approach in contrast with the traditional music education approach or to scheduling conflicts. Parents and administrators seemed to prefer the performance opportunities of the Orff approach and the ability of the Orff approach to reach different types of learners. A few parents of students in the treatment group commented on how much their children enjoyed attending music class. No comments were received from parents of students in the control group.

Researcher-observed attitudinal differences between groups did not accurately reflect the mean gain scores between groups. Classroom observations revealed that the students in the experimental group participated more and had a better attitude than students in the control group. Students in the control group would ask why they did not use the barred instruments each time they came to music. They also complained about using the textbooks and supplementary

materials. When students were asked to get a textbook, they often groaned. A few students in each class of the control group would not participate in the lesson, but sat quietly and listened to the teacher. The majority of students in the experimental group were excited when attending music class, and all students participated. These attitudinal differences could be attributed to non-measured characteristics, such as personalities of the classes or outside of school music activities, although no significant difference was shown between groups on pretest/posttest mean gain scores.

Although the Orff approach was not shown to be more effective than the traditional approach in this study, the findings reveal that the experimental group made gains in music achievement in most cases, although those gains were not statistically significant. Mean gain scores from the pretest to the posttest for the experimental group increased in all areas, except on the subtest for interval discrimination. The smallest increase in mean gain scores occurred in this subtest for the control group.

Conclusions

Findings of this study support results found in previous research conducted by Siemens (1969), who determined that students involved in an Orff instructional program showed significantly more improvement in interest and attitude than students involved in a traditional music education program, although students in the latter group performed significantly better on a music achievement measure.

In contrast to this research, other studies (Boras, 1988; Hudgens, 1987; Young, 1967) revealed no significant difference between students taught with the Orff-Schulwerk approach and traditional music education methods in the acquisition of musical skills. In addition, this study is in contrast to other research (Hensley, 1981), which found that students taught using the

Memphis City Curriculum Guide, based on the Orff and Kodály philosophies, performed significantly better on certain aspects of music achievement than students taught from a published songbook series.

The inconclusive nature of the previous studies taken in their entirety could reveal the complexities inherent in experimental research based in school settings. Many variables could not be controlled in this and previous studies, including scheduling, the use of intact classes, out of school music activities, and attitudes and personalities of stakeholders, which could make comparisons of teaching approaches increasingly difficult.

Recommendations

Central aims of this study were to contribute to the sparse body of knowledge involving Orff Schulwerk and to generate research areas in need of future inquiry. With the continued popularity of the Orff approach to music education, the need for studies that examine its impact on student achievement grows. Other studies in different teaching situations and lasting for longer periods of time would be appropriate. Studies focusing on the attitudinal differences of students taught using the Orff approach compared with other approaches should also be investigated. Longitudinal studies that examine the influence of Orff Schulwerk on student development and music achievement over time are strongly encouraged.

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APPENDIX A

CONSENT FORMS

January 3, 2007

Dear Parents:

I have thoroughly enjoyed working with your children during music class this year. I would like to explain a project that I will be undertaking the remainder of the school year with most third, fourth, and fifth grade classes. I am working on my doctorate in music education at the University of Georgia, and my research project is in the area of music methods and curriculum.

The music program will be based on two different music teaching approaches, which I am already using to some extent with the music classes. Each presents sound teaching procedures and opportunities to experience the same music concepts. Your child's class will be assigned at random to one of the two teaching approaches. I will meet with each class during their scheduled music class, one time per week for thirty minutes, for the remaining portion of the school year.

A music achievement test will be given to each child before the program begins, and again in the spring, to determine the effectiveness of each teaching approach. All the scores will be kept confidential and can be accessed by you at any time. Individual names will not be listed in the final draft or any publication of this research. The music achievement tests will be destroyed after the final defense of the dissertation. Your completion of the attached letter authorizes your child's participation in this study.

This project has been explained and approved by Dr. Black, who has also informed Mr. Andy Craig, Interim Superintendent. If you have any questions, I will be happy to talk to you. You may e-mail me at swomack@hoover.k12.al.us or call me at (205) 317-5010.

Thank you for your attention. There are two attached forms that should be signed and returned to your child's homeroom teacher by January 12, 2007. Keep this letter and copies of the two forms for you records. Again, I am looking forward to further working with the students at Greystone Elementary School.

Sincerely,

Sara Womack

Research Study Consent Form

I give permission for my child, _____, to take part in a research study titled "A Comparison of the Effects of Orff Schulwerk and Traditional Music Instruction on Selected Elements of Music Achievement in Third, Fourth, and Fifth Grade Students," which is being conducted by Sara Womack, from the School of Music, University of Georgia, (205) 317-5010, under the direction of Dr. Roy Legette, School of Music, University of Georgia, (706) 542-2756. I do not have to allow my child to be in this study if I do not want to. My child can refuse to participate or stop taking part at any time without giving any reason, and without penalty. I can request to have the results of the participation, to the extent that it can be identified as my child's, removed from the research records or destroyed.

The purpose of the study to measure the musical achievement of third, fourth, and fifth grade students taught using an Orff-centered approach and those taught using a more traditional music teaching approach as outlined in the music textbook series, Share the Music.

Students participating in this research may gain additional music knowledge and skills.

If my child and I volunteer to take part in this study, my child will be asked to do the following things:

- Take the *Music Achievement Test* as a pre-test during regularly scheduled music class lasting approximately twenty minutes.
- Participate in regularly scheduled music classes for the remainder of the school year.
- Take the *Music Achievement Test* as a post-test during regularly scheduled music class lasting approximately twenty minutes.

No discomforts or stresses are expected.

No risks are expected.

The results of this participation will be confidential, and will not be released in any individually identifiable form, unless otherwise required by law. All information gained during the course of the study will be kept confidential and will be destroyed after the final defense of the dissertation. The only people who will know that my child is a research study participant are members of the research team.

The researcher will answer any further questions about the research, now or during the course of the project, and can be reached by telephone at: (205) 317-5010.

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree for my child to participate in the study. I have been given a copy of this form

_____	_____	_____
Name of Researcher	Signature	Date
Telephone: (205) 317-5010		
E-Mail: swomack@hoover.k12.al.us		
_____	_____	_____
Name of Parent/Guardian	Signature	Date
_____	_____	
Student's Name	Homeroom Teacher	

Please sign both copies, keep one and return one to the researcher.

Additional questions or problems regarding your child's rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu.

January 3, 2007

Minor Assent Form

Dear Participant,

You are invited to participate in my research project titled, "A Comparison of the Effects of Orff Schulwerk and Traditional Music Instruction on Selected Elements of Music Achievement on Third, Fourth, and Fifth Grade Students." Through this project I am learning about the best way to teach boys and girls about music.

If you decide to be part of this, you will allow me to work with you on developing skills in music. You will take a test that will show how much you learn about music. You will allow me to take notes while you are making music. Your participation in this project will not affect your grades in school or your status in music class. I will not use your name on any papers that I write about this project. However, because of your participation you may improve your knowledge of music. I hope to learn something about music that will help other children in the future.

If you want to stop participating in this project, you are free to do so at any time. You can also choose not to answer questions that you don't want to answer.

If you have any questions or concerns you can always ask me or call my teacher, Dr. Roy Legette, at the following number: (706) 542-2756.

Sincerely,

Sara Womack
School of Music, University of Georgia
(205) 317-5010

I understand the project described above. My questions have been answered and I agree to participate in this project. I have received a copy of this form.

_____ _____

Signature of the Participant Date

Please sign both copies, keep one and return one to the researcher.

Additional questions or problems regarding your rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu

APPENDIX B

THIRD GRADE LESSON PLANS

The sequential procedures of the control group lesson plans were derived from the basic program of *Share the Music*. The sequential procedures of the experimental group lesson plans were derived from well-respected Orff materials (see Appendix E).

<table>
<tr><td colspan="2">Week 1</td></tr>
<tr><td colspan="2">Conceptual Objective: Rhythm patterns are groupings of durations that move in relation to the beat.</td></tr>
<tr><td>Control Group</td><td>Treatment Group</td></tr>
<tr><td>Behavioral Objective: Given selected listening examples, students will be able to accurately identify whether the teacher is performing (clapping) the rhythm of the beat or the rhythm of the melody.</td><td>Behavioral Objective: Given a selected rhyme, students will demonstrate ability to accurately differentiate between the rhythm of the words and the rhythm of the beat by playing different instruments on each at the appropriate time.</td></tr>
<tr><td>Source: Share the Music pages 1-7</td><td>Source: “Think of a Fly,” Level I, Jim Solomon, page 51</td></tr>
<tr><td>Materials: student textbooks, Share the Music recordings cd1:1-5</td><td>Materials: hand drums, rhythm sticks, triangles</td></tr>
<tr><td>Students:
1. Listen to teacher read the poem, “Rope Rhyme” (page 1).
2. Name some of their favorite games and discuss whether or not they have a steady beat.
3. Read the text on page 2.
4. Listen to the recorded lesson, “Beat and Rhythm of the Words of ‘Jambo’ ” and identify whether the steady beat or rhythm of the words accompanies the song.
5. Sing “Jambo” (page 2) while patting the steady beat and tell how the beat differs from the rhythm of the words.
6. Sing “Jambo” and change from clapping the rhythm of the words when the teacher’s hand is raised to patting the steady beat when the teacher’s hand is lowered.
7. Listen to “Bonefish, Bluebird” and tap the beat bars on page 3.
8. Listen again and pat the steady beat on their shoulders to determine if they hear beats where there are no words.
9. Clap the rhythm of the words and compare that rhythm with the steady beat.
10. Clap the rhythm of the words while looking at page 3, holding thumbs up on the beat of silence on each line.
11. Read about “The Name Game” (page 4)</td><td>Students:
1. Watch teacher perform movements and discuss what the possible text of “Think of a Fly.”
2. Mirror the teacher’s movements.
3. Learn the words to “Think of a Fly” by rote and perform with movements.
4. Stand and step the steady beat in place while speaking the rhyme with the movements.
5. Watch teacher demonstrate the partner movements of the B section with a student helper.
6. Perform the rhythm of the words of the A section on drums and the steady beat of the B section on wood instruments for the first 8 beats and metal instruments for the second 8 beats.
7. Perform in ABABAB etc. with changing partners.</td></tr>
</table>

and perform the movement. 12. Play “The Name Game” and identify the beats on which they spoke and on which beats they were silent. 13. Imitate the movement for “Oboa Asi Me Nsa” (page 6) while listening to the recording. 14. Determine whether they patted the rhythm or the steady beat. 15. Listen and imitate the pronunciation on the recording. 16. Identify on which beats of the rhythm pattern there is no sound by raising thumbs-up on beats three and four. 17. Listen to “Jambo” as the teacher claps the rhythm. 18. Determine whether the teacher is clapping the rhythm or the steady beat. 19. Explain their reasoning. 20. Read page 7 and discuss the questions and fine art piece.	
Method of Assessment: documented observation	Method of Assessment: documented observation

Week 2	
Conceptual Objective: Tones of a melody may move up, down, or remain the same.	
Control Group	Treatment Group
Behavioral Objective: Given several musical selections, students will identify melodic direction verbally and through movement.	Behavioral Objective: After discussion of melodic direction, students will apply knowledge by correctly performing a melody on barred instruments.
Source: *Share the Music* pages 3, 8-13	Source: "Chinese Ribbon Dance," *Mallet Madness* pages 60-61
Materials: student textbooks, *Share the Music* recordings cd 1:3, 6-9	Materials: barred instrument visual, barred instruments, gong
Students: 1. Say "Bonefish, Bluebird" (page 3) while patting the steady beat. 2. Listen to the recorded lesson, "Pitch in Bonefish, Bluebird," and echo lines at different pitch levels. 3. Move both hands higher or lower to show the pitch level they hear. 4. Read page 8. 5. Listen to and discuss the first verse of "Rocky Mountain." 6. Trace the melodic direction on pages 8 and 9 as they listen to verse 1 again. 7. Describe the pitch direction of the first verse. 8. Sing the first verse. 9. Sing the first verse again with their eyes closed while drawing the shape of the melody in the air. 10. Read page 10. 11. Listen to "Sabre Dance" and trace the shape of the main theme on page 10 and discuss how the melody moves. 12. Listen to the "Sabre Dance" theme while running in place on the repeated pitches, bending their knees on the dips in the melody, and lowering their bodies into a low-level twisted shape on the downward-moving melody at the end of the main theme. 13. Discuss the symbols on the "Sabre Dance" listening map. 14. Follow the listening map as they listen to the piece and discuss whether "Sabre	Students: 1. Listen to "Chinese Ribbon Dance" performed by the teacher on the xylophone with their eyes closed. 2. Listen to the piece again with their eyes open. 3. Discuss the upward, downward, and repeated patterns in the music. 4. Watch the teacher demonstrate the melodic pattern on a poster of a barred instrument while the students sing the accompanying number pattern. 5. Volunteer and individually play the melody on barred instruments as a demonstration for the class. 6. Practice the melody on barred instruments during a few minutes of free practice time. 7. Follow the teacher as they are led through the melody by slowly singing each note name. 8. Work gradually to increase the tempo. 9. Learn the bass bars and temple block part as an introduction and accompaniment. 10. Perform the piece while adding a strike on a gong on beat 4 of the coda. 11. Perform the piece ten times in a row without pause.

Dance" is exciting. 15. Listen to "Long-Legged Sailor" and discuss the text. 16. Read page 12 and trace the shape of the notated melody. 17. Compare the shape of the notated "Long-Legged Sailor" melody to the melodic shape of the theme on page 11. 18. Sing the song while patting their shoulders in time with the beat on the highest pitches. 19. Sing "Rocky Mountain" silently and explain which words are sung on the upward-moving pitches and downward-moving pitches. 20. Sing "Long-Legged Sailor" (page 13).	
Method of Assessment: documented observation	Method of Assessment: documented observation

Week 3	
Conceptual Objective: Tones of a melody may move up, down, or remain the same.	
Control Group	Treatment Group
Behavioral Objective: Students will demonstrate knowledge of melodic direction by accurately identifying like patterns in a selected piece of music.	Behavioral Objective: Students will demonstrate ability to accurately perform melodies on barred instruments.
Source: *Share the Music* pages 12-13, 24-27	Source: "Chinese Ribbon Dance," *Mallet Madness* pages 60-61
Materials: student textbooks, *Share the Music* recordings cd 1:7, 9, 16, 17	Materials: barred instrument visual, barred instruments, gong, ribbon streamers
Students: 1. Review the first section of "Long-Legged Sailor" on page 12 and listen to the instrumental track of the recording. 2. Trace the shape of the melody with their hands as they sing the first section on the syllable *loo*. 3. Trace the shape of the melody as they follow the notation and lyrics on page 13. 4. Read about "Kuma San" on page 24. 5. Listen to the song while raising their hands each time they hear the words *Kuma san*. 6. Listen again as they draw the shape of the melody in the air each time they occur. 7. Listen to the recorded lesson, "Pronunciation for 'Kuma San' " and learn the song. 8. Read page 25 and sing the song. 9. Identify the pitches in the tinted measures by touching legs, waist, and shoulders for the lowest, middle, and highest pitches. 10. Sing the song while performing the movements sung in the song. 11. Read about the staff on page 26. 12. Trace the notation on page 24 while they sing "Kuma San." 13. Sing the tinted measures of "Rocky Mountain" on page 27. 14. Identify other pitch patterns in "Rocky Mountain" that are the same as the	Students: 1. Review the melody on barred instruments while the teacher brings attention to the upward, downward, and repeated melodic patterns. 2. Play soft glissandos on the barred instruments and roll on the gong and crescendo as an introduction to the piece. 3. Perform the piece ten times in a row with the added introduction. 4. Imitate the teacher's movements to learn the ribbon dance that will be performed with the music. 5. Half of the students will perform on the instruments while the other half perform the movement. 6. Rotate parts with ribbon dancers becoming instrument players and instrument players becoming ribbon dancers and perform again.

printed pattern. 15. Sing all verses of “Rocky Mountain” (page 27).	
Method of Assessment: documented observation	Method of Assessment: documented observation

<table>
<tr><td colspan="2">Week 4</td></tr>
<tr><td colspan="2">Conceptual Objective: Beat is grouped by accent.</td></tr>
<tr><td>Control Group</td><td>Treatment Group</td></tr>
<tr><td>Behavioral Objective: Upon listening to an unknown recording, students will verbally identify beat groupings (meter).</td><td>Behavioral Objective: Given a musical selection in triple meter, students will accurately perform dotted half-note values as additive note values (group of three quarter notes).</td></tr>
<tr><td>Source: Share the Music pages 174-179</td><td>Source: “Bells in the Steeple,” Level I, Jim Solomon, page 110</td></tr>
<tr><td>Materials: student textbooks, Share the Music recordings cd 4:40-43, cd5:1-3</td><td>Materials: rhythm visuals, barred instruments, suspended cymbal</td></tr>
<tr><td>Students:
Read “They Were My People” (page 175) silently as the teacher reads it aloud.
Listen to “African Postal Workers” and discuss what the people may be doing.
Listen again after finding out the song is performed by postal workers as they stamp and sort letters.
Explain why they think people make music why they work.
Read page 176.
Listen to the recorded lesson, “Introducing ‘Tititorea’ ” and perform a pat-clap-snap pattern to prepare for the Maori stick game.
Listen to the song.
Recall and perform the bounce-catch motion for beats grouped in sets of two and describe the motion.
Listen to and hum the melody of “Tititorea” while performing the pat-clap-snap motion and describe the motion as beats grouped in sets of three.
Listen to the recorded lesson, “Pronunciation for ‘Tititorea’ ” and learn the words of the song.
Read page 177 and hum the melody as they perform the pat-clap-snap movement with imaginary sticks to emphasize triple meter.
Hum the melody again changing from</td><td>Students:
Softly pat the steady beat while the teacher sings the song.
Discuss which words last for three beats.
Discuss the visuals including three quarter notes equaling one dotted half note.
Learn the song by rote.
Sing the song, while the teacher ensures they are sustaining the dotted quarter notes for three beats.
Read and play the bass metallophone part, consisting of dotted half notes, while singing.
Discuss the posted visual of one dotted half note equaling one dotted half rest.
Read and play the glockenspiel part, consisting of dotted half rests and quarter notes.
Add cymbal part.
Perform orchestration with singing.</td></tr>
</table>

the pat-clap-snap movement to the floor-freeze-freeze movement. 13. Listen to "One, Two, Three!" to find how the beats are grouped and tell what occurs on beat 4 of the first measure of each line. 14. Move by hitting one fist into the palm of the other hand on the downbeat and shaking hands three times in the air on beats 2, 3, and 4. 15. Read page 179, listen to "Cuequita de los Coyas," and identify which beat grouping they heard.	
Method of Assessment: documented observation	Method of Assessment: documented observation

Week 5	
Conceptual Objective: Rhythm patterns are groupings of durations that move in relation to the beat.	
Control Group	Treatment Group
Behavioral Objective: Students will accurately identify and clap sixteenth-note patterns in a selected melody.	Behavioral Objective: Students will accurately identify and perform patterns containing sixteenth notes.
Source: *Share the Music* pages 132-137	Source: "Chicken in the Fence Post," Level I, Jim Solomon, pages 112-113
Materials: student textbooks, *Share the Music* recordings cd 4:1-5	Materials: barred instruments
Students: 1. Listen to the teacher read "Alphabet Stew" (page 132). 2. Read the lyrics of "Frog Went A-Courtin' " (pages 134-135) and discuss the story. 3. Listen to the recorded lesson, "Learning to Sing 'Frog Went A-Courtin' " and echo four-beat phrases of the verse and refrain. 4. Sing the song while clapping the steady beat. 5. Pat the rhythm of *Rinktum body minchy cambo* with alternating hands. 6. Listen to a few verses and only sing *Rinktum body minchy cambo*. 7. Sing the song, patting the rhythm *Rinktum body minchy cambo* as the pattern occurs. 8. Read page 136 and listen to "I'll Rise When the Rooster Crows." 9. Sing the song. 10. Say the rhythm ostinato while patting with alternate hands. 11. Form two groups. One group pats with the beat and the other group says the ostinato four times. 12. Discuss the number of sounds on each beat. 13. Listen to "Biddy, Biddy" and answer the questions on page 137. 14. Sing the song and pat only the rhythm of the words with four sounds to a beat. 15. Discuss the words that have been sung	Students: 1. Listen to the teacher sing "Chicken in the Fence Post" and determine which phrases are the same. 2. Echo sing the phrases that repeat. 3. Sing phrases 1 and 3 while the teacher sings phrases 2 and 4. 4. Sing the entire song. 5. Pat the rhythm of the words while singing. 6. Set up barred instruments in F pentatonic. 7. Determine how many rests come after the third *Chicken in the fence post*. 8. Practice the rhythm of *Chicken in the fence post can't dance Josie* and label sixteenth notes with a visual. 9. Perform the following form: A (class sings), B (rhythm of the words on temple blocks), A (class sings), C (rhythm of the words on barred instruments). 10. Learn the Orff arrangement for the A section by rote. 11. Perform the entire arrangement in ABAC form with temple blocks and barred instruments.

during class that have four sounds per beat.	
Method of Assessment: documented observation	Method of Assessment: documented observation

Week 6	
Conceptual Objective: Musical form is based on the principle of repetition and contrast.	
Control Group	Treatment Group
Behavioral Objective: Students will demonstrate ability to correctly identify (verbally) antecedent and consequent phrases.	Behavioral Objective: Give a selected song, students will indicate knowledge of song form by accurately alternating performance media at each section change.
Source: *Share the Music* pages 138, 158-161	Source: "Listen to the Glockenspiels," *Mallet Madness* page 63
Materials: student textbooks, *Share the Music* recordings cd 4:5, 6, 21	Materials: improvisation visual, barred instruments
Students: 1. Listen while the teacher reads "The Secret Song" aloud and discuss the questions and answers in the poem. 2. Sing verse 1 of "The Old Sow's Hide" on page 138 while standing during phrases 1 and 3 and sitting during phrases 2 and 4. 3. Look at page 159 and identify which phrase is a question. 4. Sing the question aloud and the answer silently. 5. Improvise an 8-beat body percussion rhythm to replace phrase 2 of the song. 6. Listen to the recorded lesson, "Sample Questions and Answers" and identify and discuss the best musical answer. 7. Read the second rhythmic question and answer and answer the questions on page 159.	Students: 1. Discuss the differences in timbre and construction between xylophones, metallophones, and glockenspiels. 2. Warm up on the instruments to further determine the differences. 3. Define improvisation as creating your own music rather than reading notes from notation. 4. Improvise on instruments for 16 beats. 5. Individually share their improvisations. 6. View the visual of 16 beats and watch as the teacher points to each beat while a student improvises. 7. Take special note of the rest on beat 16 of the improvisation. 8. Improvise on the barred instruments when directed to do so by the text of the song as sung by the teacher. 9. Perform the song in ABABAB etc. form with the teacher singing on the A section and improvising in instrument groups on the B section.
Method of Assessment: documented observation	Method of Assessment: documented observation

Week 7	
Conceptual Objective: Musical form is based on the principle of repetition and contrast.	
Control Group	Treatment Group
Behavioral Objective: Given an antecedent phrase performed by the teacher, students will demonstrate knowledge of phrase structure by accurately improvising the consequent phrase.	Behavioral Objective: Give a selected song, students will indicate knowledge of song form by accurately alternating performance media at each section change.
Source: *Share the Music* pages 158-161	Source: "Listen to the Glockenspiels," *Mallet Madness* page 63
Materials: student textbooks, *Share the Music* recordings cd 4:5, 6, 21	Materials: improvisation visual, barred instruments
Students: 1. Review question and answer improvisations. 2. Sing "Biddy, Biddy" (page 161) and name the words on which they find sixteenth notes. 3. Listen as the teacher claps the rhythmic question on page 160 and individually improvise answers. 4. Describe how a rhythmic question and its answer should be alike and how they should be different. 5. Perform their improvisations as an introduction and coda for "Biddy, Biddy."	Students: 1. Review improvisations on barred instruments. 2. Learn the melody of the A section by rote. 3. Learn the instrument accompaniment by rote while singing the melody of the A section. 4. Improvise on the barred instruments when directed to do so by the text of the song and following the direction of the teacher. 5. Perform the song in ABABAB etc. form with singing and playing instruments on the A section and improvising in instrument groups on the B section.
Method of Assessment: documented observation	Method of Assessment: documented observation

Week 8	
Conceptual Objective: Beat is grouped by accent.	
Control Group	Treatment Group
Behavioral Objective: Given a selected listening example, students will accurately identify which sections in duple versus triple meter.	Behavioral Objective: Upon listening to a selection sung by the teacher, students will accurately identify the meter.
Source: *Share the Music* pages 196-199	Source: "Piping Hot" and "My Horses Ain't Hungry," *Discovering Orff* pages 183-186
Materials: student textbooks, *Share the Music* recordings cd 5:15, 17-20	Materials: barred instruments, woodblocks
Students: 1. Listen to "Ton Moulin" and perform a down-up-up movement to describe the placement of the downbeat. 2. Discuss which section did not match the movement. 3. Read page 196 and imitate the teacher's movements, pat-clap-snap-snap, to "Mabel, Mabel" in duple meter. 4. Echo the teacher saying the speech piece as they perform the body percussion pattern. 5. Listen to "Mabel, Mabel" in triple meter and perform the body percussion, pat-clap-snap. 6. Echo the teacher saying the speech piece as they perform the body percussion pattern in triple meter. 7. Read pages 198-199. 8. Listen to "Allemande Tripla" while following the listening map and determine which sections are in duple meter and which sections are in triple meter. 9. Answer the questions on page 199. 10. Discuss ways in which the notation tells them there are different meters in a piece of music. 11. Clap the rhythmic ostinato to accompany the triple meter section of "Allemande Tripla."	Students: 1. Perform locomotor movements to a drum played by the teacher in duple meter and triple meter. 2. Discuss and notate the differences between duple meter and triple meter. 3. Listen to the teacher perform rhythmic patterns on a drum to determine if the music is in duple meter or triple meter. 4. Listen to "Piping Hot" (page 183) performed by the teacher in duple meter and in triple meter and discuss the differences. 5. Perform nonlocomotor movements to "Piping Hot" in duple meter and triple meter. 6. Listen to teacher sing "My Horses Ain't Hungry" (page 185-186) and determine if the song is in duple meter or triple meter. 7. Learn the Orff arrangement for "My Horses Ain't Hungry" by rote. 8. Perform the arrangement in triple meter.
Method of Assessment: documented observation	Method of Assessment: documented observation

Week 9	
Conceptual Objective: Musical form is based on the principle of repetition and contrast.	
Control Group	Treatment Group
Behavioral Objective: After guided practice on improvising 8-beat "question/answer" phrases, students correctly improvise a rondo form.	Behavioral Objective: After guided practice on improvising 8-beat "question/answer" phrases, students correctly improvise a rondo form.
Source: *Share the Music* pages 162-165	Source: "Listen," *Strike It Rich* pages 6-7
Materials: student textbooks, *Share the Music* recordings cd 4:11, 22-26	Materials: barred instruments, triangles
Students: 1. Sing the A section of "Goin' to Ride Up in the Chariot." 2. Listen to the entire song. 3. Discuss how the two versions are different. 4. Read pages 162-163 and sing the B section of "Goin' to Ride Up in the Chariot." 5. Sing the song in ABA form. 6. Sing "I'll Rise When the Rooster Crows" on page 151. 7. Listen to the recorded lesson, "Question and Answer Review" and echo 8-beat rhythmic questions and answers using body percussion. 8. Perform 8-beat questions and answers in pairs. 9. Read page 164. 10. Create a rondo form by alternating the class performance with rhythmic questions and answers.	Students: 1. Listen to the teacher sing "Listen" and echo phrase by phrase to learn the melody. 2. Sing the melody and snap on the rests. 3. Transfer the snaps to a triangle. 4. Learn the text for sections B, C, and D from the visuals presented by the teacher. 5. Pat the rhythm of the words with alternating hands for sections B, C, and D. 6. Discuss the characteristics of xylophones, metallophones, and glockenspiels. 7. Prepare the Orff arrangement by playing the parts using body percussion. 8. Transfer the parts to instruments set up in a C pentatonic scale by improvising the pitches using the rhythm of the words. 9. Perform the rondo.
Method of Assessment: documented observation	Method of Assessment: documented observation

Week 10	
Conceptual Objective: Musical form is based on the principle of repetition and contrast.	
Control Group	Treatment Group
Behavioral Objective: After guided discussion of rondo form, students will accurately identify the form as presented in "Ah-Choo!".	Behavioral Objective: After learning to play the A section, students will create B and C sections on non-pitched instruments and perform all sections as a rondo.
Source: *Share the Music* pages 164-165, 370-371	Source: "Simple Simon," *3rd Rhyme's the Charm* pages 18-19
Materials: student textbooks, *Share the Music* recordings cd 4:24-25, cd 9:31	Materials: barred instruments, cabasa, pie visuals
Students: 1. Listen to the A section of "Los mariachis." 2. Read pages 164-165 and discuss the form of the music. 3. Listen to the piece while following the listening map. 4. Listen to the rondo form of the piece while patting the steady beat each time they hear the A section. 5. Listen as students discuss some of their favorite folk tales. 6. Read the words of "Ah-Choo!" and discuss the story. 7. Listen to "Ah-Choo!" while following the notation. 8. Outline the form of the song as rondo form. 9. Sing each section of the song.	Students: 1. Warm up vocally by echoing the teacher singing short patterns using mi, re, and do. 2. Echo sing the melody in measures 2 and 4 of "Simple Simon." 3. Sing measures 2 and 4 while teacher sings measures 1 and 3. 4. Sing measures 1 and 3 while teacher sings measures 2 and 4. 5. Sing entire song. 6. Learn the Orff arrangement, which becomes the A section, on bass xylophone, contra bass bars, alto xylophone, and cabasa, by rote. 7. Perform the A section twice, internalizing the melody on the repeat. 8. Create the B section by combining favorite pies into a word chain and performed on unpitched instruments twice. 9. Create the C section in the same manner. 10. Perform in rondo form.
Method of Assessment: documented observation	Method of Assessment: documented observation

<table>
<tr><td colspan="2">Week 11</td></tr>
<tr><td colspan="2">Conceptual Objective: The unique organization of musical elements creates a musical style.</td></tr>
<tr><td>Control Group</td><td>Treatment Group</td></tr>
<tr><td>Behavioral Objective: After guided practice, students will correctly manipulate musical elements to create new arrangements of given selections.</td><td>Behavioral Objective: After guided practice, students will correctly manipulate musical elements to create new arrangements of given selections.</td></tr>
<tr><td>Source: Share the Music pages 262-265</td><td>Source: “Tideo,” As American as Apple Pie pages 10-12</td></tr>
<tr><td>Materials: student textbooks, Share the Music recordings cd 6:32-35</td><td>Materials: barred instruments, jingle bells, temple blocks, visual of rhyme</td></tr>
<tr><td>Students:
Read “America, the Beautiful” (page 262) and discuss the meaning of the lyrics.
Clap the rhythmic ostinato and locate the ostinato in the notation.
Pat the rhythm as an ostinato while singing the song.
Listen to “You’re a Grand Old Flag” (page 263), march in place to the steady beat, and wave an imaginary flag on the longer sounds.
Listen to “This Land is Your Land” (page 264-265).
Sing the refrain aloud and the tinted words silently.
Sing the tinted words aloud and the refrain silently.
Compare the lines in the refrain by tracing the shape of the melody as they follow the notation.
Form two groups with group 1 singing the refrain as group 2 sings the verse to discover the melodies are the same.
Sing the entire song.
Listen to “America” (page 265) and sing along when able.</td><td>Students:
Listen while the teacher sings the song while students follow the text on the visual.
Echo sing by phrase to learn the melody.
Isolate special words one at a time and transfer to body percussion.
Transfer body percussion to instruments used in the Orff arrangement.
Learn the bass xylophone and metallophone part by imitating the teacher.
Perform the arrangement.
Internalize the words and perform the arrangement.</td></tr>
<tr><td>Method of Assessment: documented observation</td><td>Method of Assessment: documented observation</td></tr>
</table>

Week 12	
Conceptual Objective: Beat is grouped by accent.	
Control Group	Treatment Group
Behavioral Objective: After guided practice, students will correctly sing and play body percussion in six-eight time.	Behavioral Objective: After guided practice, students will correctly speak, play body percussion, play instruments, sing, and move in six-eight time.
Source: *Share the Music* pages 104-107	Source: "Soda Pop," *D.R.U.M.* page 38 and "Down the River," *As American as Apple Pie* page 13
Materials: student textbooks, *Share the Music* recordings cd 3:1, 3, 7, 14, 15	Materials: tubanos, shaker, cowbell, vibraslap, bass drum, guitar
Students: 1. Listen to "Veinte y tres" (page 104) and recall the people who sang it. 2. Choose and perform a locomotor movement to fit the unequal rhythm as they listen. 3. Listen to the recorded lesson, "Pronunciation for 'Veinte y tres' " and learn the song. 4. Sing the song in Spanish, then in English. 5. Listen to "Charlie." 6. Sing the first verse of "Charlie" (page 105) while patting the beat in six-eight time with alternating hands. 7. Read page 105. 8. Read about the dotted quarter rest. 9. Play the ostinato on body percussion while singing "Charlie." 10. Listen to the melody of "Row, Row, Row, Your Boat" without the words. 11. Sing the song while clapping the rhythm of the words. 12. Read page 107 and clap the rhythms. 13. Identify which rhythms match the rhythm of the words.	Students: 1. Listen to the teacher speak "Soda Pop" in six-eight time. 2. Identify the different kinds of soda pop in the text of the rhyme. 3. Listen to the teacher speak the rhyme again and clap on the basses. 4. Speak the rhyme and clap on the basses. 5. Echo pat the rhythm a phrase at a time. 6. Pat the rhythm of the entire rhyme. 7. Pat the rhythm of the rhyme and tap knee on the basses. 8. Transfer body percussion to drums. 9. Learn the accompanying parts by rote. 10. Perform entire arrangement with the cowbell part serving as an interlude between the repeat of the A section. 11. Listen as the teacher sings "Down the River" in six-eight time. 12. Learn the song by rote. 13. Imitate the teacher's movements to learn the dance. 14. Perform the dance and sing while the teacher accompanies on the guitar.
Method of Assessment: documented observation	Method of Assessment: documented observation

Week 13	
Conceptual Objective: The unique organization of musical elements creates a musical style.	
Control Group	Treatment Group
Behavioral Objective: Students will correctly sing, move, play body percussion, and verbally analyze music in a variety of styles.	Behavioral Objective: After guided practice, students will correctly move to a folk dance in an old-time musical style.
Source: *Share the Music* pages 304-309	Source: "Alabama Gal," *Chimes of Dunkirk* page 10
Materials: student textbooks, *Share the Music* recordings cd 7:31-36	Materials: *Chimes of Dunkirk* recording
Students: 1. Read page 304. 2. Bounce an imaginary ball to a steady 3-beat rhythm while saying bounce-catch-hold. 3. Listen to "In the Good Old Summertime" while conducting in triple meter. 4. Sing the song. 5. Read page 305 and listen to "In the Good Old Summertime" in barbershop style. 6. Conduct in triple meter to notice the freer rhythm. 7. Compare the two styles of the song by discussing the differences in voice and rhythm. 8. Listen to "Cotton Eyed Joe" while patting the steady beat during the A section and clapping during the B section. 9. Read page 307. 10. Listen to the "Acitrón" and pat the strong beat with the right hand on the right thigh. 11. Listen again while picking up an imaginary lemon from the floor and placing it in front of the neighbor to the right. 12. Listen to the recorded lesson, "Pronunciation for 'Acitrón' " and sing the song. 13. Read the top of page 309. 14. Pat the steady beat while listening to "Doudlebska Polka" and identify the	Students: 1. Listen to the teacher sing the song and discuss the possible meaning of the text 2. Learn the song by rote. 3. Sing along with the recording. 4. Imitate the teacher's movements to learn the dance with a partner. 5. Perform the dance along with the recording to experience the role of folk music.

form as ABC. 15. Read page 308 and listen to “Jamaican Jump-Up.”	
Method of Assessment: documented observation	Method of Assessment: documented observation

APPENDIX C

FOURTH GRADE LESSON PLANS

The sequential procedures of the control group lesson plans were derived from the basic program of *Share the Music*. The sequential procedures of the experimental group lesson plans were derived from well-respected Orff materials (see Appendix E).

Week 1	
Conceptual Objective: Tonal movement may progress by steps, by skips, or by repetition of the same tone.	
Control Group	Treatment Group
Title: "Reviewing GAB"	Title: "Boat to Brazil"
Source: *Share the Music* Recorder Master 7	Source: "Boat to Brazil," *Recorder Routes* pages 4-5
Materials: copies of Recorder Master 7, *Share the Music* recording cd 2:14, student textbooks, pencils, recorders	Materials: visual, recorders
Students: 1. Echo patterns using G, A, and B with their eyes closed. 2. Review by listening to "Swapping Song" (page 68). 3. Practice the patterns on the worksheet individually. 4. Play one pattern for a partner who will guess which pattern it is and then, switch roles. 5. Complete the written activity on the worksheet.	Students: 1. Clap the rhythm of "Boat to Brazil" from the visual. 2. Track the melody from the visual as the teacher plays it on recorder. 3. Learn the body percussion, snap for B, clap for A, and pat for G, by imitating the teacher's movements. 4. Sing the pitch names while performing the body percussion. 5. Sing the pitch names and finger the pitches on recorder. 6. Play measures 1-2 and 5-6 while the teacher plays measures 3-4 and 7-8. 7. Play measures 3-4 and 7-8 while the teacher plays measures 1-2 and 5-6. 8. Play the entire song from the visual.
Method of Assessment: written assessment by student	Method of Assessment: documented observation

Week 2	
Conceptual Objective: Tonal movement may progress by steps, by skips, or by repetition of the same tone.	
Control Group	Treatment Group
Title: "Reviewing GAB" (continued)	Title: "Boat to Brazil" (continued)
Source: *Share the Music* Recorder Master 7	Source: "Boat to Brazil," *Recorder Routes* pages 4-5
Materials: copies of Recorder Master 7, student textbooks, *Share the Music* recording cd 2:14, recorders	Materials: visual, recorders, barred instruments, temple blocks, maracas
Students: 1. Practice playing the accompaniment for "Swapping Song." 2. Sing the refrain of "Swapping Song" while other students play the accompaniment and then, switch roles. 3. Practice with partners to help each other play "Babylon's Fallin'." 4. Sing "Babylon's Fallin' " while other students play with accompaniment and then, switch roles.	Students: 1. Review the recorder part for "Boat to Brazil." 2. Listen to the teacher play the glockenspiel part and discuss the similarities and differences between it and the melody. 3. Learn the additional instrument parts by rote. 4. Perform "Boat to Brazil."
Method of Assessment: documented observation	Method of Assessment: documented observation

<table>
<tr><td colspan="2">Week 3</td></tr>
<tr><td colspan="2">Conceptual Objective: Beat is grouped by accent.</td></tr>
<tr><td>Control Group</td><td>Treatment Group</td></tr>
<tr><td>Title: “Music with a Message”</td><td>Title: “Lullaby”</td></tr>
<tr><td>Source: Share the Music pages 176-181</td><td>Source: “Lullaby,” Level I, Karen Medley, pages 31-32</td></tr>
<tr><td>Materials: student textbooks, Share the Music recordings cd 5:1-4</td><td>Materials: visual, recorders, barred instruments, jingle bells, claves, triangles</td></tr>
<tr><td>Students:
1. Identify ways people communicate messages or ideas to each other.
2. Read the proverbs on page 177 and discuss the messages they contain.
3. Read about “Take Time in Life” (page 178) and listen to the song.
4. Discuss the advice given in the song.
5. Learn the song and then, sing it while patting a neighbor’s hand with a “high five” gesture on the first beat of each measure.
6. Identify the time signature and find the time signature in the music.
7. With a partner, create a beat pattern that shows the beat in sets of four.
8. Sing the song while performing the four-beat movement patterns with their partners.
9. Learn the dance for “Take Time in Life.”
10. Listen to the recorded lesson, “Beat Groupings,” and find the beats in the A section of “D’Hammerschmieds-gesellen” are in sets of three.
11. Read page 179 and match the meter signature to the pictures representing sets of beats.
12. List to the complete selection and identify its meter signature.
13. Learn the movement and perform it with the music.
14. Read about and listen to “Calypso” (page 180-181).
15. Discuss the message of the lyrics.
16. Listen again and determine the meter.
17. Perform the beat pattern that represents</td><td>Students:
1. Echo on recorder after watching the teacher’s body percussion patterns, snap for B, clap for A, and pat for G.
2. Echo the melody for “Lullaby” from the teacher’s body percussion.
3. Listen to the teacher sing the song while following the visual.
4. Snap on the high words as they sing.
5. Clap on the middle words as they sing.
6. Pat on the low words as they sing.
7. Play the entire melody on body percussion.
8. Sing the melody.
9. Sing the melody while fingering the pitches on recorder.
10. Play the melody on recorder.
11. Learn the accompaniment on barred instruments and unpitched percussion instruments by rote.
12. Perform the arrangement of “Lullaby.”</td></tr>
</table>

the meter.	
Method of Assessment: documented observation	Method of Assessment: documented observation

Week 4	
Conceptual Objective: Musical form is based on the principle of repetition and contrast.	
Control Group	Treatment Group
Title: "A Rain 'E'-Day Song"	Title: "Sally on the Seesaw"
Source: *Share the Music* Recorder Master 11	Source: "Sally on the Seesaw," *Recorder Routes* page 15
Materials: copies of Recorder Master 11, student textbooks, *Share the Music* recording cd 2:32, recorders	Materials: pitch stack visual, recorders, barred instruments, woodblocks, triangles
Students: 1. Review "I Don't Care If the Rain Comes Down" on page 88. 2. Learn the fingering for E by imitating the teacher. 3. Experiment playing "Rainstorm" using different rhythms, dynamics, and tempos and then, share with the class. 4. Practice the rhythmic and melodic patterns on the worksheet. 5. Play the pattern on *I'm gonna dance all day* while other students sing "I Don't care If the Rain Comes Down" and then, switch roles.	Students: 1. Learn the first motive on recorder by imitating the teacher's movements on a pitch stack. 2. Identify the other places in the song that have the same motive. 3. Learn motives 2 and 4 in the same process. 4. Play each motive in small groups and then, switch groups. 5. Individually play the entire melody. 6. Sing the melody with lyrics and unpitched instruments. 7. Learn the arrangement on barred instruments and unpitched percussion instruments by rote. 8. Perform the arrangement with recorders, barred instruments, and unpitched percussion instruments.
Method of Assessment: documented observation	Method of Assessment: documented observation

Week 5	
Conceptual Objective: Tonal movement may progress by steps, by skips, or by repetition of the same tone.	
Control Group	Treatment Group
Title: "Reviewing EGAB"	Title: "Rainforest Song"
Source: *Share the Music* Recorder Master 13	Source: "Rainforest Song," *Tropical Recorder* page 1
Materials: copies of Recorder Master 13, student textbooks, *Share the Music* recording cd 3:14, pencils, recorders	Materials: visual, recorders, guitar
Students: 1. Sing the song, "I's the By" on page 112. 2. Practice the rhythmic and melodic patterns on the worksheet. 3. Complete the worksheet by writing the pitch names under the notes. 4. Play "Yangtze Boatmen's Chantey" on recorder.	Students: 1. Listen to the teacher play the melody of "Rainforest Song." 2. Sing the pitch names for the A section from notation while the teacher accompanies on guitar. 3. Sing and finger the pitches for the A section from notation. 4. Play the A section. 5. Use the same process to learn the B section. 6. Finger the pitches while the teacher plays the entire song. 7. Play the entire song while the teacher accompanies on guitar.
Method of Assessment: written assessment by student	Method of Assessment: documented observation

Week 6	
Conceptual Objective: Tonal movement may progress by steps, by skips, or by repetition of the same tone.	
Control Group	Treatment Group
Title: "Reviewing EGAB" (continued)	Title: "Rainforest Song" (continued)
Source: *Share the Music* Recorder Master 13	Source: "Rainforest Song," *Tropical Recorder* page 1
Materials: copies of Recorder Master 13, student textbooks, *Share the Music* recording cd 3:14, recorders	Materials: visual, recorders, guitar, barred instruments
Students: 1. Review playing "Yangtze Boatmen's Chantey." 2. Practice playing "Yangtze Boatmen's Chantey" as a duet with a partner. 3. Play the duets in partners for the class. 4. Practice "I's the By" rhythmic and melodic patterns on the worksheet. 5. Play the patterns while another group sings the song and then, switch roles.	Students: 1. Review playing "Rainforest Song" on recorder while the teacher accompanies on guitar. 2. Learn the barred instrument parts by rote. 3. Play the entire song on recorder and barred instruments.
Method of Assessment: written assessment by student	Method of Assessment: documented observation

Week 7	
Conceptual Objective: Tonal movement may progress by steps, by skips, or by repetition of the same tone.	
Control Group	Treatment Group
Title: "A Starry Night with EGAB"	Title: "Rainforest Song" (continued)
Source: *Share the Music* Recorder Master 19	Source: "Rainforest Song," *Tropical Recorder* page 1
Materials: copies of Recorder Master 19, student textbooks, *Share the Music* recording cd 1:6, recorders	Materials: visual, recorders, guitar, barred instruments, claves, maracas, tubanos
Students: 1. Sing "Mongolian Night Song" on page 9. 2. Clap the rhythmic patterns on the worksheet. 3. Play the rhythmic patterns on low E. 4. Speak the pitch names in part 1 of the "Mongolian Night Song" introduction. 5. Play part 1 of the introduction. 6. Use the same process to play parts 2 and 3. 7. In groups of three, play the "Mongolian Night Song" introduction for the class. 8. Play the three parts together as an introduction and then, sing the song.	Students: 1. Review playing "Rainforest Song" on recorder while the teacher accompanies on guitar. 2. Review the barred instrument parts. 3. Play the song on recorder and barred instruments. 4. Learn the unpitched percussion instrument parts by rote. 5. Play the entire arrangement while the teacher accompanies on guitar.
Method of Assessment: documented observation	Method of Assessment: documented observation

<table>
<tr><td colspan="2">Week 8</td></tr>
<tr><td colspan="2">Conceptual Objective: Tonal movement may progress by steps, by skips, or by repetition of the same tone.</td></tr>
<tr><td>Control Group</td><td>Treatment Group</td></tr>
<tr><td>Title: “Learning to Play D ‘D”Lightfully”</td><td>Title: “All Hid”</td></tr>
<tr><td>Source: Share the Music Recorder Master 21</td><td>Source: “All Hid,” Recorder Routes pages 30-31</td></tr>
<tr><td>Materials: copies of Recorder Master 21, student textbooks, Share the Music recording cd 5:5, recorders, pencils</td><td>Materials: recorders, pitch stack visual, guitar, bass xylophones</td></tr>
<tr><td>Students:
Echo rhythmic patterns on low E after the teacher.
Imitate the teacher’s fingering of low D to learn how to play the pitch on recorder.
Clap the rhythmic pattern on the worksheet and play on low D.
Play each melodic pattern using low D and low E on the worksheet.
Complete the worksheet by writing the pitch names for “Tum-Balalaika” accompaniment under the notation.
Listen to the recording of the song while fingering the pitches on recorder.
Play the accompaniment for along with “Tum-Balalaika.”</td><td>Students:
Discuss the game, hide and seek.
Learn the refrain by rote.
Listen to the teacher sing the entire song and sing along during the refrain.
Discuss the number of pitches they sang during the refrain.
Warm up on recorder by following the teacher pointing to pitches on the pitch stack.
Identify pitch names of the refrain by looking at a visual of the notation.
Play the questions while the teacher plays the answers.
Play the answers while the teacher plays the questions.
Divide into three groups and play the questions, play the answers, and sing the song while the teacher accompanies on guitar.
Learn the accompaniment on bass xylophone by rote.
Perform the song on recorder and bass xylophone while the teacher accompanies on guitar.</td></tr>
<tr><td>Method of Assessment: written assessment by student</td><td>Method of Assessment: documented observation</td></tr>
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Week 9	
Conceptual Objective: Beat is grouped by accent.	
Control Group	Treatment Group
Title: "Learning a Lullaby"	Title: "Red Sails"
Source: *Share the Music* Recorder Master 22	Source: "Red Sails," *Recorder Routes* page 33
Materials: copies of Recorder Master 22, recorders, pencils	Materials: recorders, visual, bass xylophone, triangle
Students: 1. Review the fingering for low D. 2. Partner with another student and play head and shoulders. 3. Play the rhythmic pattern on the worksheet on low E and low D. 4. Complete the worksheet by writing in pitches E or D in any order. 5. Play the pitch pattern for the class. 6. Play "Fais do-do." 7. Play "Fais do-do" while their partner plays their pitch pattern composed earlier and then, switch roles. 8. Play the duets for the class.	Students: 1. Listen to the teacher play the bass xylophone part and sing the song. 2. Echo sing to learn the song by rote. 3. Sing the song while the teacher accompanies on bass xylophone. 4. Listen to the teacher play the melody on recorder. 5. Play each measure of the song on recorder by reading the notation. 6. Play measures 1 and 2 while other students play measures 3 and 4 and then, switch roles. 7. Play the entire song on recorder. 8. Learn the bass xylophone and triangle parts by rote. 9. Perform the song with recorder, singing, bass xylophone, and triangle.
Method of Assessment: written assessment by student	Method of Assessment: documented observation

Week 10	
Conceptual Objective: Musical texture is the relationship of harmonic and melodic elements of music.	
Control Group	Treatment Group
Title: "Signs of the Road with DEGAB"	Title: "Get on Board"
Source: *Share the Music* Recorder Master 24	Source: "Get on Board," *Recorder Routes* pages 34-35
Materials: copies of Recorder Master 24, student textbooks, *Share the Music* recording cd 2:13, recorders	Materials: recorders, pitch stack visual, bass xylophones
Students: 1. Echo four-beat patterns after the teacher. 2. Play melodic patterns listed on the worksheet. 3. Sing "Down the Road" on page 62. 4. Play the motive for "Down the Road" by following the notation on the worksheet. 5. Play the A section of "Down the Road" along with the recording. 6. Improvise during the B section of the song using pitches D, E, G, A, and B and share with the class. 7. Play the A section and improvise during the B section. 8. Play the accompaniment for "Down the Road" by following the notation on the worksheet.	Students: 1. Learn the refrain to "Get on Board" by rote. 2. Sing the refrain while the teacher accompanies on bass xylophone. 3. Learn the accompaniment by following the teacher pointing to the pitch stack. 4. Sing the accompaniment by following the notation on the visual. 5. Play the accompaniment by following the notation on the visual. 6. Perform the song by singing the refrain while the teacher accompanies on bass xylophone and then, playing recorders while the teacher accompanies.
Method of Assessment: documented observation	Method of Assessment: documented observation

Week 11	
Conceptual Objective: Harmony is created by sounding two or more tones simultaneously.	
Control Group	Treatment Group
Title: "All Around the House with a GACD"	Title: "Jamaican Money Man"
Source: *Share the Music* Recorder Master 32	Source: "Jamaican Money Man," *Tropical Recorder* pages 2-3
Materials: copies of Recorder Master 32, *Share the Music* recording cd 6:10, recorders	Materials: recorders, visual, guitar
Students: 1. Echo patterns on high C and high D after the teacher. 2. Play the accompaniment two measures at a time by following the notation. 3. Play all four parts to the accompaniment. 4. Discuss how the parts are different. 5. Play part 1 and 2 and parts 3 and 4 with a partner. 6. Play the accompaniment with a recording of "Old Joe Clark." 7. Play the refrain of "Old Joe Clark" by following the notation on the worksheet. 8. Play the accompaniment and the refrain of "Old Joe Clark" with the recording.	Students: 1. Listen to the teacher play the melody of "Jamaican Money Man." 2. Echo sing the pitch names after the teacher. 3. Sing the pitch names from notation while the teacher accompanies on guitar. 4. Sing and finger the pitches from notation. 5. Play the entire song while the teacher accompanies on guitar.
Method of Assessment: documented observation	Method of Assessment: documented observation

Week 12	
Conceptual Objective: Harmony is created by sounding two or more tones simultaneously.	
Control Group	Treatment Group
Title: "Theme and Variations"	Title: "Jamaican Money Man" (continued)
Source: *Share the Music* Recorder Master 33	Source: "Jamaican Money Man," *Tropical Recorder* pages 2-3
Materials: copies of Recorder Master 33, recorders	Materials: recorders, visual, guitar, barred instruments, maracas, cowbell, tubanos, claves
Students: 1. Play the theme for "Hot Cross Buns" by following the notation on the worksheet. 2. Listen to the teacher play variation 1 and discuss the differences. 3. Play variation 1 by following the notation on the worksheet. 4. Learn each of the parts for variation 2 by playing following the notation on the worksheet. 5. Discuss the differences in the variations and the theme. 6. Play variation two in groups of three with one student playing each part. 7. Divide into four groups and play each of the variations and the theme.	Students: 1. Review the melody of the "Jamaican Money Man" on recorder. 2. Play the song while the teacher accompanies on guitar. 3. Learn the barred instrument parts by rote. 4. Play the entire song on recorder and barred instruments. 5. Learn the unpitched percussion instrument parts by rote. 6. Play the entire arrangement while the teacher accompanies on guitar.
Method of Assessment: documented observation	Method of Assessment: documented observation

<table>
<tr><td colspan="2">Week 13</td></tr>
<tr><td colspan="2">Conceptual Objective: Musical texture is the relationship of harmonic and melodic elements of music.</td></tr>
<tr><td>Control Group</td><td>Treatment Group</td></tr>
<tr><td>Title: “Changing Accompaniment”</td><td>Title: “Breakfast Delight”</td></tr>
<tr><td>Source: Share the Music pages 223-227</td><td>Source: “Breakfast Delight,” Hand Drums on the Move pages 7-8</td></tr>
<tr><td>Materials: student textbooks, Share the Music recordings cd 6:5, 7-11</td><td>Materials: hand drums</td></tr>
<tr><td>Students:
1. Discuss the importance of background music.
2. List different tempos, dynamics, and other changes that might be used in a movie.
3. Listen to part 1 of “The Cat Came Back” to learn the refrain.
4. Read the verses of the song (pages 224-225) and suggest accompaniment ideas based on the lyrics of each verse.
5. Listen to the song and sing part 1 of each refrain.
6. Identify a place where the accompaniment changes.
7. Sing “This Pretty Planet” (page 223).
8. Listen to the song in canon.
9. Describe the differences in accompaniment.
10. Read about “Old Joe Clark” (page 226).
11. Listen to the recorded lesson, “Ostinato Samples,” and perform with verse 1.
12. Divide into groups and sing the song while accompanying each verse with the appropriate ostinato.
13. Transfer the speech ostinato rhythms to a variety of body percussion and perform with the song.</td><td>Students:
1. Learn the lyrics of the A section by rote.
2. In four groups, layer in the lyrics one part at a time.
3. Transfer the rhythm of the words to hand drums while the teacher discusses hand drum technique.
4. In four groups, layer in the rhythms one part at a time.
5. Learn the lyrics of the B section by rote.
6. Transfer the rhythm of the words to hand drums and take turns improvising the answer.
7. Perform the entire arrangement in ABAB etc. form.</td></tr>
<tr><td>Method of Assessment: documented observation</td><td>Method of Assessment: documented observation</td></tr>
</table>

APPENDIX D

FIFTH GRADE LESSON PLANS

The sequential procedures of the control group lesson plans were derived from the basic program of *Share the Music*. The sequential procedures of the experimental group lesson plans were derived from well-respected Orff materials (see Appendix E)

Week 1	
Conceptual Objective: Tonal movement may progress by steps, by skips, or by repetition of the same tone.	
Control Group	Treatment Group
Title: "Do You Hear Music in the Air?"	Title: "Possum Trot"
Source: *Share the Music* Recorder Master 3	Source: "Possum Trot," *Recorder Routes* page 9
Materials: copies of Recorder Master 3, student textbooks, *Share the Music* recording cd 1:11, recorders	Materials: recorders, visuals, guitar
1. Sing "Over My Head" from page 15. 2. Echo sing each pattern as the teacher points to the pitch. 3. Finger each pattern as the teacher points to the pitch. 4. Echo play each of the patterns listed on the worksheet. 5. Divide into two groups with some students singing the song and the other students playing the recorder parts.	1. Clap the rhythm from the visual. 2. Learn the body percussion pattern by rote. 3. Notate the body percussion pattern on a two-line staff. 4. Compare their notation with the visual to resolve any differences. 5. Perform the body percussion pattern. 6. Transfer the body percussion to recorder with snaps to B, claps to A, and pats to G. 7. Play the song measure by measure by following the teacher pointing to the pitch stack. 8. Finger the pitches of the song while singing the pitch names by following notation. 9. Play "Possum Trot" from the visual while the teacher accompanies on guitar.
Method of Assessment: documented observation	Method of Assessment: documented observation

Week 2	
Conceptual Objective: Musical form is based on the principle of repetition and contrast.	
Control Group	Treatment Group
Title: "Easy Does It with Low E!"	Title: "Acka Backa"
Source: *Share the Music* Recorder Master 7	Source: "Acka Backa," *Recorder Routes* page 14
Materials: copies of Recorder Master 7, student textbooks, *Share the Music* recording cd 1:37, recorders	Materials: recorders, visual
1. Discuss how to play low notes on recorder with a characteristic sound. 2. Sing "Funga Alafia" on page 55. 3. Learn to play low E with a characteristic sound. 4. Play the following rhythmic and melodic patterns by notation on the worksheet. 5. Play individually to ensure characteristic sound on low E. 6. Play the patterns for "Funga Alafia" by following the notation. 7. Discuss the key to play "Funga Alafia." 8. Play "Funga Alafia" along with the recording.	1. Listen to the teacher sing the song. 2. Learn the song by rote. 3. Echo sing the pitch names and model the melodic contour through body levels. 4. Sing pitch names and finger recorder by following notation. 5. Play each measure on recorder in small groups. 6. Play measures 1 and 2 and measures 3 and 4 in small groups and then, switch roles. 7. Play the melody in unison. 8. Play the counting out game.
Method of Assessment: documented observation	Method of Assessment: documented observation

Week 3	
Conceptual Objective: Musical form is based on the principle of repetition and contrast.	
Control Group	Treatment Group
Title: "All Aboard to Practice EGAB"	Title: "Who Has Seen the Wind?"
Source: *Share the Music* Recorder Master 8	Source: "Who Has Seen the Wind?," *Recorder Routes* page 19
Materials: copies of Recorder Master 8, recorders, pencils	Materials: recorders, visual
Students: 1. Play a rhythm pattern using E, G, A, and B for the class. 2. Echo rhythm patterns after the teacher using body percussion. 3. Play rhythm patterns on the worksheet once on B, once on A, once on G, and once on E. 4. Play the rhythm pattern with other pitches as listed on the worksheet. 5. Complete the worksheet by notating the melodic patterns on the staff. 6. Check answers to ensure accuracy. 7. Play the patterns on recorder from the written notation on the worksheet.	Students: 1. Listen to the teacher play "Who Has Seen the Wind?" on recorder. 2. Listen again and show the melodic contour with arm levels. 3. Divide into four groups, one for each pitch, as the teacher conducts the melody. 4. Switch pitches and repeat three times. 5. Sing the song's pitch names as the teacher models on body percussion. 6. Discuss how to write the melody on a blank staff. 7. Play the suggestions on recorder to check for errors and correct as needed. 8. Perform the melody of "Who Has Seen the Wind?" on recorder.
Method of Assessment: written assessment by student	Method of Assessment: documented observation

Week 4	
Conceptual Objective: Musical form is based on the principle of repetition and contrast.	
Control Group	Treatment Group
Title: "All Aboard to Practice EGAB" (continued)	Title: "Who Has Seen the Wind?" (continued)
Source: *Share the Music* Recorder Master 8	Source: "Who Has Seen the Wind?," *Recorder Routes* page 19
Materials: copies of Recorder Master 8, student textbooks, *Share the Music* recording cd 2:1, recorders	Materials: recorders, barred instruments
Students: 1. Review the patterns by playing each pattern from the notation on the worksheet. 2. Sing "This Train" on page 58. 3. Listen and finger on recorder as the teacher plays the patterns with the recording of "This Train" while following the plan on the worksheet. 4. Divide into two groups with one group singing the song and the other group playing the patterns on recorder. 5. Switch roles. 6. Listen and finger on recorder as the teacher plays the introduction while following the notation on the worksheet. 7. Play the introduction from the notation on the worksheet. 8. Perform the entire song along with the recording while following the notation.	Students: 1. Review the melody of the song on recorder. 2. Listen to the teacher sing the song with the text and learn by rote. 3. Learn the accompaniment by rote using body percussion. 4. Transfer the accompaniment to barred instruments. 5. Perform the accompaniment while singing and playing the song on recorder. 6. Perform the arrangement in canon. 7. Perform the arrangement in the following form: Introduction, A, A1, A, A3, Coda.
Method of Assessment: documented observation	Method of Assessment: documented observation

Week 5	
Conceptual Objective: Rhythm patterns are groupings of durations that move in relation to the beat.	
Control Group	Treatment Group
Title: "Try Something New – Low D"	Title: "Wakilah"
Source: *Share the Music* Recorder Master 14	Source: "Wakilah," *Tropical Recorder* page 4
Materials: copies of Recorder Master 14, recorders, pencils	Materials: recorders, visual, guitar
Students: 1. Review the fingerings for E, G, A, and B while discussing the importance of correct recorder technique. 2. Imitate the teacher's fingering for low D. 3. Echo sing pitch patterns using E and D. 4. Echo play pitch patterns on recorder using E and D. 5. Improvise three rhythm patterns of eight beats each on low D. 6. Choose their favorite pattern and notate the pattern on the worksheet. 7. Play their notated pattern for the class.	Students: 1. Listen to the teacher play the melody of "Wakilah." 2. Echo sing the pitch names after the teacher. 3. Sing the pitch names from notation while the teacher accompanies on guitar. 4. Sing and finger the pitches from notation. 5. Play the entire song while the teacher accompanies on guitar. 6. Identify syncopated rhythms within the music.
Method of Assessment: written assessment by student	Method of Assessment: documented observation

Week 6	
Conceptual Objective: Rhythm patterns are groupings of durations that move in relation to the beat.	
Control Group	Treatment Group
Title: "Try Something New – Low D" (continued)	Title: "Wakilah" (continued)
Source: *Share the Music* Recorder Master 14	Source: "Wakilah," *Tropical Recorder* page 4
Materials: copies of Recorder Master 14, recorders, student textbooks, *Share the Music* recording cd 2:34	Materials: recorders, visual, guitar, barred instruments, cabasa, claves, maracas, tubanos
Students: 1. Review their notated rhythm pattern. 2. Sing "Shabat Shalom" on page 107 along with the recording while identifying the syncopated rhythms. 3. Play their 8-beat rhythm pattern on low D four times along with the recording of the first section of "Shabat Shalom." 4. Play the five melodic patterns on the worksheet. 5. Play pattern 1 and then, pattern 2. 6. Play pattern 3 and then, pattern 4. 7. Play pattern 5 and then, pattern 1. 8. Choose two patterns and play them for a partner.	Students: 1. Review the melody of the "Wakilah" on recorder. 2. Play the song while the teacher accompanies on guitar. 3. Learn the barred instrument parts by rote. 4. Play the entire song on recorder and barred instruments. 5. Learn the unpitched percussion instrument parts by rote. 6. Play the entire arrangement while the teacher accompanies on guitar.
Method of Assessment: documented observation	Method of Assessment: documented observation

Week 7	
Conceptual Objective: Harmony is created by sounding two or more tones simultaneously.	
Control Group	Treatment Group
Title: "Joyful, Joyful"	Title: "Down in the Jungle"
Source: *Share the Music* Recorder Master 15	Source: "Down in the Jungle," *Recorder Routes* pages 36-37
Materials: copies of Recorder Master 15, recorders	Materials: recorders, visual, tubanos, contrabass bars
Students: 1. Review correct recorder technique and the fingerings for low D, low E, G, A, and B. 2. Discuss the patterns on the worksheet with the same pitches and rhythm. 3. Discuss the patterns on the worksheet with the same rhythm. 4. Discuss the pattern that is most different from the others. 5. Play the patterns in order. 6. Play the "BAG Review" while following the notation on the worksheet. 7. Play the patterns in order as the introduction and coda to the "BAG Review."	Students: 1. Speak the poem, which will become the A section, from the visual. 2. Speak the poem again adding the body percussion on the rests. 3. Transfer the body percussion to percussion instruments. 4. Clap the rhythm of the B section from the visual. 5. Sing the pitch names from the visual. 6. Sing the pitch names and finger the recorder from the visual. 7. Play the B section four times in a row adding players with each repeat. 8. Play the song using voices, percussion instruments, and recorders in ABA form.
Method of Assessment: documented observation	Method of Assessment: documented observation

Week 8	
Conceptual Objective: Harmony is created by sounding two or more tones simultaneously.	
Control Group	Treatment Group
Title: "Joyful, Joyful" (continued)	Title: "Down in the Jungle" (continued)
Source: *Share the Music* Recorder Master 15	Source: "Down in the Jungle," *Recorder Routes* pages 36-37
Materials: copies of Recorder Master 15, recorders, student textbooks, *Share the Music* recording cd 2:37	Materials: recorders, tubanos, contrabass bars, barred instruments
Students: 1. Review playing the patterns in order as the introduction and coda to the "BAG Review." 2. Sing "Joyful, Joyful, We Adore Thee" on page 111 along with the recording. 3. Identify which patterns are included in the harmony part for "Joyful, Joyful, We Adore Thee." 4. Play the harmony part from the notation on the worksheet. 5. Divide in two groups with one group singing the song and the other group playing the harmony part on recorder.	Students: 1. Review the song using voices, percussion instruments, and recorders in ABA form. 2. Learn the C section by rote on barred instruments with xylophones playing the first time and metallophones playing the second time. 3. Play the song using voices, percussion instruments, and recorders in rondo form. 4. Play the introduction and coda by making jungle sounds with voices. 5. Perform the song in the following form: introduction, A, B, A, C, A, coda.
Method of Assessment: documented observation	Method of Assessment: documented observation

Week 9	
Conceptual Objective: Musical texture is the relationship of harmonic and melodic elements of music.	
Control Group	Treatment Group
Title: "Introducing 'Yankee Doodle' "	Title: "Yemaya"
Source: *Share the Music* Recorder Master 16	Source: "Yemaya," *Tropical Recorder* page 5
Materials: copies of Recorder Master 16, recorders, pencils, student textbooks, *Share the Music* recording cd 3:3	Materials: recorders, visual
Students: 1. Play the rhythm patterns on the worksheet to review the following pitches: low, D, low, E, G, A, and B. 2. Complete the worksheet by writing the pitch names for the notated music. 3. Review answers for accuracy. 4. Sing "Yankee Doodle" on page 120 along with the recording. 5. Identify the measures in which both parts play. 6. Clap the rhythm of each part. 7. Sing the pitch names while fingering on the recorder. 8. Play the introduction. 9. Divide into two groups with one group playing the introduction and the other group singing. 10. Switch roles.	Students: 1. Listen to the teacher play the melody of "Yemaya." 2. Echo sing the pitch names after the teacher. 3. Sing the pitch names from notation while the teacher accompanies on guitar. 4. Sing and finger the pitches from notation. 5. Play the entire song.
Method of Assessment: written assessment by student	Method of Assessment: documented observation

Week 10	
Conceptual Objective: Musical texture is the relationship of harmonic and melodic elements of music.	
Control Group	Treatment Group
Title: "It's a Package Deal"	Title: "Yemaya" (continued)
Source: *Share the Music* Recorder Master 18	Source: "Yemaya," *Tropical Recorder* page 5
Materials: copies of Recorder Master 18, recorders, pencils	Materials: recorders, visual, tambourine, maracas, cowbell, bongos, tubanos
Students: 1. Echo play patterns on the recorder that contain D in combination with B, A, and G. 2. Echo play patterns in the boxes on the worksheet. 3. Play the two examples of combining the patterns. 4. Decode the patterns into short phrases. 5. Play the phrases. 6. Play the combination of phrases from the worksheet. 7. Complete the missing notation on the worksheet. 8. Review answers for accuracy. 9. Play the notated melody.	Students: 1. Review the melody of the "Yemaya" on recorder. 2. Play the song. 3. Learn the unpitched percussion instrument parts by rote. 4. Play the entire arrangement.
Method of Assessment: written assessment by student	Method of Assessment: documented observation

Week 11	
Conceptual Objective: Beat is grouped by accent.	
Control Group	Treatment Group
Title: "Polonaise" and "Brandenburg Concerto"	Title: "Hot Cross Buns"
Source: *Share the Music* pages 391C-D and 391 G-H	Source: "Hot Cross Buns," *Recorder Routes* pages 6-8
Materials: copies of "Polonaise" listening map, copies of "Brandenburg Concerto" listening map, *Share the Music* recordings cd 9:33 and cd 10:1	Materials: recorders, visual, guitar
Students: 1. Practice conducting in triple meter. 2. Discuss that the polonaise is a dance organized in sets of three beats. 3. Listen for a strong beat in the first part of the A section while following the "Polonaise" listening map. 4. Listen and follow the melodic contour during the B section. 5. Listen for the trills and rhythm patterns in the d part. 6. Listen again to the section while conducting in sets of three. 7. Practice conducting in duple meter by moving an arm down and up while saying one and two. 8. Identify the theme on the listening map for "Brandenburg Concerto." 9. Listen to the recording and follow the solo instruments on the listening map. 10. Identify the number of measures on each harpsichord by conducting in duple meter while counting the number of measures aloud. 11. Listen again and pantomime playing the instrument heard.	Students: 1. Listen to the teacher sing the melody of "Hot Cross Buns." 2. Identify the measure whose rhythm matches that of *one a penny, two a penny* on the visual. 3. Identify the measures whose rhythm matches that of *hot cross buns* on the visual. 4. Speak and clap the rhythm of the entire pattern from the visual. 5. Echo the body percussion performed by the teacher. 6. Play the body percussion patterns from the visual. 7. Listen as the teacher plays the melody of the class. 8. Echo sing the pitch names. 9. Sing and finger the pitches on recorder. 10. Play the melody on recorder as the teacher accompanies on guitar from the visual.
Method of Assessment: documented observation	Method of Assessment: documented observation

<table>
<tr><td colspan="2">Week 12</td></tr>
<tr><td colspan="2">Conceptual Objective: Beat is grouped by accent.</td></tr>
<tr><td>Control Group</td><td>Treatment Group</td></tr>
<tr><td>Title: “Folk Styles from the Past”</td><td>Title: “Hot Cross Buns” (continued)</td></tr>
<tr><td>Source: Share the Music pages 197, 200, 202-205</td><td>Source: “Hot Cross Buns,” Recorder Routes pages 6-8</td></tr>
<tr><td>Materials: student textbooks, Share the Music recordings cd 5:2, 4-7</td><td>Materials: recorders, visual, guitar</td></tr>
<tr><td>Students:
Sing “Chumbara” (page 200) while performing the ostinato with a partner.
Define duple meter.
Read about “La bamba” on page 202.
Listen to “La bamba.”
Listen to the recorded lesson, “Pronunciation for ‘La bamba.’ ”
Sing the refrain while listening to the song.
Pat the ostinato during the refrain while speaking the words Ba-ma-la-ma Bam!
Divide into two group with one group singing the refrain and the other group patting and speaking the ostinato.
Switch roles.
Read about “Oh, My Darling, Clementine” on page 204.
Listen to the song and identify the meter.
Define triple meter.
Sing the song.
Perform the body percussion ostinato on page 205 with verse 1 of the song.
Identify the meter of the songs discussed during the lesson.
Sing “Music! Music!” on page 197.</td><td>Students:
Review playing the melody for “Hot Cross Buns” while the teacher accompanies on guitar.
Echo play variation 1 in the waltz style while the teacher accompanies on guitar.
Echo play variation 2 in the march style while the teacher accompanies on guitar.
Echo play variation 3 in the calypso style while the teacher accompanies on guitar.
Play the form of the entire song as the teacher accompanies on guitar.</td></tr>
<tr><td>Method of Assessment: documented observation</td><td>Method of Assessment: documented observation</td></tr>
</table>

Week 13	
Conceptual Objective: A motive is the smallest musical segment: a brief and fragmentary rhythmic or melodic pattern.	
Control Group	Treatment Group
Title: "Shakin' and Breakin' with BCD"	Title: "One More River"
Source: *Share the Music* Recorder Master 23	Source: "One More River," *Recorder Routes* page 58
Materials: copies of Recorder Master 23, recorders, pencils	Materials: recorders, visual, barred instruments, triangles, guiros, temple blocks
Students: 1. Echo four-beat patterns on recorder. 2. Clap the rhythm pattern from notation on the worksheet. 3. Play the six patterns on recorder from the worksheet. 4. Complete the worksheet by writing the pitch name under each note on the staff. 5. Play the completed pattern. 6. Play the entire song by playing the first six patterns and the completed pattern in order.	Students: 1. Listen as the teacher sings the song. 2. Echo play the refrain motive on recorder from a visual. 3. Listen as the teacher sings the song again and identify each time the motive is sung. 4. Divide into two groups with one group playing the motive on recorder in refrains 1 and 3 and the other group playing the motive on recorder in refrains 2 and 4. 5. Switch roles. 6. Learn the accompaniment parts on barred instruments by rote. 7. Play the song with barred instruments, recorder, and voices. 8. Learn the unpitched percussion parts by rote. 9. Play the song with barred instruments, recorders, unpitched percussion instruments, and voices.
Method of Assessment: written assessment by student	Method of Assessment: documented observation

APPENDIX E

SOURCES FOR EXPERIMENTAL GROUP LESSON PLANS

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Kriske, J. & DeLelles, R. (1999). *Strike it rich.* Las Vegas: KiD sounds.

Kriske, J. & DeLelles, R. (2001). *3rd rhyme's the charm.* Las Vegas: KiD sounds.

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Solomon, J. (1998). *D.R.U.M.: Discipline, respect, and unity through music.* Miami: Warner Brothers Publications.

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APPENDIX F

RUBRIC TO DETERMINE EQUALITY OF CONCEPTUAL OBJECTIVES BETWEEN TREATMENT GROUPS

Rubric to Determine Equality of Conceptual Objectives between Treatment Groups

Evaluator_____

Conceptual Objective_____

Please rate each area from 1 to 10, with 1 representing more differences and 10 representing more similarities.

❑ Both lessons appropriate for same age and ability level.

❑ Both lessons address same musical concept.

Total _____