AN EXPERIMENTAL STUDY OF THE EFFECTIVENESS OF THE
ORFF METHOD OF MUSIC EDUCATION AT THE
FOURTH GRADE LEVEL

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CHAPTER I

THE PROBLEM AND PREVIEW OF THE STUDY

I. THE PROBLEM

Introduction

While enrolled in graduate studies at Kansas State Teachers College at Emporia, Kansas, the author of this thesis was introduced to a series of music texts comprised of five volumes which are collectively titled Music for Children. These publications, copyrighted in 1956, 1960, and 1961, are English adaptations by Doreen Hall and Arnold Walter of an earlier German work titled Orff-Schulwerk by Carl Orff and Gunild Keetman. This work includes a series of practical examples of songs, rhythmic exercises, instrumental pieces, and speech training exercises\(^1\) which are suitable for children in elementary grades one through eight in some schools. The step-by-step pedagogical approach of Music for Children seemed like such a carefully considered and well-structured program of learning that this researcher was anxious to try Carl Orff's ideas in the classroom. Thus this study was instigated.

\(^1\)From the pamphlet included in Music for Children, Angel record album, No. 35P2-T (New York: Angel Records).
Statement of the Problem

It was the purpose of this study to compare the effectiveness of the method *Music for Children* by Carl Orff with more conventional teaching procedures presently being used in America.

Importance of the Study

Music educators must always be searching for better methods to help pupils achieve a deeper and more meaningful appreciation, understanding, and enjoyment of music. Responsible music teachers will investigate, evaluate, and adopt any concepts or methods which will be beneficial to the musical growth and enrichment of their students. An examination of Orff's materials indicated that they might be worthwhile; however, a thorough search of theses and dissertation titles² revealed an absence of existing studies which compare Orff's methods with other methods of music instruction.

Limitations of the Study

Restricted training of the researcher. Training in the methods of Orff for in-service teachers in America is not readily obtainable at the present time. Summer courses

²See bibliography for sources of this information.
in the use of Orff's books and instruments are presently offered in Toronto, Canada, and at Ball State University in Muncie, Indiana. Unfortunately, this investigator has not had the privilege of this type of training. *Music for Children* was introduced to the researcher and his graduate classmates as one of the newer series of music texts. The instructor who introduced us to Carl Orff's books and instruments had examined them carefully, but had not had an opportunity to test their practical application in a classroom situation. The training of the researcher was, therefore, limited to a seminar discussion and an evaluation of the series. This had, without question, some effect on the results of this study. It must be remembered, therefore, that the observations of this study are the culmination of laboratory experiences under the direction of a teacher with minimal training in the techniques suggested by Orff.

**Time limitation of the study.** The teaching and testing involved in this study were completed in one school year (nine months). Because of the experimental nature of the study and the fact that Orff's controversial methods have elicited either high praise or extreme criticism, the researcher asked for the permission of his school superintendent to carry on the experiment for one year only. It was felt that the period of one school year would indicate whether
or not Music for Children merited a longer period of study. At the same time, if there were areas important to a child’s musical growth which were inadequately developed by the methods of Carl Orff, limiting the study to one year only would protect the children involved from serious deficiencies in their training.

**Study limited to fourth grade level.** Two fourth grade classes were involved in the study: an experimental group learning through the procedures and experiences provided by Carl Orff in *Music for Children*, and a control group learning through the eclectic procedures customarily used by the investigator. A completely thorough comparison of Orff’s *Music for Children* with more conventional teaching methods probably demands a minimum testing span of six years in which the pupils involved can be examined as they advance from grades one through six. The examination and comparison of these groups after six years of these dissimilar approaches to musical learning would undoubtedly result in a more complete study. Because of the time limitation of one year, however, it was decided to restrict the present study to only two class sections at one grade level. After careful consideration of the song texts and physical coordination involved in *Music for Children*, it was felt that children in the fourth grade would afford the greatest possible indication
of the merits of *Music for Children* obtainable within the time limits of the study. The song texts, the majority of which are nursery rhymes, are more suitable for primary grades. Some of the instrumental parts are, however, quite difficult, and are perhaps more suitable for older children. Although the first grade would seem the most logical group with which to start this project, this age group would not be able to advance fast enough within the time limits of the present study to give an overall view of the merits and weaknesses of Orff's approach to music education. The reader of this study should remember that the children in the experimental group were required to develop some concepts and skills (e.g., mallet techniques), unique to *Music for Children*, which normally would have been experienced at lower grade levels. This naturally caused a delay in the start to assimilate Orff's materials suitable for fourth grade, whereas the control group merely continued with an extension of the type of training which they had experienced in the first three grades. The delay, caused by the necessity to acquaint the experimental group with additional skills and concepts, should give the control group an advantage in the findings of this study.

*Experimental group devoted some time to areas not included in Orff's methods.* In the opinion of the researcher,
some vital phases of a well-rounded program of music education are absent in *Music for Children*; therefore, the researcher did not feel justified in withholding some of these more conventional experiences from the experimental group. The school system involved in this study\(^3\) starts children on band instruments in the fifth grade. Because this entails individual finger manipulation, it was felt that the children in both fourth grade classes should have one period a week devoted to training on the tonette.\(^4\) Other areas not provided for in *Music for Children* are lessons devoted to listening to music literature, to the study of composers, and to folk games. Both the control class and the experimental class were taught similarly in these areas. The reader of this thesis will see that this limitation of time devoted entirely to *Music for Children* in the experimental group will, again, tend to skew the results of this study to the advantage of the control group.

**Atypical characteristics of the classes involved in this study.** Unfortunately, the two classes involved were

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\(^3\)This study was made in Joyce Grade School, Ulysses, Kansas, during the 1963-1964 school term.

\(^4\)Classes met five days a week. In the fourth grade, one music period a week has been devoted to training on the tonette for the last several years.
not characteristic fourth grade classes. They had been unusual classes since they had entered first grade. Educators find that most classes have above-average, average, and below-average groups—the largest group being the average. The majority of the children involved in this study fell into only two groups: above-average and below-average. A few of the children might be classified as average, but this group was not nearly as large as one would normally expect. This atypical distribution was caused partly by the fact that this particular age group had a high number of Mexican children who came from Spanish-speaking homes where the children spoke little or no English. Most of these Mexican children remained in the first grade for two years in an effort to learn English as well as the customary first grade material. Many of these children, even with the additional year of study at the first grade level, were still handicapped at the fourth grade level; in fact, they will likely suffer scholastically throughout their entire public school training. Also, most of these Mexican children are from a lower socio-economic environment and have not had some of the advantages common to the average home. Fortunately for this study, these children were about equally divided between the control group and the experimental group; thus, the two groups were similar to each other even though they were not typical fourth grade classes.
II. PREVIEW OF THE STUDY

Music for Children and how it came to be written will be discussed in the second chapter. The third chapter is devoted to a discussion of the objectives of the study and to an explanation of procedures used in this study, including a description of the tests used and their construction. The activities of the control class are discussed in the fourth chapter, and the experimental class activities are explained in the fifth chapter. The results of the tests constitute the sixth chapter. The final chapter states the conclusions of the study and the researcher's recommendations in regard to the use of Music for Children.
CHAPTER II

HISTORICAL AND PHILOSOPHICAL CONSIDERATION
OF THE ORFF METHOD

I. INTRODUCTION

Carl Orff's unusual approach to music education can often lead to misunderstandings and misconceptions—virtually as a result of its innovations. In a speech at the opening session of the elementary education course presented at the University of Toronto in 1962, Orff cautions:

... Those who look for a method or a ready-made system are rather uncomfortable with the Schulwerk; people with artistic temperament and a flair for improvisation are fascinated by it. They are stimulated by the possibilities inherent in a work which is never quite finished, in flux, constantly developing. It is only natural that such a procedure may be dangerous at times; it may run in the wrong direction. Anyone who wishes to advance on his own, needs a thorough professional training and, in addition, an intimate knowledge of the style of the Schulwerk, a grasp of its aim and potential.

Unfortunately, it has often been misinterpreted, exploited, and falsified to the point of caricature.2

1 According to Mrs. Maria Stoffers, a member of the faculty, Foreign Language Department, Kansas State Teachers College, Emporia, the term Schulwerk may be translated as, "Teaching methods, or teaching materials for children. When it is used as 'Orff-Schulwerk', it means Orff's teaching methods and his materials to be used in the teaching of children."

Heeding this caution, the author of this thesis feels it is important to trace the history and philosophy of Orff-Schulwerk. This will be done to present a clear picture and develop a more accurate concept of what the method involves today. Carl Orff, himself, has spoken on "The Schulwerk--Its Origin and Aims." Many direct quotations and references to this speech will be made, therefore, in order to insure an accurate account of the historical and philosophical development of the method.

The remainder of this chapter has been divided into two parts. Historical and philosophical consideration of the Orff method cannot be completely divided because the development of Orff’s present-day philosophy is interwoven with and influenced by the historical development. Any attempt to separate the two would be futile and confusing to the reader; therefore, the next section of this chapter contains the origin and development of Music for Children. The following section will present the method as it exists today.

II. ORIGIN AND DEVELOPMENT OF MUSIC FOR CHILDREN

Carl Orff’s method, Music for Children, is the result of many influences. Some of the people who worked with Orff

Ibid., pp. 69-74.
and had an effect on his philosophy and the development of his methods are: Émile Jaques-Dalcroze, who developed eurhythmics to develop rhythmic ability in his pupils; Dorothea Guenther, a teacher of gymnastics and dance who established the Guenther School in Munich in 1924 with Orff; Mary Wigman, a teacher of movement and dance who emphasized improvisation in movement; Karl Maendler, who helped design and manufacture the musical instruments used in the Guenther School; Gunild Keetman, one of Orff’s pupils, who helped prepare the original Orff books and supervised the music in the Guenther School, and also, more recently, served as one of the translators in preparing the English edition of Music for Children; and Maja Lex, who supervised the choreography in the Guenther School. The development of the method was also causally related to both world wars and the consequent changes in attitude and conditions after each. Its inception can be traced to an adjunct of the training and teaching of bodily movement and dance. From these beginnings Music for Children has broadened and developed to a point where one author observed that,

... In general terms, Orff’s philosophy of music education considers 'music' to be not only the mere employment of sounds but comprising the arts as they were symbolized by the Muses in ancient Greece. 4

---

Carl Orff was very interested in the work of Émile Jacques-Dalcroze and his method of teaching eurhythmics. This later influenced Orff in the gradual development of the system. It will be worthwhile, therefore, to examine the philosophy of Dalcroze and his concept of eurythmics.

Jacques-Dalcroze (1865-1950) was "one of the first music educators who attempted to make musical training a means of expression rather than an end in itself." As a piano teacher, he was concerned about the lack of rhythmic ability of his pupils. He felt that the skills of rhythm were basically muscular; therefore, he designed a series of exercises to develop the skills for expressing rhythms by bodily movements. Dalcroze stated that the main objective of his method is "... to create by the help of rhythm a rapid and regular current of communication between brain and body and to make feeling for rhythm a physical exercise."

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5Orff, op. cit., p. 69.


Eurhythms implies a method of movement of the body, to music; the movement being not merely accompanied by the music but suggested by it and growing out of it, so that the two become complementary. The music is interpreted by the bodily movement; the bodily movement becomes expressive and harmonious in response to the music.

The teacher at the piano expresses an idea in music, and in response the children help to develop it. The educational value of the method depends on the interaction of teacher, children, and music. It can only be fully appreciated by watching the children's reactions, both physical and mental, to the teacher's theme; and by realizing the "rapport" which is created between the child and the teacher through the music. It will be found that the child develops greater poise of body, more initiative, and more acute mental awareness; and that the foundations of musical knowledge and appreciation have been laid.

Although the Dalcroze method was originally intended to develop rhythmic feeling in the musically gifted child, it eventually developed to include a means of self-expression and a general training in musical theory for the child with average musical ability as well.

"During the first quarter of this century, music education was badly neglected in the German speaking

---

Both eurythmics and eurhythms are correct spellings.


Thresher, *loc. cit.*
countries of Europe. . . ."12 Young people were not introduced to the cultural and aesthetic values of music. Some singing instruction was offered, but it was frequently an elective subject and was considered a supplement to the other subjects. "After the defeat suffered in World War I, Germany tried to rally her spiritual forces. The reorganization of school music in the 1920's . . . is a part of this attempt. . . ."13 A new philosophy in music education stressed the importance of developing creativity and self-expression through musical experiences which would broaden children's personalities and enrich their lives.14

It was during this era that " . . . a new feeling for the body, for sport, gymnastics, and dance. . . ."15 was awakened. Carl Orff stated:

It was a time when numerous schools for gymnastics and dance came into being. Being keenly interested in the whole movement, I added to their number. Together with Dorothea Guenther--she was to become one of the outstanding teachers in her field--I established, in 1924 the Guenther Schule in Munich. Uppermost in my mind was the creating of a rhythmic education; also the realization of my main idea that music and movement ought to be taught simultaneously, supplementing one another


13Ibid. 14Ibid. 15Orff, loc. cit.
and intimately connected. How necessary this was
I had learned in the theater. Working with
singers, actors, dancers, and musicians, I dis-
covered a surprising lack of rhythmic awareness,
a total absence of proper training.16

In the Guenther School, Orff had every opportunity to
experiment and try out his ideas. He was convinced that the
training must be totally different from the customary approach
at that time. Because the accent was to be on rhythm,
instruments had to be found which would lend themselves to
this approach. Orff continues:

. . . It was my ambition to bring all students
to the point where they could accompany their own
dances and exercises as competently as musicians
would. I did not want to have anything to do with
piano accompaniments which were then (and still are)
being used in the training of movement. I wanted
the students to become musicians in their own
right. . . . 17

Mary Wigman, an inspired teacher of movement and
dance, was also a member of the Guenther School faculty.
Her teaching ideas included a new accent and emphasis on
improvisation in movement.18 Orff stated that her experi-
ments showed him the way. He was particularly impressed by
one of her dances he referred to as " . . . her sensational
witch dance, accompanied only by African rattles. . . ."19

16 Ibid.
17 Ibid., pp. 69-70.
19 Orff, loc. cit.
Rather than using the piano to accompany the dancers, Orff taught the students to accompany themselves on instruments which had rhythmical impact and primitive appeal. He searched for percussion instruments which were easy to handle. Although the current development of jazz had furnished many percussion instruments, the independent ensemble which Orff desired called for both melody and bordun\textsuperscript{20} instruments.

\ldots For that reason we proceeded to build rhythm instruments capable of carrying melody—xylophones, metallophones, and glockenspiels in various sizes and forms. Some were new, some influenced by medieval and exotic models. The trogxylophones for instance, had little in common with the xylophones usually found in orchestras; it was actually a descendant of highly developed Indonesian types. In Karl Maendler, a piano and harpsichord manufacturer of genius, I found a man who was sympathetic to my ideas and willing to experiment. It took him years to develop all those instruments which are taken for granted today; but he succeeded in adding incomparable, irreplaceable timbres to our ensemble. New also were the ranges—there appeared soprano, alto, tenor, and bass models of both xylophones and metallophones. New was a playing technique made possible by the addition of resonance boxes and by the use of soft mallets; the sound became infinitely more variable. \ldots\textsuperscript{21}

After experimenting with several types of flutes, Orff decided to add the recorder to his ensemble as a

\textsuperscript{20}Orff used the word, bordun, to describe a drone of the open fifth. Moving borduns are those in which one or both of the constituents of the open fifth are set in motion.

\textsuperscript{21}Orff, \textit{op. cit.}, p. 70.
melody instrument. Recorders, as well as harpsichords and
gambas, were being rediscovered in the course of the revival
of old music in Germany in the early years of the twentieth
century. Curt Sachs, at that time curator of the famous
Berlin collection of ancient instruments, helped Orff assemble
a quartet of recorders built after old models—descant,
treble, tenor, and bass.22

• • • For the bass part of our ensemble—
sustained fifths and borduns—we used kettledrums,
low xylophones, also strings: cellos, fiddles and
gambas of all sorts. A group of plucked instru-
ments consisting of lutes and guitars completed
our ensemble. . . .23

Now that the instrumental ensemble had been assembled,
it was necessary to find satisfactory original source mater-
ial from which music could be created, composed, or arranged.
Both native and foreign folk music proved very helpful. Orff
tried to bring the students to a point at which they could
extemporize pieces of their own to accompany movement.
These spontaneous improvisations were not generally written
down. The music was memorized by rote as it was created.
Later on, it was written down in order to remember it, and
also to illustrate Orff's pedagogical intentions. In this
manner, the first edition of the method came into being in
1930. This first volume began with the statement:

22 Ibid. 23 Ibid.
"The Schulwerk concerns itself with the primary forces and forms of music." By 1933, Orff's experiences in the Guenther School resulted in the publications collectively titled, *Das Schulwerk--Musik für Kinder.* The titles of some of these additional volumes which followed the original book in 1930 were, *Playing Percussion and Tambourine, Playing Kettledrums, Playing Xylophones, Playing Recorders,* and *Dances and Instrumental Pieces for Various Combinations.*

Gunild Keetman, one of Orff's pupils and a life-long assistant, helped in the preparation of these volumes.

By now,

... The Guenther school boasted an ensemble of dancers with an orchestra of their own. Music and choreography were supervised by Gunild Keetman and Maja Lex, respectively. ... Dancers and players changed places freely and some of the more suitable instruments (e.g., flutes, cymbals, drums, etc.) were actually woven and integrated into the dance itself.

... To illustrate the diversity and variety of such an orchestra let me list the instruments employed: recorders, xylophones, and metallophones of all ranges, glockenspiels, kettledrums, small

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24 Ibid.


26 Orff, *loc. cit.*

27 Ibid.

28 Ibid., p. 72.
drums, tomtoms, gongs, various kinds of cymbals, triangles, tune bells; sometimes also fiddles, gambas, spinettinos, and portatives. The group toured Germany and other European countries; its performances were invariably successful. In addition the ensemble appeared at teachers' conventions and educational conferences, thereby drawing attention to the Schulwerk. . . .

The Orff-Schulwerk was published because Leo Kestenberg, who held a position in the Ministry of Education in Berlin, planned to test Orff's approach on a large scale in the public schools. Before this test could be realized, however, Kestenberg was forced to leave his position because of political reasons.

The Guenther School was completely destroyed during World War II. The buildings were gutted by fire, destroying all the instruments. The school was never rebuilt.

"...Times had changed; I had given up teaching. And yet I expected, subconsciously, a new call." In 1948 Orff did receive a call from one of the officials of the Bavarian radio. Dr. Panofsky and the director of school programming for the radio had heard an out-of-print recording from the time of the Guenther School. The recorded music was scored for the ensemble described above. They asked Orff to compose some music similar to

\[\text{\scriptsize 29Ibid.} \]
\[\text{\scriptsize 30Ibid.} \]
\[\text{\scriptsize 31Ibid.} \]
that which they had heard on the recording—music which could be performed by children, themselves. They asked Orff to prepare three or four broadcasts. 32

At the time of this request, Orff was working on the score of Antigone. The offer was attractive to him, even though he felt out-of-touch with educational problems. The realization of these broadcasts, however, would involve two main difficulties. First, the fire in the Guenther School had destroyed all the instruments and it would be difficult to build new instruments because, at that time, raw materials were scarce or unavailable. The second problem was that "... the old Schulwerk had addressed itself to an older age group, to prospective teachers of movement and dance. As it stood it was not applicable to children." 33

Orff mulled over these problems and suddenly gained new insights as to where rhythmical education really ought to begin. Instead of waiting until a child reaches adolescence, rhythmical education should begin when a child enters school, or even at pre-school age. Orff’s previous experiments were less valid in the light of his new insights, but the experience of those years had prepared him for a fresh start.

32 Ibid.
33 Ibid.
As Orff expressed it:

... That the unity of music and movement is still naturally present in the child (adolescents have already lost it, and must relearn it) is so sadly overlooked that it became the cornerstone of my new pedagogical work. I suddenly understood what the first Schulwerk had lacked; the singing voice, the word. A child quite naturally starts with a call, a rhyme, with text and tune together; movement, play and song coalesce and integrate. I would never have been able to bring myself to "write a few pieces for children" for radio, seeing how busy I was at that time; but I was fascinated by the idea of a musical education completely geared to the child. So I accepted the offer and went to work, but in my own way.

I began to see things in the right perspective. "Elemental" was the password, applicable to music itself, to the instruments, to forms of speech and movement. What does it mean? The Latin word elementarius, from which it is derived means "pertaining to the elements, primeval, basic". What, then, is elemental music? Never music alone, but music connected with movement, dance, and speech—not to be listed to, meaningful only in active participation. Elemental music is pre-intellectual, it lacks great form, it contents itself with simple sequential structures, ostinatos, and miniature rondos. It is earthy, natural, almost a physical activity. It can be learned and enjoyed by anyone. It is fitting for children.

Gunild Keetman and I, assisted by an experienced educator, shaped the first broadcasts and started to build the series. We worked with children and for children. The result was the new Schulwerk. ... 34

The falling minor third was used as the melodic starting point. The range was gradually expanded until it encompassed a pentatonic scale without half-steps. Name calls,

Ibid.
counting-out rhymes and very simple songs were used for texts. Orff was seeking for ideas and material most natural to a child's world. He had in mind the musical education of every child, not just the especially gifted ones. He stated that few children are completely unmusical, and

. . . That almost every child can comprehend and enjoy music. Incompetent teachers too often fail to recognize what is inherent in the child. Such teachers do a great deal of damage. . . .

The broadcasts were begun in the autumn of 1948 using untrained school children between the ages of eight and twelve. Some instruments salvaged from the Guenther School were used in these broadcasts. The enthusiasm of the children giving the broadcasts was quickly sensed by the listener. All children in the schools listening to these broadcasts wanted to learn to make "that kind" of music. There was a demand for more information. People wanted to purchase the instruments. Klauss Becher, a pupil of Karl Maendler (the piano and harpsichord manufacturer who built the instruments for the Guenther School), gathered together whatever materials he could find and constructed the first instruments for the new Schulwerk. His success enabled him to establish a workshop called "Studio 49" where the instruments used in Orff's teaching methods are still continually being improved.36

35Ibid. 36Ibid., pp. 72, 74.
The "three or four broadcasts" which were originally requested of Orff proved to be highly inadequate. These first few broadcasts created such a demand that they were extended and continued for five full years. These broadcasts "... laid the groundwork for five basic volumes which appeared between 1950 and 1954. 37 Their title—Music for Children... 38

... In 1949 Gunild Keetman joined the staff of the Mozarteum in Salzburg to give regular courses in the Schulwerk. ... Here it was possible to pay more attention to movement, an aspect that naturally doesn't lend itself to broadcasting. Demonstrations and performances aroused interest. Delegates to international conferences held at the Mozarteum became acquainted with the Schulwerk and decided to make use of it in their own countries. One of them was Arnold Walter, who prevailed upon Doreen Hall to study with Keetman in Salzburg and to introduce the Schulwerk into Canada after her return. ... 39

As a result of these international conferences at the Mozarteum, Orff-Schulwerk has found its way into many countries and languages. This involves more than just a translation, because the folklore of each country must be used for its adaptation of the method. Schulwerk has been published in the following languages: Swedish, Flemish, Danish, English, French, Spanish, Portuguese, and Japanese. 40

37 This refers to the dates of the original publications in German. The English translations and adaptations were published between 1956 and 1961.

38 Orff, op. cit., p. 74. 39 Ibid. 40 Ibid.
A 75,000 dollar grant from the U. S. Office of Education is presently financing an eighteen-month pilot program in the public schools of Bellflower, California, which may result in a new adaptation containing materials that grow out of American culture. This project in Bellflower, a Los Angeles suburb, is directed by Martha Maybury Smith, who studied Orff-Schulwerk for two years in Salzburg, Austria. The National Observer reports that the purpose of this pilot program is aimed at introducing the method to America and at testing its effects on American children, and at devising instructional materials. Mrs. Smith is being assisted by Frau Gertrud Orff of Munich, the former wife of the composer, who is serving as a consultant. Others involved in the project are a musicologist, a folk-song expert, and a professor of literature to evolve and record native American instructional materials.

41 The English adaptation was used by the author of this thesis in the teaching experiences involved in this research. It was suspected that some of the texts used in this adaptation were more familiar to and held more meaning for children reared in an English or Canadian culture than those with an American background. For this reason, it pleases this researcher that a present effort is being made to "Americanize" the Orff-Schulwerk.


43 Ibid.

44 Ibid.
The National Observer also noted that

... In Germany, Orff-Schulwerk is widely used as therapy for mentally retarded and physically handicapped children. ... Mrs. Smith believes that similar applications can be developed here.45

III. PRESENT-DAY MUSIC FOR CHILDREN

Music, in its developed state, was not handed to man by some outside force or being with the dictum, "Study and master this art." It was something which came from man and was developed by him through a series of many natural stages. Why should more be expected from the child? He is often handed the art of music, full-blown, and is expected to "swallow it whole".

Carl Orff's Approach to Music Education

Carl Orff's overwhelming desire is that a child's approach to music should be exactly that—a "child's approach," not the "teacher's approach" to music aimed at the child. Music should come from the child and exist only for the child and his needs. This first music from the child will be, naturally, "first music"—primitive, simple, basic, and elemental. The only function of the teacher is to guide the child in his music-making as he follows the natural evolutionary path from the most ancient and basic to the most

45 Ibid.
contemporary and complex. Music history is Orff's guide and resource authority. Not that an attempt is made to teach music history, rather that it is allowed to be re-created by the child as he progresses from his primeval instincts to a more sophisticated form of expression.

Then, where does one start? What is the nucleus of music? What aspect is the most basic? What is its elemental genesis? Carl Orff feels that the answer is to be found in the rhythmic aspect of music. The most natural aspects of rhythm found in the child are in his movements and speech. Movement and speech are, therefore, the basic elements with which Orff starts the musical education of children.

As Arnold Walter of the faculty of music of the University of Toronto, explained in the "Introduction" to the first volume of Music for Children, rhythm

... is not taught mechanically, mathematically (by sub-divisions of whole notes perhaps or by counting beats) it grows out of speech-patterns. For the child (as for primitive man) speaking and singing, music and movement are an indivisible entity; it is this intimate connection, which leads quite naturally from speech-patterns to rhythm, from rhythmical patterns to melody. Speech-patterns make it possible for a child to grasp every type of meter without difficulty, even up-beats or irregular bars. Rhythmical formulas so experienced are reproduced by clapping, stamping, body-slapping; and, later, on percussion instruments which provide accompaniments of steadily increasing complexity. . . .

The first singing melodies introduced are simple two-note tunes utilizing the most natural interval of a descending minor third. Very gradually, the range of the songs is expanded (adding only one note at a time) until the compass of the pentatonic scale has been reached. Orff continues working with the pentatonic material throughout the remainder of the first volume. He stated, in part:

Music based on a five tone scale represents a stage of development which closely corresponds to the mentality of children; the restricted medium makes it possible for a child to find modes of expression of his own without being in danger of merely imitating the powerful examples of other kinds of music.\(^47\)

Curt Sachs reported interesting research by the psychologist Heinz Werner:

A thorough research with phonograph recordings of the babble songs of European children three and four years old . . . shows the amazing fact that the children's singing style is very close to the earliest sing-song of two, three, and four notes in primitive cultures.\(^48\)

The universality of the pentatonic scale attests to its naturalness. Its appearance in most cultures, at some point in the musical evolution of that culture, indicates that it is something inherent in man, not something which

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\(^47\)Ibid., p. 111.

must be learned. It comes from him. In the Harvard Dictionary of Music Willi Apel stated, in part:

The tonal penta-scale, usually in its "first mode" (on c), occurs in nearly all the early musical cultures, in China (as far back as 2000 B.C.), Polynesia, Africa, as well as with the American Indians, the Celts, and the Soots. It must be considered the prototype of all scales. 49

With Orff's insistance on a natural evolutionary approach, the contributions which the pentatonic scale offer to his method can hardly be minimized. As Frank stated it:

Within the framework of the pentatonic scale, the concepts of consonance and dissonance are nonexistent. All five tones of the scale can sound at the same time without creating the effect of tension or the need for resolution. This is an advantage that makes a spontaneous and unsophisticated improvisation possible. . . . 50

The Books in the Series

The first volume of the series, Pentatonic, contains speech patterns to be spoken in unison as well as those to be used as rounds. Rhythmic ostinati are developed through a series of exercises starting with simple clapping patterns which are then followed by more complex patterns calling for stamping, clapping, knee-slapping, and finger-snapping.


The following exercises combine both rhythmic ostinati with speech patterns. Patchen (knee-slapping) exercises develop basic rhythmic and movement patterns which, when applied to the instruments, become melodic ostinati. These above activities (speech patterns, rhythmic ostinati, and melodic ostinati) are developed simultaneously with echo clapping. In echo clapping the teacher claps a pattern which is imitated ("echoed") by the children. This activity leads into echo playing in which the children imitate the pattern played by the teacher on the xylophone or glockenspiel. Phrase building, in which a child completes a phrase started by the teacher, is started with short two-measure phrases and extended as the child becomes more capable. Rhythmic phrase building is followed by melodic phrase building. Canons and rondos are also developed first rhythmically and then melodically. This first volume also includes instrumental pieces and a section titled "Nursery Rhymes and Songs" which are scored for various instrumental ensemble accompaniments.51

The second volume, Major: Bordun, after much experience with a sixth tone added to the pentatonic experiences of the first volume, finally adds a seventh tone to complete

51The activities mentioned in this paragraph are fully explained in the fifth chapter, "Experimental Class Activities," p. 54.
the major scale. Borduns (harmonic intervals of open fifths; e.g., C and G played simultaneously) and moving borduns (e.g., C and G alternating) are embellished by neighboring tones and develop into ostinato figures. These ostinato figures open the door to rhythmical variety without unwanted harmonic complications. Functional harmony makes its appearance only after the introduction of melodies in major. . . . The worn-out commonplaces of dominant harmony are carefully avoided. 52

In the third volume, Major: Triads,

"Moving borduns" lead to the introduction of supertonic and submediant chords; parallel motion takes precedent over dominant relationship. The dominants themselves are not simply taken for granted; they appear at the final stage of a carefully planned development. 53

In the last two volumes, Minor: Bordun, and Minor: Triads,

minor is treated in a similar way. Aeolian, dorian and phrygian tunes are at first accompanied by borduns and ostinati; when triads are introduced, the dominants are preceded by chords of the VII and III degree (aeolian). 54

The song texts are derived from nursery rhymes and singing games. One of Carl Orff's beliefs is that music-making is interwoven with and a part of the child's world


53Ibid.

54Ibid.
of play. Keeping this in mind, it becomes obvious that a mere translation of German songs and games would not, in most cases, provide texts familiar to children in other countries. Therefore, adaptations must be made, rather than translations. The English adaptation was made by Doreen Hall and Arnold Walter. "Miss Hall spent over a year in Europe working under the supervision of Carl Orff and Gunild Keetman ..."55

In discussing the English adaptation, Arnold Walter explained:

Most of the texts chosen are traditional, from "Mother Goose" . . . with a few folk-songs added. In some cases it seemed advisable to keep as close to the original as possible and to translate the German text; the credit for these translations goes to Miss Hall.56

The use of new texts required, in some cases, the creation of new melodies. In the first volume, for example, eleven melodies are Carl Orff's and the rest were written by Doreen Hall.57

**Instruments**

To encourage and facilitate ensemble playing, Carl Orff has designed a complete set of instruments especially adapted to the physical requirements of children. In construction and

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55Ibid., p. vii.
56Ibid.
57Ibid.
tonal quality the instruments are similar to the chimes and gambangs of a Javanese orchestra, and allow many possibilities for contrast of tone and colour according to the combination of the instruments. Equipped with metal bars, the glockenspiels and metalophones have a clear, ringing tone quite unlike the dull, hollow sound of the hardwood xylophone bars. All are tuned in the key of C major.58

The instruments are available in either diatonic or chromatic models and in many ranges—soprano, alto, bass, and, more recently, instruments with wider ranges (e.g., alto-soprano, tenor-alto, bass-soprano). An attempt to state the exact ranges of the instruments would prove to be confusing, because the total compass may vary as much as four notes between the diatonic and chromatic models of the same instrument. Ranges also vary between one instrument manufacturer and another. All the instruments have a range of at least one octave and a fourth; most of the instruments have a range of one octave and a sixth; and some have a range of two octaves. The lowest note on the alto xylophone is middle C; the soprano model starts an octave higher, and the bass an octave lower. The metalophones have the same pitch as the xylophones. The soprano and alto glockenspiels are

pitched an octave higher than the corresponding xylophones and metalophones. 59

Included with diatonic instruments are bars for F-sharp and B-flat, making it possible to convert the instruments for music in the keys of F and G major. Additional chromatic bars may be ordered for any of the instruments, and it is possible to convert diatonic instruments to chromatic ones by ordering extra chromatic resonance boxes.

Musical glasses, either tumblers or stemmed-ware, may be tuned by adding water and used to augment the glockenspiels. 60

Some other percussion instruments used include triangle, cymbals, jingle bells, shells, tambourine, drums of various sizes and kinds (including small timpani), wood block, rattles, and castanets.

"One of the most important items is a deep-toned string instrument to give body and support to the ensemble." 61 The gamba and lute are suggested, but the guitar or cello may be substituted provided that it is tuned to the basic

59 The Orff-Schulwerk Instrumentarium, the catalogue listing Studio 49's instruments for Orff's method, indicates that all the instruments are pitched one octave lower than has been indicated in the text-body, above. The instruments used in this research, however, were pitched as indicated in the text. The Orff books, Music for Children, also indicate pitches as they were described in the text.

60 Hall, op. cit., p. 9. 61 Ibid., p. 10.
bordun C, G, C, G. Of course, long, sustained tones can be played only on the gamba and cello. 62

It is essential that the teacher be able to play and improvise freely on the recorder whether the children are doing rhythmic body movements or basic ostinati on the instruments. The soft, ready tone blends well with the whole ensemble and has a unique effect when used as a solo instrument. 63

The piano (not to mention the accordion) should never be used. The sound of a modern piano cannot possibly be integrated into such an ensemble. (This does not refer to cembali, clavichords or spinets.) 64

Musical Style

Arnold Walter described his first visit to the Guenther School as follows:

... The music itself had an archaic flavor reminding one of trouvers, jongleurs, and Italian dances of the 14th century; but it also had a very modern one bringing Stravinsky to mind, particularly Stravinsky of Les Noces. The reasons were obvious; rhythm was the predominate element; melody grew out of rhythm as it were; drones and ostinati formed the accompaniment; harmony, if used at all, restricted itself to parallel motion resulting in organum-like effects. . . . 65

In describing the harmony, Miss Janice M. Thresher 66 stated that it is

\[62 \text{Ibid.} \quad 63 \text{Ibid.} \]

\[64 \text{Carl Orff in the "Preface" to Pentatonic, op. cit., p. iv.} \]

\[65 \text{Arnold Walter, "Carl Orff's Music for Children," The Instrumentalist, XIII (January, 1959), 38.} \]

\[66 \text{Miss Thresher teaches music at the Walter E. Fernald State School in Waverley, Massachusetts.} \]
• • • a harmony more suggestive of medieval polyphonic music, in which each melodic line sounds almost self-inclusive and only incidentally related harmonically to the other voices (although they are, of course, constructed according to strict rules). One is reminded somewhat of such contrapuntal forms as twelfth century melismatic organum, or of the thirteenth century clausula (keeping in mind, naturally, that in Orff's music all the parts are measured), or of the polyphonic music of such seventeenth century composers as Heinrich Schutz. • • •

These two descriptions above are alike in the fact that they are describing Orff's style in terms of music of the Western civilization. These descriptions are equally lacking in that they make no mention of the contributions of Oriental or exotic music to Orff's style. Although other writers have described Orff's style as "primitive", a more accurate description might use the term, "exotic".

The Harvard Dictionary of Music explains, in part, that the term exotic music indicates "a long-established tradition of art music" in "musical cultures outside the European tradition" whereas, the term primitive music indicates the product of cultures "which show no evidence of methodical training and historical development."


69. Ibid., "Exotic Music," p. 250. 70. Ibid.
The ancient Chinese scale \( (f,g,a,c',d') \), when transposed to "c," is the same as that used by Orff \( (c,d,e,g,a) \) in the first volume of his series. Apel stated that the principle of transposition was of "prime importance" in Chinese music;\(^7\) therefore, this link between Orff's pentatonic scale and that of the Chinese should not be considered unlikely.

Javanese instruments are definitely the prototypes of Orff's instruments. Some of the orchestral techniques of the Javanese bear strong resemblance to those of Orff.\(^7\) This Javanese-type orchestra with an abundance of percussion instruments contributes to the effect in Orff's music which has been labeled "primitive."

Ostinato, drones and bourdons, parallel motion at intervals of a fourth or fifth, and heterophonic devices—elements found in Orff's music—are also characteristic of Oriental and exotic music.\(^7\)

It became obvious, during the course of the teaching experiences involved in this study, that children, too, were aware of elements of Orff's style when they made such observations as, "It sounds Chinese-zy," or "sounds like Indians to me," or "Sorta' like bagpipes."

\(^7\)Ibid., "Chinese Music," p. 137.

\(^7\)See Harvard Dictionar of Music, p. 373, for example of Javanese orchestral score similar to scores of Orff.

CHAPTER III

OBJECTIVES AND PROCEDURES

This chapter will describe the purposes and objectives of this study. In addition, the procedures and testing involved in the research will be explained.

I. OBJECTIVES

One objective of this study was to determine if the Orff method was more, less, or as equally effective as the customary teaching procedures of the researcher in helping children achieve musical growth and knowledge.

In what ways and to what degrees would the Orff method develop the concepts of melody, rhythm, harmony, form, expression, and style in the skills of listening, singing, playing instruments, moving, creating, and reading?

If the method, *Music for Children*, proved to be superior to that of the researcher in the development of these concepts and skills, then it certainly should be adopted. If, on the other hand, Orff's method proved to be less effective, it should be dismissed. A third possibility would be that the method might prove to be superior in some areas of musical growth and weak in other areas. If this should prove to be the case, then the problem becomes one of
how to combine the desirable aspects of the method with the many other teaching devices and techniques already being used by the researcher.

Another objective of this study was to determine how effectively the American music teacher, with the customary teacher training available in the United States, could comprehend and implement *Music for Children* without the additional training for *Orff-Schulwerk* offered only at the Mozarteum in Salzburg, Austria, the University of Toronto in Canada, or Ball State University in Indiana.

## II. PROCEDURES

The procedures involved in this experimental study are grouped under two headings: (1) **General Procedures**, and (2) **Testing Procedures**.

### General Procedures

Two fourth grade classes were involved in the study. One class was taught with the eclectic procedures developed by the researcher over four previous years of teaching experience. This class will be referred to as the "control group," or "control class." The other class was taught with Carl Orff's system (as understood by the researcher) using *Music for Children*, Volume I, *Pentatonic*, as a text book. This class will be referred to as the "experimental group," or "experimental class."
In previous years, the school system involved had used tonettes in the fourth grade as pre-band instruments. It was decided to continue this activity for one period a week in each class. Also, each class received similar instruction in lessons devoted to listening to music literature, to the study of composers, and to folk games.

Each class met for twenty-five minutes a day, five days a week. The control class started the year with twenty-nine children enrolled; the experimental group had twenty-eight. During the course of the year, the class enrollments varied from a low of twenty-six pupils to a high of thirty-three. At the end of the school year, the control class had twenty-nine children and the experimental class, thirty.

Testing Procedures

This research would have little validity or value unless it could be proven that it had been a comparison of two approximately equal groups. This fact necessitated a testing program of some type. Also, an objective analysis of the amount of musical growth achieved during the year was desirable if unprejudiced facts, rather than personal opinion alone, were to indicate the results of the study.
Search for suitable tests. Standardized tests which had already met the criteria of validity, reliability, and usability, and would give national norms helpful in evaluation were desired by the experimenter to give additional accuracy to the study. The Bureau of Tests and Measurements, Kansas State Teachers College of Emporia had available only two music tests—the Strouse Music Test, published in 1937, and the Beach Music Test, published in 1939. Although the "Manual of Directions" for each test claims impressive correlation coefficients for validity and reliability, it was felt that many fourth grade children would be incapable of reading, or confused by, the written instructions. Since the purpose of the testing in this study was to determine what children knew, or were aware of, in the field of music, and not to determine who could read well, or to detect abilities for test-taking, these tests were rejected. An examination of The Fifth Mental Measurements Yearbook,¹ an extensive bibliography and critique of tests and measurements, yielded many promising test titles. A total of ten musical aptitude tests and seven musical achievement tests were examined and considered for use in this research study.

Some of these tests had produced low correlation coefficients in regards to validity and reliability; others took too long to administer; some were not standardized or designed for use at the fourth grade level; and in two cases, the costs were prohibitive. It was decided that the use of the Seashore Measures of Musical Talent, which conformed to relatively high testing standards, would yield adequate information concerning the musical aptitude of the children involved. Attitude and achievement were measured by four other tests constructed by the researcher. Unfortunately, it was learned that the Seashore test was not available at the time it was needed; therefore, the Kwalwasser Music Talent Test was substituted. This latter test does not yield as high a coefficient of correlation as the Seashore test, but it was felt that at least one standardized test should be included in the study.

The author of this thesis fully understands and agrees with Charles Leonhard when he stated:

The collection of data must be accomplished with a variety of evaluative tools if all aspects of musical behavior are to be included. There is a tendency to concentrate upon the measurement of knowledge and the appraisal of a few skills. Due to the scarcity of available standardized evaluative tools, teachers must often construct their own, especially for evaluating understanding, attitudes, appreciation, and habits.\(^2\)

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Construction of tests. The first test constructed for this project was the Listening Test. The test was designed as a tool to evaluate what children hear when they listen to music. Included in the test were items related to the following aspects of music: tempo, rhythm, meter, mood, style, dynamics, form, instrument recognition, melodic recognition, musical terminology, pitch, and melodic direction. Many of the test items pertained to more than one aspect; for example, any item asking for "form" entails an element of "melodic recognition." The children were directed to select the best response from multiple-choice items as they listened to recordings of complete musical compositions. Many of the areas evaluated by this test have been thoroughly examined by other tests; however, in the standardized tests these areas are usually isolated and tested by a series of short examples. The researcher felt a desire and a need to learn more about what various elements a child hears or feels when he is concerned with a complete musical composition, rather than short, selected passages or the totally unmusical

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3The source of recordings used and the specific testing procedures are presented in Appendix A, page 133, with the test blank.
"beep-beep-blip" of some electronic device so common to many standardized music tests.

The **Attitude Questionnaire**\(^4\) was designed to evaluate how children felt about music. It, too, was used as a means of indicating equality between the two classes at the start of the experiment and as a measurement to indicate any changes of attitude at the end of the year—as a result of the experiment. The questionnaire consists of fifty-five statements which may be answered "True," "Not Sure," or "False."

It was impressed upon the children that this "test" would not be graded, that it was only to help the teacher (the researcher), and that the only way they could help was to answer as honestly as they could.

Although attitude can not be graded in the sense of a "right or wrong" response, certain statements would indicate a better, or more favorable, attitude than others. For example, it would be rather narrow-minded to say that a child had a bad attitude toward music because he agreed with the statement, "If I had to give up one recess a day so that I could have music class, I wouldn't do it." It can be said, however, that a child who indicates that he would give up

\(^4\)A blank **Attitude Questionnaire** form may be found in Appendix A, p. 146.
one recess a day in order to have music does have a more favorable attitude toward music.

"If I don't like music the first time I hear it, I probably never will," will evoke an answer of "False" as an indication of the most desirable attitude. Although "Not Sure" would be a more favorable response than "True" to this statement, it would not be as favorable as "False" and, therefore, could not be scored as a correct response.

Throughout the questionnaire, all items answered "Not Sure" were scored as incorrect. The function of this "Not Sure" response was that of encouraging honesty on the part of the children. In a serious effort to please the teacher, most fourth grade children do feel compelled to answer each item of a multiple-choice or "true-false" test. This would force many of the children into dishonest answers if the only possible responses were "True" or "False." The accurate evaluation of attitude certainly could not be aided by forcing a child to agree or disagree with a statement of opinion concerning an idea which the child had not previously considered. It is wiser to consider these as "attitudes not-yet-formed" and allow for them by including a "Not Sure" response in an evaluation of this type. Kate Hevner Mueller extends this idea in suggesting that some tests be designed with the possible answers of "Strongly Disagree," "Probably
Disagree," "No Opinion," "Probably Agree," and "Strongly Agree." Although much merit can be seen in this type of multiple-choice response, it was felt that, at the fourth grade level, the problems arising from this wide range of choices would outweigh the merits.

The **Attitude Questionnaire** has certain "built-in" features to encourage honest responses and insure a more accurate evaluation. Some elements of attitude are stated several times throughout the questionnaire, but worded differently each time. For example:

40. I like moving around to music.
47. Moving to music helps me "feel" the music better.
48. I think moving to music is silly and I don't like it.
49. I get embarrassed when we move to music.6

These above statements from the test are all really trying to determine the same attitude; but if they were all marked "True," one might suspect some ambiguity in the child's attitude or in his honesty. If "moving to music" embarrasses a child, there is little likelihood that it will help him "'feel' the music better." If such ambiguity does exist in the child's selection of one correct response and one incorrect response, one will negate the other.

---


6The numbers in front of these statements indicate the number of the statement as it occurs in the actual test.
Another example of various statements evaluating one aspect of attitude would be as follows:

1. I like to go to music class.
2. Music class is fun.
3. Music class is too long.
4. Music class should be longer.
28. Most music classes are pleasant and interesting.
34. I want to learn more about music.
45. I know all that I want to about music.

Although the last statement in the questionnaire, "I lied when I answered some of these questions because I didn't think you would like my answers.", may seem facetious, it proved quite helpful. In each case when this was answered "True," a private conference between the pupil involved and the researcher was held. In some cases, this indicated that the child did not understand how to mark the test blank to express what he really thought. In other instances, although the child had made an effort to guess the "best" (but not the most "honest," for himself) responses in order to please the teacher, when confronted with the point-blank statement about honesty, answered honestly. In both the above situations, explanations were given, reassurances were made, and the questionnaires were re-examined together, making any changes the child indicated.

The Music Symbols Test was an objective-type test of twenty-five items. The children were asked to match note

[Note: A blank Music Symbols Test form may be found in Appendix A, pp. 150-151.]
and rest symbols with their correct names, as well as the treble clef sign, a meter signature, and a staff. Two questions relate to the relative length of duration of a note. The remainder of the test consists of identifying notes on the treble staff by letter name.

The Reading Themes Test\(^8\) was designed to evaluate skills in recognizing familiar tunes. The beginning measures of five songs familiar to children were to be identified. Statistical examination of the test results proved this test to be totally unreliable and, therefore, worthless. It is mentioned here only for the reason that it was a part of this research. The results will not be tabulated or discussed in Chapter VI with the rest of the test data.

**Test administration.** The battery of five tests was given both at the beginning and at the close of the school year. The testing periods were scattered over a span of three weeks. To prevent test fatigue and the development of a negative attitude, testing days were separated by days in which singing "for fun" was the principal activity. To aid the researcher in maintaining an unbiased approach to this

\(^8\)A blank Reading Themes Test for may be found in the Appendix A, p. 152.
study, these tests were not checked until after the school year had been completed. To avoid "teaching the test" the researcher did not look at them again until the last three weeks of school, during which time the tests were readministered in much the same fashion as at the start of the year. After the fall testing, the tests and the correct answers were not discussed with the children. The musical compositions used in the Listening Test were not studied during the year.
CHAPTER IV

CONTROL CLASS ACTIVITIES

The "five-fold" approach as conceived by the Music Educators National Conference\(^1\) will be used as a guide in discussing the activities of the control class. This divides musical activities into five areas: (1) Singing, (2) Rhythmic, (3) Listening, (4) Playing, and (5) Creative. Although these areas do overlap, this "five-fold" classification is helpful in organizing a discussion of musical activities.

The learning and knowledge involved in the five activities discussed in the remainder of the chapter were fortified and enriched by means of a workbook. Usually, one day a week was devoted to a lesson in this workbook.\(^2\)

I. SINGING ACTIVITIES

Many rote songs were learned including foreign and American folk songs, patriotic, seasonal, and "special day" songs. Several rounds and canons were learned during the first semester to prepare the children for simple two-part

---


songs which were learned in the second semester. Note-reading songs were learned using syllables, numbers, and letter names. This reading activity naturally involved a study of scales, key signatures, rhythm, and meter. Tone-matching calls and games were continued from earlier grades to help the uncertain singers as well as to continue solo singing activities.

II. RHYTHMIC ACTIVITIES

Folk and square dances were learned. Rhythmic accompaniments to familiar songs were played on standard rhythm instruments. Note values (duration) and their relationship to each other were studied. This learning was enhanced by the use of Latin American rhythm instruments which were used in a study of the rhythm patterns of children's names. Examples of these rhythmic patterns may be seen in Figure 1.

These and other "name-rhythms" were sometimes used either singularly or several at a time to provide accompaniments for songs.

III. LISTENING ACTIVITIES

Lessons devoted to listening to music literature and the study of composers included the material shown in Table I, page 52.
FIGURE 1

NAME RHYTHMS USED IN CONTROL CLASS
In addition to the material presented in Table I, some songs by Stephen Foster and some by Schubert were learned.

**TABLE I**

**COMPOSERS AND COMPOSITIONS USED IN LISTENING LESSONS**

<table>
<thead>
<tr>
<th>Composer</th>
<th>Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bach</td>
<td>Prelude and Fugue in D Minor</td>
</tr>
<tr>
<td>Copland</td>
<td>Rodeo (excerpts)</td>
</tr>
<tr>
<td>Dukas</td>
<td>The Sorcerer's Apprentice</td>
</tr>
<tr>
<td>Ghys</td>
<td>Amaryllis</td>
</tr>
<tr>
<td>Greig</td>
<td>In the Hall of the Mountain King</td>
</tr>
<tr>
<td>Handel</td>
<td>The Messiah (excerpts)</td>
</tr>
<tr>
<td>Honegger</td>
<td>Pacific 231</td>
</tr>
<tr>
<td>Moussorgsky</td>
<td>Ballet of the Unhatched Chicks</td>
</tr>
<tr>
<td>Mozart</td>
<td>Minuet (from Don Giovanni)</td>
</tr>
<tr>
<td>Mozart</td>
<td>Symphony No. 40 (First Movement)</td>
</tr>
<tr>
<td>Prokofieff</td>
<td>Peter and the Wolf</td>
</tr>
<tr>
<td>Rimsky-Korsakov</td>
<td>Scherazade</td>
</tr>
<tr>
<td>Saint-Saëns</td>
<td>Carnival of the Animals</td>
</tr>
<tr>
<td>Saint-Saëns</td>
<td>Danse Macabre</td>
</tr>
<tr>
<td>Tchaikovsky</td>
<td>Swan Lake</td>
</tr>
<tr>
<td>Tchaikovsky</td>
<td>The Nutcracker Suite</td>
</tr>
<tr>
<td>Villa-Lobos</td>
<td>Little Train of the Capria</td>
</tr>
</tbody>
</table>

These lessons naturally entailed the study of the following forms: theme and variations, sonata-allegro, rondo, round, canon, fugue, and song forms. Related terms discussed were: introduction, coda, bridge, and interlude; exposition, development, and recapitulation; opera, ballet, and oratorio.
IV. PLAYING ACTIVITIES

Playing rhythm band instruments to accompany familiar songs and to study rhythms has already been discussed under "Singing Activities," and "Rhythmic Activities." In addition to these activities, songs with simple melodies (or phrases from such songs) were played on keyboard-type melodic instruments such as the piano, xylophones, and resonator bells. The study of I, IV, V, and V\(^7\) chords led to the chording of songs with simple chord structures on the resonator bells. Autoharp accompaniments were also played by the children. An average of one period a week was devoted to the study of the tonette using the Melody Fun book by Buchtel.\(^3\)

V. CREATIVE ACTIVITIES

Creativity is essentially a part of the areas already discussed in this chapter. Additional verses were created for familiar songs. Rhythmic accompaniments were created for songs and for some of the compositions studied in listening lessons. Melodies were composed for pre-existing poems.

CHAPTER V

EXPERIMENTAL CLASS ACTIVITIES

It has been mentioned earlier that the experimental class participated in some activities which are not a part of the Orff method. These activities include lessons devoted to the study of composers and music literature, to folk games and dances, and to tonettes. Little time was devoted to the Orff method during the month of December because many music periods were used to learn the traditional Christmas carols. Unlike the control class, however, the experimental class did not participate in lessons from a workbook.

In addition to the standard rhythm band instruments, ten instruments designed for Music for Children were purchased.¹ These were as follows: two soprano xylophones, two alto xylophones, two alto metalophones, two soprano glockenspiels, and two alto glockenspiels. A second-hand guitar was obtained from a local source as a substitute for the gamba normally used in the Orff system. Although two timpani were desired, their infrequent use in the scores of Volume I, Pentatonic, hardly justified the additional expense. Two large drums which were already a part of the rhythm band

¹See Appendix B, p. 156, for the Orff instruments.
instruments owned by the school were substituted for the timpani.

The remainder of this chapter is divided into three parts: (1) Non-melodic Activities, (2) Melodic Activities, and (3) Studies in Form and Improvisation. This division approximates the order in which the various aspects of the method were introduced to the children in the experimental class. In each section several illustrations will be presented to aid the reader in developing a more thorough understanding of the Orff system.

I. NON-MELODIC ACTIVITIES

Non-melodic activities are those of echo clapping, speech patterns, and rhythmic ostinato. These three types of activities were begun almost simultaneously at the beginning of the school year. Although these activities led naturally into other activities introduced later in the experiment, they were not then dropped, but were continued throughout the year.

Echo Clapping

This rhythmical exercise must be started right at the beginning, together with speech-patterns. The use of the hollow or the flat of the hand helps to vary the tone-quality. ... 2

2Orff and Keetman, Pentatonic, op. cit., p. 80.
Echo clapping encourages a child to concentrate and respond to that which he hears in regard to rhythm and tone quality. Figure 2 shows a simple pattern for echo clapping. Both lines are read simultaneously.

![Pattern for Echo Clapping](image)


**FIGURE 2**

**PATTERN FOR ECHO CLAPPING**

**Speech Patterns**

Speech patterns consist of a series of words, sometimes proverbs and old sayings, which are spoken in a rhythmical manner. These patterns are spoken in pulses of two's or three's. In some cases the same pattern is first spoken in two's and then in three's to help develop a sense of meter. Examples of speech patterns may be seen in Figure 3.

... Through speech-patterns, the various types of measure are easily grasped; even up-beats, or sudden changes of time signature, present no difficulties. Clapping and conducting exercises may be added, they are very helpful in learning the
A.

Blue bird, Blue bird, Bob-o-link, Bob-o-link,

Black bird, Black bird, Whi-poor-will, Whi-poor-will,

King-fish-er, King-fish-er, Duck.

When done in three's, the example above would become:

Blue bird, Blue bird, Bob-o-link, Bob-o-link,

Black bird, Black bird, Whi-poor-will, Whi-poor-will,

B.

If at first you don't suc-ceed, try, try, try a-gain.

C.

Like a bull in a chin-a shop.

*Orff, Pentatonic, p. 66. **Ibid., p. 67.
rudiments of notation. It is important to develop a feeling for the tonal qualities of words, so that the characteristic sounds are displayed to the best advantage . . . Monotony should be avoided; the speech should be vibrant at all times, and dynamically varied. It is wise to divide classes into groups and to make use of the contrasts of solo and chorus, light voices and dark voices etc. Dynamics and phrasing (piano and forte, crescendo and decrescendo, legato and staccato, accented and unaccented beats) should also be taken into consideration.3

This type of activity was continued throughout the year from time to time. Speech patterns were also used as rounds which helped to develop rhythmic independence. Two examples are shown in Figure 4.

1
2

Mind your p's and q's.

When thieves fall out, 

hon-est men come by their own. When . . .

When thieves fall out, 

hon-est men come . . .

*Orff, Pentatonic, p. 68.

FIGURE 4

SPEECH PATTERNS USED AS ROUNDS

3Ibid., p. 66.
Two-part speech patterns held much interest for the children. Their favorite was "Tromm, tromm, tromm," which is illustrated in Figure 5.

Tromm, tromm, tromm, come see my new red drum! It's really lots of fun to march in time and sing in rhyme and beat upon my drum,

Come see my new red drum! It's really lots of fun . . .

*Orff, Pentatonic, p. 69.

FIGURE 5
A TWO-PART SPEECH PATTERN

Rhythmic Ostinato

Rhythmic ostinato is a term used to indicate rhythm patterns which are repeated. Patschen, or patsch, a term used in discussing rhythmic ostinato, refers to slapping one's knees; this can be done either in a sitting or standing
position. Rhythmic ostinati are explained in the following statement from the book, *Pentatonic*:

Simple rhythms, which are clapped only, are followed by more complex ones calling for clapping, stamping, knee-slapping and finger-snapping. (Good posture and relaxed movements are important). At first, such rhythms serve as accompaniments for melodies to be improvised by the teacher on recorders, glockenspiel or xylophone; later on they are combined with speech-patterns, canons and songs.4

In the examples of rhythmic ostinati which are shown in Figure 6, when two or more lines are fastened together at the beginning and at the end, they are to be read simultaneously. Figure 6 contains no written rests because the examples shown are presented in this manner in the book, *Pentatonic*. The correct sequence must be determined by considering the notes as being on one line, horizontally, and then reading them from left to right.

Individual rhythmic independence was developed by adding rhythm band instruments to some of the ostinato patterns and having individual children each play one note of the pattern. This also helped develop a concept of working together as an ensemble. Letter E, in Figure 6, shows suggested rhythm instruments applied to the ostinato patterns shown in D.

---

4Ibid., p. 71.
A. Clapping only.

\[
\begin{align*}
\begin{array}{c}
\text{Clap} \\
\text{Stamp}
\end{array}
\end{align*}
\]

B. Clapping and stamping.

\[
\begin{align*}
\begin{array}{c}
\text{Clap} \\
\text{Stamp}
\end{array}
\end{align*}
\]

C. Clapping, patschen (knee-slapping), and stamping.

\[
\begin{align*}
\begin{array}{c}
\text{Clap} \\
\text{Patschen} \\
\text{Stamp}
\end{array}
\end{align*}
\]

D. Finger snapping, clapping, patschen, and stamping.

\[
\begin{align*}
\begin{array}{c}
\text{Finger snap} \\
\text{Clap} \\
\text{Patschen} \\
\text{Stamp}
\end{array}
\end{align*}
\]

E. Suggested rhythm instruments for examples above, under letter D.

\[
\begin{align*}
\begin{array}{c}
\text{Cymbal} \\
\text{Sticks} \\
\text{Woodblock} \\
\text{Drum}
\end{array}
\end{align*}
\]

\[
\begin{align*}
\begin{array}{c}
\text{Triangle} \\
\text{Two sized Woodblocks} \\
\text{Hand drum}
\end{array}
\end{align*}
\]

*Orff, Pentatonic, p. 71.  **Ibid., p. 72.

FIGURE 6

RHYTHMIC OSTINATO PATTERNS
Speech Patterns and Rhythmic Ostinati Combined

After speech patterns and rhythmic ostinati were taught as separate activities, they were combined into one activity. The ostinato patterns serve as an accompaniment to the speech patterns. Hall, in the Teacher's Manual for the series, gives detailed procedures for teaching a speech pattern, both in pulses of two's and three's, and then expanding the activity to include rhythmic ostinati. Figure 7 shows the procedures for teaching the speech pattern, and Figure 8, page 64, shows the score for the completed speech pattern with the rhythmic ostinati. Although Miss Hall does not suggest it in the example shown in Figure 8, page 64, it would be a simple matter to add rhythm instruments, perhaps varying the instrumentation on each repeat.

II. MELODIC ACTIVITIES

Melodic activities discussed in this section are those of nursery rhymes and songs, and melodic ostinati. Although there are other melodic activities involved in Music for Children, they fall more naturally into a discussion of the third portion of this chapter, "Studies in Form and Improvisation."

The present discussion of melodic activities will reveal some pedagogical errors made by the researcher due
(1) Learn the words in sequence.
(2) Stress diction and quality of vowel sounds as in Blue and Bell.
(3) Repeat the pattern several times as a complete phrase.
(4) Repeat the pattern clapping each syllable:

(5) Repeat the pattern adding patschen and clapping on the strong and weak beats:

(6) Divide the class into voices: light voices to the left of the conductor, dark voices to the right. Repeat the text in the following sequence:

(7) Using both groups of voices, repeat the pattern as in (6) with the addition of patschen and clapping on the strong and weak beats. These actions will be performed throughout by the children of both groups whether they are speaking or not.

(8) Develop the same text in triple time in a similar manner.

Example:

(9) With a four bar introduction of patschen and clapping in the respective rhythms combine the text first in duple and then in triple rhythm.*

*This illustration is a Xerox reproduction from the book by Doreen Hall, Music for Children: Teacher's Manual, p. 14.
Example:

Light Voices

Dark Voices

Clap Pattern

Blue Bell, Blue Bell, Cor-al Bell, Cor-al Bell, Hare Bell,

Heath-er Bell, Heath-er Bell, Blue Bell of Scot-land.

Hare Bell, Blue Bell of Scot-land.

* First time as written, second time in unison throughout crescendo to Fine.

**This illustration is a Xerox reproduction from the book by Doreen Hall, *Music for Children: Teacher's Manual*, p. 15.

FIGURE 8

SCORE OF A SPEECH PATTERN INCLUDING RHYTHMIC OSTINATI
to his minimal training in the methods of Orff. These problems and their solutions will be presented in the sequence in which they occurred during the experiment.

The melodic instruments used in this research were designed with removable tone bars to facilitate playing. The music used in the research was confined to the pentatonic scale; therefore, the F and B bars were removed from the instruments. Other tone bars not needed for a particular ostinato pattern were sometimes removed to make the playing easier for the children.

**Nursery Rhymes and Songs**

A superficial look at a typical score of a nursery rhyme or song from the book, *Pentatonic*, might cause one to conclude that it was much too difficult for grade school children. A closer examination will reveal, however, that in most cases, each instrument has a simple one- or two-measure pattern which is repeated. Figure 9 shows a relatively easy score for the song, "Rain, Rain, Go Away." The soprano and alto xylophone parts are alike in that they each consist of a one-measure melodic pattern which is repeated. The biggest problem for the children was learning when to start and when to stop and to keep a steady beat. In this particular song removing all but the C and G bars on the alto xylophone literally eliminated the problem of striking the wrong tone bar.
Rain, rain go away, come again some other day, come again some other day, little Susy wants to play.

*This illustration is a Xerox reproduction from the book by Carl Orff, *Pentatonic*, p. 4.

**FIGURE 9**

*SCORE FOR "RAIN, RAIN, GO AWAY*
The complexities a score may reach may be seen in the song, "Lucy Locket," shown in Figure 10, pages 68 and 69. Although no one child is expected to perform an extremely difficult part, it can easily be seen that the achievement of an ensemble feeling is necessary. In examining the alto xylophone part in Figure 10, it will be noted that a quarter-note rhythm and a half-note rhythm exist simultaneously. In situations like this, the part may be played by one child or by two children, depending on the level of proficiency which has been achieved.

The scores were studied by the children and efforts were made to encourage the "reading" of the score. It was noted, however, that the children preferred to memorize their individual ostinato pattern and concentrate their visual efforts in watching the instruments while they were playing. The researcher noted this same tendency in his own playing. Striking the correct tone bar at the correct time necessitated watching the instrument rather than the score.

Approximately one week after the Orff system had been started, some simple two-note songs were introduced. When an attempt was made to add the suggested instrumental parts, however, it immediately became apparent that the children had not been adequately prepared for this activity. With the intent to be facetious, it could be said that the resultant
Lu - cy Lock - et lost her pok - et, Kit - ty Fish - er found it.

**NOTE:** Figure 10 is continued on page 69.

*This illustration is a Xerox reproduction from the book by Carl Orff, *Pentatonic*, p. 9.

**FIGURE 10**

SCORE FOR "LUCY LOCKET"
not a penny was therein it only ribboun round it.

*This illustration is a Xerox reproduction from the book by Carl Orff, *Pentatonic*, p. 9.

FIGURE 10 (continued)
Four-four meter simultaneously played at four diverse tempi using the technique of rubato (and usually with a fermata at the end of each measure) might have been conceived as an adventure into techniques of the twentieth century embodied in a "pantatonico" composition employing poly-rhythms. A more accurate description would be to label it a sound of catastrophic cacophony. The children obviously did not have the required rhythmic independence and listening skills to function as an ensemble. A re-examination of the Orff material and the Teacher's Manual by Hall revealed that the area of melodic ostinato had been omitted in the learning activities. This was the probable cause of the problem; therefore, although the songs were occasionally sung for review purposes, the emphasis was shifted to the area of melodic ostinato.

**Melodic Ostinato**

Melodic ostinati are a logical outgrowth of speech patterns and rhythmic ostinati. The activities involved in the development of this area presented some problems in classroom management. Although the researcher had ten of the Orff melodic instruments to use, what was to be done

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5A word coined by the researcher to indicate atonality in regard to the pentatonic scale, as N. Slonimsky uses "pandiatonicism" to refer to atonality in regard to the diatonic scale.
With the other twenty (approximately) pupils while only ten children were at the instruments? At this point in the research, it was decided to divide the class into ten teams, three children on each team. The investigator picked the ten best students to be team captains and assigned an average and a weak student to each team captain. (Of course, the children were not told the basis of the team selection.) As each team captain was shown what to do at his instrument, the other two team members stood at the instrument as observers. Once the team captains had mastered their parts and were successfully functioning together as an ensemble, a few minutes were allowed in which it was the duty (and pleasure) of each team captain to help one of his teammates learn the stipulated pattern. Then with the researcher conducting, the captain-taught pupils played together as an ensemble. This same procedure was followed with the third member of each team. This "team method" was employed throughout the rest of the year in most activities which required the use of the instruments. The children were satisfied with the team approach because they realized that they were able to play much more often than if the researcher had had to show each one of them what to do.

The basis of the melodic ostinati used by Orff is the interval of a fifth, which he refers to as bordun. The simple
basic bordun is illustrated in Figure 11. The bordun leads into what is termed the moving bordun, in which

\[ \ldots \text{one note of the interval of the 5th is in motion either by means of a step or jump over or under the ground tone, thereby enlarging the ornamental figure} \ldots \text{Or both tones move together in parallel motion.} \]

\[ \text{FIGURE 11} \]

THE BASIC BORDUN USED AS THE BASIS OF MELODIC OSTINATI

Basic rhythmic and movement patterns are prepared by patchen exercises, and must then be applied to an ostinato accompaniment on the glockenspiel, xylophone or timpani. \ldots \]

In the examples of borduns and moving borduns which are shown in Figure 12, the patschen exercise used in preparation for each will be shown first. Children are seated with the right hand poised over the right knee and the left hand over the left knee to start each patschen exercise. R. and L. indicate right knee and left knee, respectively. Notes to be

\[ \text{Hall, op. cit., p. 20.} \]

\[ \text{Orff and Keetman, Pentatonic, op. cit., p. 76.} \]
is used to develop a feeling of rhythm, physical distance, and muscular reaction for:

**Note that one patschen exercise is used in preparing several borduns or moving borduns.**

**Orff, Pentatonic, p. 76.**

FIGURE 12

BORDUNS, MOVING BORDUNS, AND THEIR PREPARATORY PATSCHEN EXERCISES
performed by the right hand are indicated by ♩; those for
the left hand are indicated by ♪.

Borduns and moving borduns develop into the ostinato
patterns used to accompany the songs. It is impossible to
determine at exactly what point this type of activity could
be thought of in terms of being a melodic ostinato rather
than a bordun. The progression from simple exercises to
complex ones is so gradual and natural (as it is in all
phases of *Music for Children*) that it is difficult to make
sharp delineations between one aspect and a closely related
one. Figure 13 shows two examples which are definitely what
Orff calls ostinato patterns; however, it is not difficult
to see that they are an outgrowth of the simple and moving
bordun.

The children in the experimental class began to feel
more natural and relaxed in using the instruments to play
melodic ostinato patterns. Although the class was engaged
in rather simple ostinato patterns, the success and obvious
improvement in muscular control and rhythmic feeling tempted
the researcher to once more approach the area of nursery
rhymes and songs. The plan was to use only the more simple
songs with easy instrumental parts—similar to the ostinato
patterns which had already been practiced. It was thought
that the area of melodic ostinato would continue to be
developed, selecting patterns for group study and practice as they became needed in the increasingly difficult song accompaniments.

![Musical notation]

*Orff, Pentatonic, p. 77.

**FIGURE 13**

PATSCHEN AND BORDUNS WHICH GRADUALLY DEVELOP INTO MELODIC OSTINATI

At this point in the research, the return to nursery rhymes and songs met with little more success than the first attempt. The children still were unable to listen to each other and work effectively as an ensemble. A careful
Consideration of the problem led to the suspicion that, even though the children were improving in their rhythmic feeling (through the use of melodic ostinati), their activities at the instruments had provided only unison experiences. Although the use of one child at each of the ten melodic instruments had provided an ensemble experience, there had been little demand made upon the children which would foster a growth in maintaining an individual independence in a rhythmic and melodic line. Some rhythmic independence had been previously developed through the speech canons and by applying rhythm band instruments to the rhythmic ostinato patterns, but no experiences had been offered which demanded both rhythmic and melodic independence in the children's individual responses.

The book, Pentatonic, contained no discussion of this problem or how to solve it. In the Teacher's Manual, however, Hall does recognize this difficulty and offers a suggested activity which was invaluable in solving, or at least in minimizing, this problem. Miss Hall's suggested procedures are presented in Figure 14, page 77. Figure 15, page 78, illustrates the completed score for the outcome of the procedures shown in Figure 14.
If left alone to play a simple ostinato such as:

\[ \text{\includegraphics{gamba.png}} \]

the children would produce a sound of sheer cacophony, and in order to prevent this we must prepare their listening processes and teach them to associate the notes and rhythm of the ostinato with the notes and rhythm of the gamba. The guitar may be substituted for the gamba.

1. Have the children close their eyes and listen as the teacher plays the following on the gamba:

\[ \text{\includegraphics{gamba2.png}} \]

2. Children will listen for the high note and clap when they hear it.
3. Children will play the note C when they hear the high note.
4. Teacher will repeat the gamba ostinato, and children will come in after two bars playing:

\[ \text{\includegraphics{gamba3.png}} \]

listening carefully, and playing softly so that they can relate their part to that played by the gamba.

Other ostinato patterns should be prepared in the same way until all the simple rhythms are included. (Example see page 21). It cannot be stressed too often that the children must be trained to listen at all times, and that at first rhythms and ostinati should be kept as simple and uninvolved as possible. The teacher should guard against including too many rhythms and ostinati at one time until the children are secure in the basic fundamentals of rhythm and melody.

*This note to see page 21 refers to the original source and not to this thesis. The example referred to is reproduced in Figure 15, page 78, of this thesis.

**This illustration is a Xerox reproduction from the book by Doreen Hall, Teacher's Manual, p. 20.

FIGURE 14

SUGGESTED PROCEDURE TO DEVELOP A FEELING FOR ENSEMBLE PLAYING
Rhythm instruments and timpani may also be added. When all ostinati have entered the teacher should improvise on the recorder or a glockenspiel.

*This illustration is a Xerox reproduction from the book by Doreen Hall, Teacher’s Manual, p. 21.

FIGURE 15

SCORE OF SUGGESTED OSTINATO PATTERNS
TO DEVELOP A FEELING FOR
ENSEMBLE PLAYING
Return to Nursery Rhymes and Songs

The songs with their instrumental ensemble accompaniments are naturally a culmination of the activities of speech patterns, rhythmic ostinato, and melodic ostinato. Now that the activities had been presented in their proper order, adding accompaniments to the songs proved to be much easier.

It should be remembered, however, that none of the activities previously started are ever completed or discontinued. It must be emphasized that each new song presented to the class should be prepared by selecting appropriate speech patterns, rhythmic ostinati, and melodic ostinati.

III. STUDIES IN FORM AND IMPROVISATION

Additional activities which are a part of the Orff system are those included in the Pentatonic book in the section titled, "Studies in Form and Improvisation." These activities include the following: echo clapping⁸ and playing, rhythmic and melodic canons, rhythmic and melodic phrase building, and rhythmic and melodic rondos. Much less time was devoted to these activities because most of them required too much time for individual response which left the other

---

⁸Echo clapping has been previously discussed on pages 55 and 56. This was necessary for an understanding of the material which followed.
Fifty-nine class members waiting an unreasonable amount of for their turns. If the class had only had eighteen twenty-two members, these types of activities would have beneficial. In the experimental situation, however, this was not the case. The threatened breakdown of discipline which could easily have been caused by justifiable boredom and the resultant development of a negative attitude toward music class hardly seemed worth the possible benefits involved.

Echo Clapping and Playing

Echo clapping can easily be developed in the classroom because it is an activity in which all the children can participate in unison at the same time. This is not true of echo playing, which is a logical outgrowth of echo clapping. Only three tones (G, E, and A) are used. The teacher first plays a simple pattern on the xylophone or glockenspiel using any or all of the three tones. Then, one child at a time echoes the pattern. Even though this activity was pursued only a few minutes a day, and taking only a few children each day, by the time each of the thirty children had taken a turn, the class and the investigator had lost interest in continuing this activity to a point of proficiency.
Rhythmic Canons

Rhythmic canons grow quite naturally out of echo-clapping. It would be a mistake to practice the constituent phrases of such canons one by one and to combine them later on; the canonic imitation must not lose the character of spontaneous reaction. As in echo-clapping, attention must be paid to tone quality, and particularly to the contrasts one obtains by using the flat or the hollow of the hand.9

The rhythmic canons included in Pentatonic are, in most cases, simple clapping exercises eight measures long. To perform the canons, the class was divided into two groups. The second group started clapping the same rhythmic pattern one measure after the first group had begun. This activity was enjoyed by the children and presented no particular difficulties. The children had had similar experiences in the speech canons except that the lack of a text to aid in maintaining the pattern called for increased concentration. With very young children, the first experiences properly would be rote ones, but since this experiment was being conducted at the fourth grade level, the children were directed to follow the notation in their books.

Melodic Canons

Melodic canons are preceded by echo-playing or singing. Here again, the melody to be canonically imitated, must not be practiced singly and

9Orff and Keetman, Pentatonic, op. cit., p. 82.
laboriously, not to destroy the immediacy of the response. Instrumental exercises should first be prepared vocally.\textsuperscript{10}

The experimental class did very little work with melodic canons. Their lack of sufficient experiences in the area of echo playing left them inadequately prepared for melodic canons.

**Rhythmic Phrase Building**

Rhythmical phrases, clapped by the teacher, are continued and concluded by the children in a variety of ways . . . At first, the initial phrase will consist of four bars only, later on it may be extended to six, eight and even sixteen bars . . .\textsuperscript{11}

Hall, in discussing rhythmical phrase building, stated:

This is the first step towards improvisation. . . . The children should be very comfortable with echo clapping before being encouraged to make their own rhythms. The transition from imitation to invention will be smoother when the teacher explains that each individual will have the opportunity of completing a two bar phrase which will be improvised for every child. Extend the length of the phrases corresponding to the progress of each person.\textsuperscript{12}

Adequate time was devoted to rhythmic phrase building, even though it involved individual response which entailed the problem of "waiting for a turn." Most of the work was done with short two-measure phrases. This enabled the

\textsuperscript{10}\textit{Ibid.}, p. 83. \textsuperscript{11}\textit{Ibid.}, p. 84. \textsuperscript{12}\textit{Hall, op. cit.}, p. 24.
researcher to give every child a turn (in a short period of time), once a "feeling" for phrase length had been established. The peer-level criticism of, "Johnnie's was too short," or "Jim's was too long," or "But she just clapped what you did! That's just copyin'," and similar remarks were cheerfully accepted by members of the class and proved quite helpful in shaping and developing abilities in this activity.

Melodic Phrase Building

Melodic phrase building involved a short melodic phrase which was to be played by the teacher and then continued and completed by individual children. Only three tones (G, E, and A) were used. This activity met with little success in the experimental class (in which the enrollment had reached a high of thirty-three pupils). By this time in the school year, the self-discipline of the children had been severely taxed by several of the activities which have been discussed previously. In short, melodic phrase building was aborted after the first day it was attempted.

A group of ten children, hereafter called "the demonstration group," did pursue melodic phrase building

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13This group, made up of the ten team captains, was organized as the result of a request for a demonstration of the Orff method. Additional information about this group may be found in Appendix C, p. 158.
activities with much success. The important factor in this success was the small size of the demonstration group, rather than any personal attributes or abilities of the children involved. The children in this group simply did not have to wait as long for a turn as the children in the experimental class.

Rhythmic Improvisation and Rhythmic Rondos

Rhythmic phrase building, in which children improvise the last half of a phrase started by the teacher, is followed by rhythmic improvisation, a term used by Hall. She stated that rhythmic improvisation "... grows naturally out of phrase building and clapping, stamping, finger snapping and patschen should be used as added interest." This rhythmic improvisation leads into and becomes a part of rhythmic rondos. An explanation and example of the rhythmic rondo is presented in Figure 16.

The children enjoyed the rhythmic rondos more than the preparatory work of rhythmic phrase building. The probable reason for this was that the rondo activity involved the entire class on every section, thus eliminating the longer periods of listening and waiting involved in the phrase building activity. This favorable attitude made it

---

14 Hall, op. cit., p. 25.
possible to advance in the skills of rhythmic improvisation in a relatively short period of time.

Rhythmic Rondo

The rhythmic rondo, page 86, can be introduced very easily after the children have become adept at echo clapping, phrase building and rhythmic improvisation. Consisting of a recurring refrain, or A section, with episodes in between this instrumental form lends itself admirably to our purpose since the A section can be established and performed by the whole group and the episode improvised by the individual.

Give the children a simple A section such as:

```
Clap:     Stamp:  
```

Tell them that this will be the chorus in which they will all join. Encourage each child to improvise one section in between every chorus and when a rondo has been thus successfully accomplished discuss it from a form point of view with the group. **

**This refers to page 86 in the book, Pentatonic. It is not reproduced in this thesis.

Melodic Rondos

Melodic rondos, in which each child created a four-measure episode between repetitions of a four-measure composed A section, 15 were much better received than the earlier work of melodic phrase building. Again, the involvement of the class in the frequent A section was the probable reason for a more positive attitude toward the rondos.

15The A section used for the rondo was very similar to the simple ostinato patterns shown in Figure 15, p. 78.
rather than the phrase-building activities. The researcher was not satisfied with the results of this activity, even considering the children's desire to engage in it. The lack of adequate preparation, which would have been provided in sufficient melodic phrase-building experiences, severely limited the progress of the class in this activity.

The children in the small demonstration group, who did have adequate training in melodic phrase-building activities, enjoyed a fair degree of success in the melodic-rondo type of improvisation.
CHAPTER VI

DATA

This chapter presents an analysis of the test results of the investigation. In addition, the results of a questionnaire concerning the musical background of the students involved in the experiment will be discussed.

The five tests,¹ Kwalwasser Music Talent Test, Attitude Questionnaire, Listening Test, Reading Themes Test, and Music Symbols Test, were administered to the control and experimental classes. This was done intermittently over a period of three weeks, both at the beginning and at the end of the school year. The purpose of the testing program was to determine what aptitudes, skills, and knowledge were possessed by the children at the start of the investigation. It also provided a means of comparing the similarities of the classes at the start of the research and a means by which it was possible to evaluate the similarities and differences between the classes at the end of the experiment.

A questionnaire concerning contacts the children had had with music outside their school experiences was sent to

¹A discussion and description of these tests may be found in Chapter III, pp. 37-48. The blank test forms may be found in Appendix A, pp. 133-153.
each child's home to be filled out by the parents.\textsuperscript{2} After
the results of this questionnaire have been presented, this
chapter will continue with an explanation of the methods
used in the statistical calculations involved in reporting
the test results. The pretest and posttest results will be
reported and discussed, as well as the improvement shown by
each class at the end of the year. After the correlations
between the tests have been presented, the chapter will
be summarized.

I. BACKGROUND QUESTIONNAIRE RESULTS

The purpose of this questionnaire was to evaluate
each child's musical background and to determine whether or
not the children in the two classes had had similar contacts
with music. Forty-four (approximately 85 per cent) of the
possible fifty-two questionnaires were returned. They were
equally divided between the two classes with twenty-two
returned in each.

Responses to general information questions revealed
that the mean average age of children in the control class
was nine years and ten months, while the mean average age of
children in the experimental class was nine years and seven

\textsuperscript{2}See Appendix A, pp. 154-155, for a blank background
questionnaire.
months. The average family size (including parents) of the control class children was 6.32 and the average family size of the experimental class children was 5.91.

The remainder of the data gathered by the background questionnaire is shown in Table II.

In item number thirteen, Table II, concerning the watching of musical programs on television, most families indicated that they watched two or three musical programs a week. Of course, "musical program" means many things to different people. To some, the term implies the type of program presented by the music department of Wichita State University, Wichita, Kansas, which consists of music performed by the University choir, orchestra, band, and smaller instrumental and vocal ensembles. To other families, the term "musical program" means a light, variety-type program, such as Andy Williams or Perry Como--one family even mentioned Ed Sullivan's show. The two shows most frequently mentioned were "The Bell Telephone Hour" (listed by five control class and four experimental class families) and "Sing Along with Mitch" (listed by eight control class and six experimental class families). The only statement which can be made, therefore, is that twenty families in each class watched musical programs of various types on an average of two or three times a week, and that there was no essential difference between the classes as to the type of program watched.
DATA TAKEN FROM BACKGROUND QUESTIONNAIRE CONCERNING INDIVIDUALS OR FAMILIES OF THE CONTROL AND EXPERIMENTAL CLASSES

<table>
<thead>
<tr>
<th>STATEMENT</th>
<th>Control</th>
<th>Experimental</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Number of children for which the researcher has served as the music</td>
<td></td>
<td></td>
</tr>
<tr>
<td>instructor in years previous to the experiment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>for three years previous to the experiment</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>for two years previous to the experiment</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>for one year previous to the experiment</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td>2. The fourth grade child has taken (or is taking) lessons on piano*</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>3. Number of families in which both the father and mother play (or have</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>played) instruments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Number of families in which only the father plays (or has played)</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>an instrument(s)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Number of families in which only the mother plays (or has played)</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>an instrument(s)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Total number of families in which one or both of the parents play (or</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>have played) instruments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Number of families in which brothers or sisters play (or have played)</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>an instrument</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Number of families in which both parents sang in a choir</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>when they were in high school or college</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*In each of the two classes, the mean average length of study was approximately one and one-half years.
<table>
<thead>
<tr>
<th>STATEMENT</th>
<th>Control</th>
<th>Experimental</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Number of families in which only the father sang in a choir when he was in high school or college</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>10. Number of families in which only the mother sang in a choir when she was in high school or college</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>11. Total number of families in which one or both parents sang in a choir when they were in high school or college</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>12. Number of families in which at least one member was singing in a church or high school choir at the time of this experiment</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>13. Number of families who watch musical programs on television</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>14. Number of families who have a phonograph in their home</td>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td>15. Number of families in which there is informal singing in the home</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>16. Number of families who have a piano or organ in their home</td>
<td>11</td>
<td>8</td>
</tr>
</tbody>
</table>
Item number fourteen pertains to the possession of a phonograph. In the questionnaire, the parents were also asked to list the type (or types) of music which their family enjoyed, or to list some of their favorite records. Their responses indicated that a wide variety of music was enjoyed, but that there was a general preference for "lighter" music, rather than more "serious" music. Often, musical tastes varied considerably within a family. It can be stated, in general, that there was no essential difference in the preferences of the families of the two classes.

In item number fifteen, which involves informal singing in the home, some parents described the family singing together, some indicated "housework" or "shower" singing as individuals, and some described only the children singing; but most responses indicated that several or all the above types of singing were common, every-day occurrences in their home. In every questionnaire returned by a Mexican family, group singing as a family in the evenings was mentioned and, in most of these instances, accompaniment was provided by a guitar, or guitars and percussion instruments.

In item number sixteen almost all families owning a piano or organ indicated that the instrument was used daily.

In summarizing the results of the background question-
in the study consisted of children whose collective musical backgrounds were essentially similar. Although it would be difficult, if not impossible, to prove anything (in the statistical sense of "proof") from the results of this questionnaire, if it were assumed that the questionnaire was a "rating scale of musical background" and that the numbers involved could be considered unweighted points on this hypothetical "scale," then the numbers involved in items two through sixteen (pages 90-91) could be added to produce a "musical background score" of 141 for the control class and 142 for the experimental class. This foregoing discussion concerns a purely hypothetical measure of evaluation and is not intended to be taken as a serious, valid statistic. It was pointed out only to demonstrate that even though there were minor differences between the classes as indicated in the responses to individual items in the questionnaire, these minor differences had a strong tendency to "balance out" or cancel out each other, yielding a total response for each class which implies a remarkably similar "amount" of musical background.

II. METHODS OF STATISTICAL CALCULATION

The nature of the experiment required that only test scores of pupils who had been enrolled in the two classes for
the entire school year be used in the statistical calculations. As has been mentioned in Chapter III, the class enrollments varied from a low of twenty-six to a high of thirty-three during the experiment. Fortunately, for statistical purposes, each class contained twenty-six children who were enrolled throughout the length of the study. All of the statistics presented in the remainder of this chapter are based on these fifty-two children.

All tests and questionnaires were scored by the researcher, who also calculated the amount of difference between the pretest and posttest scores for each child. All scores were represented as percentage-correct scores for the purpose of correlations between tests to be made later.

All other calculations presented in this chapter were made by means of an electric computer and the facilities of the Data Processing Center of Kansas State Teachers College, Emporia, Kansas. Mr. Joe Bowman, statistician for the center, directed the computations and assisted the researcher in making valid interpretations of the results.

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3Although Mr. Bowman was statistician for the Data Processing Center at the time the computations were made, he is not employed there at the present time.
The \( t \) test was used to evaluate the significance of the test results. For one test, the Listening Test, an analysis of covariance was necessary.

The computations revealed that one test, the Reading Themes Test, was not a reliable test, and that the scores obtained could easily be the result of "guess-work" on the part of the children. The results of this test, therefore, are not presented in the tables contained in this chapter.

III. PRETEST RESULTS

Test results of the experimental and control classes at the beginning of the experiment are presented in Table III. Table III shows that on the pretest of the Kwalwasser Music Talent Test, the mean score for the control class was 54.19 and the standard deviation was 25.36; the experimental class had a mean score of 63.19 and a standard deviation of 22.23. The remainder of the table may be read in the same manner. The \( t \) test was used to test the null hypothesis that there was no significant difference between the populations of the control and experimental classes. In three tests, the Kwalwasser Music Talent Test, the Attitude Questionnaire, and the Music Symbols Test, it was found that the null hypothesis could be accepted and that there was no significant difference between the two classes in regard to abilities,
<table>
<thead>
<tr>
<th>Name of test</th>
<th>Control class</th>
<th>Experimental class</th>
<th>t Test</th>
<th>Significant differences in the two classes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Kwalwasser Music Talent Test</td>
<td>54.19</td>
<td>25.36</td>
<td>63.19</td>
<td>22.23</td>
</tr>
<tr>
<td>Attitude Questionnaire</td>
<td>64.31</td>
<td>21.56</td>
<td>69.03</td>
<td>18.14</td>
</tr>
<tr>
<td>Listening Test</td>
<td>52.46</td>
<td>10.44</td>
<td>59.54</td>
<td>8.60</td>
</tr>
<tr>
<td>Music Symbols Test</td>
<td>55.77</td>
<td>25.57</td>
<td>54.54</td>
<td>26.21</td>
</tr>
</tbody>
</table>

*Because this test showed that there was only one chance in one hundred that the two classes were equal in the abilities which it tested, these test results were subjected to an analysis of covariance in order to determine the significance of the improvement shown at the end of the year. These results are discussed on pages 101 and 102 and are shown in Table VI, page 102, and Table VII, page 103.
attitudes, and knowledge measured by the tests. In the case of the Listening Test, the t test revealed that the null hypothesis must be rejected and that there was a significant difference between the classes at the .01 level of confidence. Because this indicated that there was only one chance in one hundred that the two classes were equal in the abilities measured by the Listening Test, this data was subjected to an analysis of covariance in order to determine the significance of the improvement shown at the end of the year. These results are discussed on pages 101-102, and are shown in Tables VI, page 102 and Table VII, page 103.

IV. POSTTEST RESULTS

Test results of the experimental and control classes at the end of the experiment are presented in Table IV. Table IV shows that on the posttest of the Kwalwasser Music Talent Test the mean score for the control class was 66.46 and the standard deviation was 24.39; the mean score for the experimental class was 72.30 and the standard deviation was 23.73. The remainder of the table may be read in the same manner. The results of the t test indicated that the null hypothesis could be accepted for all four tests, and that there was no significant difference between the control class and the experimental class in the areas which were measured by the tests.
### TABLE IV

**TEST RESULTS OF EXPERIMENTAL AND CONTROL CLASSES AT THE END OF THE EXPERIMENT**

<table>
<thead>
<tr>
<th>Name of test</th>
<th>Control class</th>
<th>Experimental class</th>
<th>t Test</th>
<th>Significant differences in the two classes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean  SD</td>
<td>Mean  SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kwalwasser Music Talent Test</td>
<td>66.46 24.39</td>
<td>72.30 23.73</td>
<td>-0.88</td>
<td>not significant</td>
</tr>
<tr>
<td>Attitude Questionnaire</td>
<td>79.50 8.12</td>
<td>80.96 12.04</td>
<td>-0.51</td>
<td>not significant</td>
</tr>
<tr>
<td>Listening Test</td>
<td>63.92 10.20</td>
<td>65.46 8.89</td>
<td>-0.58</td>
<td>not significant</td>
</tr>
<tr>
<td>Music Symbols Test</td>
<td>78.23 26.15</td>
<td>76.31 22.00</td>
<td>0.29</td>
<td>not significant</td>
</tr>
</tbody>
</table>
V. SIGNIFICANCE OF THE AMOUNT OF IMPROVEMENT SHOWN BY EACH CLASS DURING THE YEAR

The difference between pretest means (Table III, page 96) and posttest means (Table IV, page 98) and the significance of the difference between these differences is presented in Table V. The Listening Test data are not presented in Table V because the significant difference between classes on the pretest necessitated an analysis of covariance to determine the significance of the improvement shown during the year. This analysis of covariance is presented in Table VI, page 102, and Table VII, page 103, and discussed on pages 101-102.

Table V, page 100, shows that the difference in pretest and posttest means for the control class on the Kwalwasser Music Talent Test was 12.27 and that the standard deviation of these differences was 32.09; the difference in pretest and posttest means for the experimental class was 9.11 and the standard deviation of these differences was 24.29. The remainder of the table may be read in the same manner. The results of the t test indicated that the null hypothesis could be accepted for three tests, the Kwalwasser Music Talent Test, the Attitude Questionnaire, and the Music Symbols Test.

4See Table III, p. 96.
TABLE V

SIGNIFICANCE OF THE AMOUNT OF IMPROVEMENT SHOWN BY EACH CLASS DURING THE YEAR*

<table>
<thead>
<tr>
<th>Name of test</th>
<th>Control class</th>
<th>Experimental class</th>
<th>t Test</th>
<th>Significant differences in the two classes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Kwalwasser Music Talent Test</td>
<td>12.27 32.09</td>
<td>9.11 24.29</td>
<td>0.40</td>
<td>not significant</td>
</tr>
<tr>
<td>Attitude Questionnaire</td>
<td>15.19 19.75</td>
<td>11.92 12.37</td>
<td>0.72</td>
<td>not significant</td>
</tr>
<tr>
<td>Music Symbols Test</td>
<td>22.46 18.52</td>
<td>21.77 21.73</td>
<td>0.12</td>
<td>not significant</td>
</tr>
</tbody>
</table>

*Because the Listening Test showed a significant difference in the two classes at the beginning of the year, it was necessary to compare the improvement of the classes by an analysis of covariance (see discussion on pages 101 and 102, and Table VI, page 102 and Table VII, page 103).
and that there was no significant difference between the control class and the experimental class in the areas which were evaluated by the tests.

VI. ANALYSIS OF COVARIANCE FOR THE LISTENING TEST

The fact that a significant difference existed between the control class and the experimental class in the pretest results of the Listening Test\(^5\) required that data on this test be submitted to an analysis of covariance in order to evaluate the significance of the amount of improvement shown by the classes at the end of the study.

The adjusted criterion means for the Listening Test are presented in Table VI. Table VII, page 103, presents a summary table of the analysis of covariance for this test. The results indicated no significant difference at the .01 level of confidence. The null hypothesis that there was no significant difference between the classes in the amount of improvement shown during the year may be accepted. Although the control class did make greater gains than the experimental class as evidenced by the fact that there was a significant difference between the classes at the start of the

\(^5\)See Table III, p. 96.
experiment and no significant difference between the classes at the end of the experiment, this gain was not great enough to be statistically significant in this study. It would indicate, however, that if the population in the study had been larger (possibly with three control and three experimental classes), it might be expected that the control classes would show a statistically significant degree of improvement over the experimental classes.

TABLE VI

ADJUSTED CRITERION MEANS FOR LISTENING TEST SCORES

<table>
<thead>
<tr>
<th>Group</th>
<th>Unadjusted mean</th>
<th>Adjusted mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>63.923</td>
<td>66.020</td>
</tr>
<tr>
<td>Experimental</td>
<td>65.462</td>
<td>63.363</td>
</tr>
<tr>
<td>Difference</td>
<td>1.539</td>
<td>2.657</td>
</tr>
</tbody>
</table>

VII. CORRELATIONS BETWEEN TESTS

The combined scores of both classes were used to compute coefficients of correlation between the tests administered at the beginning of the experiment and also at the end of the experiment. In addition, correlations between the pretest and posttest scores for each test were determined.
<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Methods</td>
<td>80.337</td>
<td>1</td>
<td>80.337</td>
<td>1.321</td>
<td>Not significant</td>
</tr>
<tr>
<td>Withins</td>
<td>2,979.690</td>
<td>49</td>
<td>60.810</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3,060.027</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SS = sum of squares; df = degrees of freedom; MS = mean squares; F = F test
Pretest Correlations

Table VIII shows the results of correlations between tests at the beginning of the experiment for combined classes. Four correlations proved to be significant at the .01 level. These four correlations were: (1) Kwalwasser Music Talent Test to Music Symbols Test, (2) Attitude Questionnaire to Listening Test, (3) Attitude Questionnaire to Music Symbols Test, and (4) Listening Test to Music Symbols Test. The two other correlations shown in Table VIII were not significant, even at the .05 level.

**TABLE VIII**

**CORRELATIONS BETWEEN TESTS AT THE BEGINNING OF THE EXPERIMENT FOR COMBINED GROUPS**

<table>
<thead>
<tr>
<th></th>
<th>Attitude Questionnaire</th>
<th>Listening Test</th>
<th>Music Symbols Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kwalwasser Music Talent Test</td>
<td>.155</td>
<td>.241</td>
<td>.360</td>
</tr>
<tr>
<td>Attitude Questionnaire</td>
<td>.456</td>
<td>.536</td>
<td></td>
</tr>
<tr>
<td>Listening Test</td>
<td></td>
<td>.598</td>
<td></td>
</tr>
</tbody>
</table>

Correlation coefficients above .273 are significant at the .05 level; those above .354 are significant at the .01 level.
Posttest Correlations

The results of correlations between tests at the end of the experiment for combined classes are shown in Table IX. Four correlations proved to be significant at the .01 level. These four correlations were: (1) Kwalwasser Music Talent Test to Listening Test, (2) Kwalwasser Music Talent Test to Music Symbols Test, (3) Attitude Questionnaire to Listening Test, and (4) Listening Test to Music Symbols Test. Correlation between the Kwalwasser Music Talent Test and the Attitude Questionnaire proved to be significant at the .05 level. The correlation between the Attitude Questionnaire and the Music Symbols Test proved to be insignificant.

TABLE IX
CORRELATIONS BETWEEN TESTS AT THE END OF THE EXPERIMENT FOR COMBINED GROUPS

<table>
<thead>
<tr>
<th></th>
<th>Attitude Questionnaire</th>
<th>Listening Test</th>
<th>Music Symbols Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kwalwasser Music Talent Test</td>
<td>.328</td>
<td>.463</td>
<td>.409</td>
</tr>
<tr>
<td>Attitude Questionnaire</td>
<td></td>
<td>.436</td>
<td>.149</td>
</tr>
<tr>
<td>Listening Test</td>
<td></td>
<td>.448</td>
<td></td>
</tr>
</tbody>
</table>

Correlation coefficients above .273 are significant at the .05 level; those above .354 are significant at the .01 level.
Correlations Between Each Pretest and Its Posttest

The results of correlations between each pretest and its posttest are shown in Table X. Correlation between the pretest and posttest results of the *Kwalwasser Music Talent Test* proved to be significant at the .05 level, but not at the .01 level. The correlations between each pretest and its posttest of the other three tests (*Attitude Questionnaire*, *Listening Test*, and *Music Symbols Test*) all proved to be well above the .01 level of significance.

**TABLE X**

CORRELATIONS BETWEEN EACH PRETEST AND ITS POSTTEST

<table>
<thead>
<tr>
<th>Test</th>
<th>Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kwalwasser Music Talent Test</td>
<td>.3099</td>
</tr>
<tr>
<td>Attitude Questionnaire</td>
<td>.5677</td>
</tr>
<tr>
<td>Listening Test</td>
<td>.5805</td>
</tr>
<tr>
<td>Music Symbols Test</td>
<td>.6772</td>
</tr>
</tbody>
</table>

Correlation coefficients above .273 are significant at the .05 level; those above .354 are significant at the .01 level.

According to Dr. Dal H. Cass,

Except to a degree that the children had been influenced by instructional techniques, the high
correlation between pre- and posttests can be interpreted as indicating that the tests are reliable.\(^6\)

It should be noted that of the tests used in this study, the Kwalwasser Music Talent Test proved to have the lowest correlation between pre- and posttest scores. This is, indeed, unexpected, for the Kwalwasser test purports to measure musical aptitude which is understood by the researcher to intimate certain inborn talents or skills not particularly subject to change as the result of teaching methods. The results of this study would indicate that the reliability and validity of the Kwalwasser Music Talent Test are questionable, at least at the fourth grade level.

VIII. SUMMARY

The results of a Background Questionnaire which was answered by the parents of the children involved in the study indicated that the control class and the experimental class were composed of children who had had similar contacts with music outside their school experiences. This is not meant to imply that each child involved in the study had a similar musical background, but rather that the total musical background of each class was quite similar.

Four tests were administered at the first of the school year as pretests. They were repeated at the end of the experiment as posttests. The purpose of the tests was to determine the equality, or inequality, of the two classes involved in the study and to evaluate any differences between the control class and the experimental class at the end of the study as a result of the teaching methods used.

The pretest results indicated that there was no significant difference between the classes except for a significant difference in listening abilities. The posttest results indicated that there was no significant difference between the classes in any of the areas evaluated by the tests. There was no significant difference between the classes in the amount of improvement made during the study. This was indicated by application of the $t$ test to the data of three tests, and an analysis of covariance for the *Listening Test*.

This total data would indicate that there was no significant difference in the amount of improvement between the control class and the experimental class in the knowledge, abilities, and skills measured by the tests. It should be noted, however, that in the results of all three tests presented in Table V, page 100, the control class showed a greater difference (or amount of improvement) between pretest
and posttest means than did the experimental class. It should also be noted that although there was a significant difference between classes in abilities measured by the Listening Test on the pretest scores (Table III, page 96), the posttest results indicated that by the end of the year there was no significant difference between the classes (Table IV, page 98). This, also, would indicate that the control class made a greater degree of improvement than the experimental class during the study. Even though the differences between the classes in the amount of improvement are not statistically significant in this particular study, the trend for the control class to show a higher degree of improvement does make it possible to make the valid statement that if the experiment had been conducted on a larger scale (e.g., possibly with three control and three experimental classes), it might be expected that the control classes would show a statistically significant degree of improvement over the experimental classes.

Correlations between tests were computed, both on pretest and on posttest data. The tests were found to be reliable when correlations were made between each pretest and its posttest; however, some doubt was cast on the validity and reliability of the Kwalwasser Music Talent Test.
CHAPTER VII

OBSERVATIONS, RECOMMENDATIONS, AND SUMMARY

Personal observations of the researcher and recommendations for the use of Music for Children in American music education will be presented in this chapter. Following this, there will be a brief summary of the entire study.

I. OBSERVATIONS

It might be expected, as a result of the data presented in Chapter VI, that in a study of this nature involving a larger number of children, the tests would indicate that the control class had made significantly larger gains in musical learnings. This might imply that in a study of a larger scope, the Orff method would prove to be less adequate than more conventional teaching methods, but this is not an entirely accurate impression. Many of the learnings of both classes concerned areas of a subjective nature and, therefore, were difficult to evaluate by objective testing.

In the opinion of the researcher, the children in the experimental class achieved a growth in musicality which was not attained by the children of the control class.
Orff's philosophy assumes that every child is a musician, even if at a rather primitive level. His method, by drawing from the child, rather than pushing something at the child, does succeed in developing a higher level of kinesthetic feeling and emotional response toward music than the methods used by the researcher in the control class.

The experimental class showed greater progress than the control class in developing a sense of phrase length. Although the control class children could accurately "count out" a four-measure phrase, the experimental class children "felt" the length of the phrase. This caused the phrasing of the experimental class children to be more meaningful and musical—an expression of feeling, rather than a problem in arithmetic.

The children following the Orff system developed a higher feeling, or sense, of meter. If the children in both classes had been asked to complete a written exercise in which they were to insert measure bars on a staff to complete a musical excerpt, undoubtedly the control class would have shown a greater ability—but is not this, in reality, a mathematical exercise and not a musical one?

Although form was studied and understood by the children in the control class, the children in the experimental class showed a greater feeling, or sensitivity,
for form. Both classes seemed equal in the ability to analyze a composition in regard to form as an intellectual activity; but the experimental class also perceived form as an emotional, feeling experience. This was a result of the fact that the learning and performance of a nursery rhyme or song with its instrumental ensemble accompaniment from the Orff books demands an understanding of how each individual section is related to the whole composition. By learning the songs first and then adding introductions and codas, the experimental class "lived" form; the control class merely observed it.

Group singing is, naturally, a type of ensemble experience. Other ensemble experiences of the control class consisted of playing the tonette, a few rhythm band experiences, and using rhythmic instruments to add simple accompaniments to songs. This does not begin to compare with the ensemble experiences of the experimental class. The Orff method develops an awareness of the interplay of parts and demands individual responsibility for a part; consequently, children exposed to this method of music education develop a more accurate understanding of the individual contribution of a part to the whole, as in a band or orchestra. Two years after the conclusion of the teaching portion of this study, the instrumental teachers who had received these children
were able to note a better feeling for ensemble on the part of the experimental class children.

They work together better. They're not as totally wrapped up with their own part as most kids. They've got an idea of what everyone else is doing, and their rhythm is much better.¹

It has been stated earlier that the tonette training was identical in both classes; however, as a result of daily work with instruments and the constant use of the letter names of notation, the researcher did expect to see a more rapid growth in tonette ability on the part of the children using the Orff system. Although a slight difference between the classes was observed, it was so small that no conclusions could be drawn.

The control class definitely showed greater gains in singing ability and in the ability to "stay on a part" in two-part songs. The melody to be sung is rarely played on an instrument in the orchestrations of Orff. This does tend to improve singing ability and is far superior to the frequent practice of always playing the piano when children are singing; however, it does not develop accurate singing ability nearly as well as a cappella singing, which was almost a daily occurrence in the control class.

¹Mr. George Wolf, instrumental instructor in the Ulysses Grade Schools, Ulysses, Kansas, in a discussion with the researcher, May, 1966. Permission to quote secured.
It can be said, in general, that although the Orff method may not develop as much technical, intellectual knowledge about music as the methods more customarily used in America, it does seem superior in developing an emotional, kinesthetic, and aesthetic feeling for music. The control class was better able to "parrot" facts, but the experimental class demonstrated a deeper feeling of musicality.

II. RECOMMENDATIONS

Further research along the general lines of this study is needed. A larger study involving several schools, several teachers (including teachers trained in the methods of Orff), and many more classes and children over a period of several years would yield much more conclusive data. This, in turn, would result in a more accurate evaluation of the effectiveness of the Orff method and lead to more definitive recommendations. A comparison of students in their first year of study in the Orff system with students in their fourth year of study in the methods of the researcher does not yield unequivocal information strong enough to use as the basis for specific predictions and recommendations. It is unfortunate that the current project in Bellflower, California, does

2Discussion of this project may be found in Chapter II, p. 24.
not have a control group involved in the study to aid in a
more objective and accurate evaluation of the results of
the project.

On the basis of this study, the researcher does not
feel that the Orff method has proved itself so superior to
other methods that it should be totally adopted to the ex-
clusion of other methods. On the other hand, the system
does have merit and some strengths which are not in evidence
in other methods. Therefore, it would seem wisest to glean
the stronger aspects of the Orff method and their ensuing
benefits and add them to the already eclectic teaching pro-
cedures in common usage at present.

One of the biggest problems in teaching the Orff
method is to keep all the members of the class constructively
occupied while help and instruction is being given to an
individual. This led the researcher to consider the system
as possibly a very effective method to be used in team-
teaching activities. While one or several teachers might
be engaged in helping an individual or small ensemble at the
instruments, another teacher, or teachers, might be working
with a larger group in learning speech patterns, new songs,
or patschen and rhythmic ostinato activities. Although it
is not known as a definite fact, some of the materials used
in the research involved in this study indicate that, in some
cases at least, several teachers have been used to work with a class.

This team-teaching approach should have relevance to the music supervisor who might be inclined to say, "Yes, but I only see my pupils once or twice a week. That's just not enough time to pursue the Orff approach, and some of the classroom teachers I work with don't have the musical training, interest, or imagination to make this type of training successful." It would seem probable that classroom teachers could successfully teach such activities as speech patterns, echo clapping, rhythmic phrase building, patschen and rhythmic ostinato, rhythmic canons, rhythmic rondo, and creating poetry to be used later as texts for songs. All these above activities require no instruments, or even a knowledge of the musical staff. Only a knowledge of rhythmic notation and an understanding of the activity involved (along with one Music for Children book) would be required. The music supervisor could then assist in the activities requiring instruments and the "ensemble feeling." Such a possibility should be considered before rejecting the system as impossible because the supervisor does not work on a daily basis with children.

3 This is not an actual quotation, but this type of thinking has been quite evident in many conversations the researcher has had with many music supervisors.
As stated in Chapter I, training in the methods of Orff for in-service teachers in America is not readily available at the present time. More opportunities and locations for training should be made available. Three school years have elapsed since the teaching portion of this study was completed, and yet the researcher is still developing new insights concerning the method. Some problems involved in the teaching of the method are still unresolved in the understanding of the researcher. The method has been misunderstood by many teachers who lacked insight or were unwilling to devote the necessary time and effort required to study the system thoroughly. This has led to unwarranted criticism of the method. Without the benefit of the specialized training, a teacher desiring to teach Music for Children with some degree of success must be prepared to spend many hours of study and reflective thinking and to learn from "trial and error" teaching experiences.

The problem of grasping the Orff approach is partly due to the poor organization of the books in the series. Any teaching methods book which expects a teacher to start the class with activities presented near the middle of the book, rather than the first activities shown, without specific directions to do so, is almost insuring that it will be misunderstood and misused. Yet, this is exactly
what is expected of the teacher in the first volume, 
*Pentatonic*, of *Music for Children*.

The chance for successful understanding and teaching 
of *Music for Children* in America would be greatly improved 
if the material were reorganized along the lines of the many 
music series textbooks now available in this country. Most 
of the music series provide a teacher's book which includes 
a sequence of activities and definite teaching procedures, 
preparatory activities, related and alternate activities, 
and other suggestions for each song or activity in the book. 
It is hoped that the Bellflower project\(^4\) may result in a 
text of this type.

The investigator's recommendations are summarized by 
the following statements:

1. Additional research involving the effectiveness 
of the Orff method is needed.

2. Some activities, unique to the Orff method, which 
better develop certain aspects of a musical education should 
be added to the activities which are already a part of the 
customary teaching procedures used in America.

3. Investigation as to the effective use of the 
method in team-teaching situations should be considered.

\(^4\) For additional information and discussion, see 
4. Music supervisors should seriously consider the possibilities of effective use of the Orff method in cooperation with the classroom teachers.

5. Additional opportunities for the training of in-service teachers and students in teacher-training programs need to be made available.

6. Extensive revision of the Orff books is desirable, including additional suggestions and procedures for the teacher.

III. SUMMARY

It was the purpose of this study to compare the effectiveness of the method, Music for Children by Carl Orff, with more conventional teaching procedures presently being used in America. It was learned that a teacher with minimal training in the method can achieve a certain degree of success, but that some misconceptions and errors in judgment may be expected.

The investigation was limited to children in the fourth grade for the period of one school year. A control class learning through the eclectic teaching procedures of the researcher and an experimental class learning through the methods of Carl Orff were compared by means of the parallel group technique.
Tests were constructed and were administered at the beginning and at the end of the experiment. These were objective in nature and were used to determine the degree of similarity between the classes at the start of the experiment, as well as to measure the amount of improvement shown by each class at the end of the year. The analysis of this test data reached the conclusion of the experiment indicated that the slight differences between the achievement of the classes were not significant enough statistically to prove the superiority of one of the methods involved in the study.

It was felt that the two methods under consideration were different types, or kinds of learning; and that the important point indicated by the study, rather than the proof that one method was superior to the other, was recommended, then, that the stronger aspects of the method be incorporated with the other customary teaching procedures used in America.
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F. UNPUBLISHED MATERIALS


G. NEWSPAPERS


H. PHONOGRAPH RECORDING

INFORMATION AND PROCEDURES FOR THE LISTENING TEST

Information

All records used for the Listening Test were from RCA Victor's Adventures in Music series. All recordings were re-recorded on a tape recorder to eliminate looking for the correct music and to save time. If a musical selection was played two or three times in the test, it was recorded the proper number of times, in succession, on the tape recorder. This eliminated wasted time rewinding and searching for the beginning of the musical composition involved. This test was not a reading test; therefore, much time was taken to thoroughly read, explain, and discuss each item in the test with the children. The pre- and posttests were each given in three sittings. The children were not told the name of the compositions. The musical selections used in the test were not studied during the year. The various aspects of listening were developed by a study of other compositions.

Testing Procedures

The oral instructions to be given to the children when taking the Listening Test were composed in advance and written down to insure that the conditions for taking the pretest and posttest were similar. Test instructions are shown on pages 135-138.
SELECTION 1: "Dagger Dance" from "Natoma" by Victor Herbert.

ORAL INSTRUCTIONS:

You are going to hear a selection played two times. First, we will read the sentences about this selection together. Then, as you listen to the selection, circle the letter that tells the best way to finish each sentence. Don't try to finish all of the sentences the first time you listen to the music. You will have two chances to listen. If you change your mind after you have circled one, erase it and circle the other one you do want. Try to finish some sentences each time the recording is played.

Look at your paper where it says "SELECTION 1." There are seven sentences about this selection. Below number seven it says, "STOP! Your teacher will tell you when to go on to the next part." Do you all find this? Now, let's read about the things we should listen for as we listen to this selection.

After reading through all of the test items concerning the first selection, all the questions of the children were answered, except that the piccolo was not discussed. The first test sentence was placed on the blackboard and each of the three possible responses was circled to insure that the children understood how to mark the test blank.

ORAL INSTRUCTIONS:

Now, let's start. Remember we will listen to this music twice; so if you don't get all the sentences finished the first time, you will have another chance. If you finish quickly, think about your sentences again and make sure they say what you want them to say.
SELECTION 2: "Air Gai" from "Iphigenie in Aulis" by Gluck.

ORAL INSTRUCTIONS:

This music will be played two times. Be sure you understand what you are to listen for. This music has three big parts. The first part and the last part are alike, but the middle part is different. Be ready to finish the sentences telling how the middle part is different.

1. Sentences and possible responses were read.
2. Children's questions were answered.
3. Children were reminded that they would hear the music twice.
4. Music was played twice.

SELECTION 3: "Parade" from "Divertissement" by Ibert.

1. Sentences and responses were read.
2. Children's questions were answered.
3. The class was told that they would hear the music only once and that they must finish all the sentences the first time.
4. Music was played once.

SELECTION 4: "Circus Music" from "The Red Pony" by Copland.

1. Sentences and responses were read.
2. Children's questions were answered.
3. The class was told that they would hear the music three times and that they did not have to finish all the sentences the first time they heard the music.
4. Music was played three times.
SELECTION 5: "March Past of the Kitchen Utensils" from "The Wasps" by Vaughan Williams.

1. Sentences and responses were read.
2. Children's questions were answered, except that the meaning of the terms staccato and legato were not explained.
3. The class was told that they would hear the music only once and that they must finish all the sentences the first time.
4. Music was played once.

SELECTION 6: "Pantomime" from "The Comedians" by Kabalevsky.

1. Sentences and responses were read.
2. Children's questions were answered, but the rhythms in test item number thirty-three were not clapped.
3. The class was told that they would hear the music twice.
4. Music was played twice.

SELECTION 7: "Pizzicato Folka" from "Ballet Suite No. 1" by Shostakovich.

1. Sentences and responses were read.
2. Children's questions were answered.
3. The class was told that they would hear the music twice.
4. Music was played twice.
SELECTION 8: "Leap Frog" from "Children's Games" by Bizet.

1. Sentences and responses were read.
2. Children's questions were answered.
3. The class was told that they would hear the music only once.
4. Music was played once.

SELECTION 9: "Waltz" from "Les Patineurs" by Mayerbeer.

1. Sentences and responses were read.
2. Children's questions were answered.
3. The class was told that they would hear the music twice.
4. Music was played twice.
LISTENING TEST

Your Name ___________________________ Teacher's Name ___________________________

SELECTION 1: Circle the letter for the best way to finish each sentence.

1. This music is about: (a) Fairies. (b) Indians. (c) Babies.

2. This music moves in: (a) 3's. (b) 4's. (c) 5's.

3. The drum plays all its notes: (a) loudly. (b) softly. (c) some loudly and some softly.

4. The instruments most plainly heard playing the melody are: (a) Brass. (b) String. (c) Woodwind.

5. Piccolos are used: (a) at the beginning (b) in the middle (c) near the end of the song.

6. The rhythm of the drum: (a) changes during the piece. (b) always stays the same.

7. The first melody of the piece: (a) is repeated several times. (b) is only heard once.

STOP! Your teacher will tell you when to go on to the next part.
SELECTION 2: Circle the letter for the best way to finish each sentence.

8. This music moves in: (a) 2's (b) 3's (c) 5's.

9. The flute has the melody in: (a) the first part (b) the middle part (c) the last part.

10. The violins have the melody in: (a) the first part (b) the middle part (c) not at all.

11. The middle part is: (a) louder (b) softer (c) just the same.

12. The middle part is: (a) faster (b) slower (c) just the same.

13. The melody for the middle part is: (a) higher (b) lower (c) just the same.

STOP!! Your teacher will tell you when to go on to the next part.

SELECTION 3: Circle the letter for the best way to finish each sentence.

14. This music moves in: (a) 3's (b) 4's (c) 5's.

15. This music is about: (a) a merry-go-round (b) an elephant (c) a parade.

16. The three big parts of this music go: (a) loud - soft - loud (b) soft - loud - soft (c) soft - soft - loud (d) loud - loud - soft.

STOP!! Your teacher will tell you when to go on to the next part.
SELECTION 4: Circle the letter for the best way to finish each sentence.

17. The main instrument that has the first melody is the:
   (a) trumpet  
   (b) violin   
   (c) tuba.  

18. This music is about:
   (a) school  
   (b) church  
   (c) a circus. 

19. This music moves in:
   (a) 2's  
   (b) 3's  
   (c) 4's. 

20. This music makes me feel:
    (a) happy  
    (b) sad 
    (c) doesn't make me feel anything. 

21. This music is divided into three big parts. Two of these parts are alike and the third one is different. The two parts that are alike are:
    (a) 1st part and last part  
    (b) 1st part and 2nd part  
    (c) 2nd part and last part. 

22. The middle part is:
    (a) higher  
    (b) lower  
    (c) about the same. 

23. The middle part is:
    (a) faster  
    (b) slower  
    (c) just the same. 

24. The middle part is:
    (a) louder  
    (b) softer  
    (c) about the same. 

STOP!! Your teacher will tell you when to go on to the next part.
SELECTION 5: Circle the letter for the best way to finish each sentence.

25. This music is for: (a) a march (b) a lullaby (c) a waltz.

26. This music moves in: (a) 3's (b) 4's (c) 5's.

27. The instrument that plays the first melody over and over is the: (a) oboe (b) trumpet (c) cello.

28. Most of the time the instruments are playing: (a) staccato (b) legato.

29. This music is divided into: (a) 2 big parts (b) 3 big parts (c) 4 big parts.

STOP! Your teacher will tell you when to go on to the next part.
SELECTION 6: Circle the letter for the best way to finish each sentence.

30. At the very beginning, (a) piccolo one of the most important instruments is the: (b) oboe (c) snare drum.

31. This music moves in: (a) 2's (b) 3's (c) 5's.

32. Most of the time, the rhythm says: (a) long, long, short, short, long (b) short, short, long, long, short.

33. The rhythm of the first part moves like this: (a) \(\text{\vdash\vdash\vdash\vdash\vdash}\) (b) \(\text{\vdash\vdash\vdash\vdash\vdash}\) (c) \(\text{\vdash\vdash\vdash\vdash\vdash}\).

34. As the record plays, it: (a) gradually gets louder (b) gradually gets softer (c) stays the same.

35. This music has: (a) 2 big parts (b) 3 big parts (c) four big parts.

STOP! Your teacher will tell you when to go on to the next part.
SELECTION 7: Circle the letter for the best way to finish each sentence.

36. This music is about:  
   (a) Fairies  
   (b) Giants  
   (c) Indians.

37. If I were walking to this music, I would:  
   (a) drag my feet along the floor  
   (b) walk on tiptoe  
   (c) walk very heavily.

38. This music moves in:  
   (a) 3's  
   (b) 4's  
   (c) 5's.

39. The speed of this music goes:  
   (a) the same all the time  
   (b) slower, faster, slower  
   (c) faster, slower, faster

40. The loudness of this music goes:  
   (a) louder, softer, louder  
   (b) the same all the time  
   (c) softer, louder, softer.

41. The middle part of this music is different because it is:  
   (a) louder and faster  
   (b) softer and slower  
   (c) louder and slower  
   (d) softer and faster.

STOP!! Your teacher will tell you when to go on to the next part.

---

SELECTION 8: Circle the letter for the best way to finish each sentence.

42. The first melody in this music:  
   (a) starts in the middle and then goes up and down.  
   (b) starts high and goes lower.  
   (c) starts low and goes higher.

43. This music moves in:  
   (a) 3's  
   (b) 4's  
   (c) 5's.

STOP!! Your teacher will tell you when to go on to the next part.
SELECTION 9: Circle the letter for the best way to finish each sentence.

44. The first melody is played by the: (a) trumpets  
(b) violins  
(c) tubas.

45. This music moves in: (a) 2's  
(b) 3's  
(c) 4's.

46. This music makes me want to: (a) march  
(b) rock back and forth  
(c) go to sleep.

47. If I were moving to this music, I would make my movements: (a) small  
(b) middle-sized  
(c) big.

48. In the middle part, the music is: (a) faster  
(b) slower  
(c) just the same.

49. In the middle part, the music: (a) is all loud  
(b) is all soft  
(c) goes loud, soft, loud, soft  
(d) goes soft, loud, soft, loud.

50. I would call this music: (a) a march  
(b) a lullaby  
(c) a waltz.
ATTITUDE QUESTIONNAIRE

Teacher's Name_____________________ Your Name_____________________

DIRECTIONS: Read each sentence below. If you feel the sentence is true for you, put an X under TRUE. If you feel that the sentence is false for you, put an X under FALSE. If you are not sure, or can not make up your mind, put an X under NOT SURF. There is no grade for this paper, so take time to think and answer as honestly as you can.

<table>
<thead>
<tr>
<th>TRUE</th>
<th>NOT SURE</th>
<th>FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</table>

1. I like to go to music class.

2. Music class is fun.

3. Music class is too long.

4. Music class should be longer.

5. I think I have learned a lot about music this year.*

6. If I had to give up one recess a day so that I could have music class, I wouldn't do it.

7. Learning to listen to good music will help me later in life.

8. It bothers me for someone to be making noise when I am listening to music.

9. I don't like to listen to music.

10. Listening to music is easier for me when I know the story of the composer.

*On the pretest, this statement read as follows: "I think I learned a lot about music last year."
24. I don't like to sing because I don't do it very well. | TRUE | NOT | SURE | FALSE |
--- | --- | --- | --- |
25. Everyone can learn to be a better singer than they are right now. | TRUE | NOT | SURE | FALSE |
26. I like to learn things about how to read music. | TRUE | NOT | SURE | FALSE |
27. I don't see why I need to learn to read music. I'd rather just sing and listen to records. | TRUE | NOT | SURE | FALSE |
28. Most music classes are pleasant and interesting. | TRUE | NOT | SURE | FALSE |
29. I like to play rhythm band instruments. | TRUE | NOT | SURE | FALSE |
30. To me, music sounds all pretty much the same. | TRUE | NOT | SURE | FALSE |
31. Hearing music is part of everyday life. | TRUE | NOT | SURE | FALSE |
32. I'd like to listen to records, but they are usually too long. | TRUE | NOT | SURE | FALSE |
33. I wish we could give more time to sports and less to music. | TRUE | NOT | SURE | FALSE |
34. I want to learn more about music. | TRUE | NOT | SURE | FALSE |
35. I like to sing songs I have learned at school on the way home. | TRUE | NOT | SURE | FALSE |
36. I don't sing songs I have learned at school any place else. | TRUE | NOT | SURE | FALSE |
37. Sometimes I sing songs I have learned at school for my parents. | TRUE | NOT | SURE | FALSE |
38. Some music makes me think of pictures in my mind. | TRUE | NOT | SURE | FALSE |
| 39. | Some music doesn't really make me think of anything. | TRUE | NOT | SURE | FALSE | |
| 40. | I like moving around to music. | | | | |
| 41. | I would like to have more chances to make up my own patterns to move to music. | | | | |
| 42. | I like to make up my own songs. | | | | |
| 43. | I would like to learn more about how to make up my own songs. | | | | |
| 44. | I like music and I want to play in a band. | | | | |
| 45. | I know all that I want to about music. | | | | |
| 46. | I would like to take part of our time for music class away and add it to recess time. | | | | |
| 47. | Moving to music helps me "feel" the music better. | | | | |
| 48. | I think moving to music is silly and I don't like it. | | | | |
| 49. | I get embarrassed when we move to music. | | | | |
| 50. | I like "rock and roll" and "twist" music better than the music we have at school. | | | | |
| 51. | "Rock and roll" and "twist" music is not as good as music we learn about in school. | | | | |
| 52. | I think tonettes have been interesting and fun.* | | | | |
| 53. | I think tonettes have helped me learn more about music. | | | | |
| 54. | I don't see why we have to have tonettes instead of regular music class. | | | | |
| 55. | I lied when I answered some of these questions because I didn't think you would like my answers. | | | | |

*On the pretest, this statement read as follows: "I think tonettes will be interesting and fun."
MUSIC SYMBOLS TEST

Teacher's Name_________________ Your Name__________________

In front of each sign, put the letter which has its correct name.

1. A. Eighth Note
2. B. Quarter Note
3. C. Half Note
4. D. Whole Note
5. E. Eighth Rest
6. F. Quarter Rest
7. G. Half Rest
8. H. Whole Rest
9. I. Bird's Eye
10. J. Treble Clef Sign
11. K. Meter Sign
12. L. Staff
13. Which is faster, an eighth note or a quarter note?

14. What is the longest note we have studied?

Under each note below, write its correct letter name.
READING THEMES TEST

Your Name________________ Teacher's Name________________

Look at the staffs below. Decide which of the following songs each one is and write the correct letter in the box at the beginning of each staff.

A. America  D. Away in a Manger
B. Silent Night  E. Pop Goes the Weasel
C. Row, Row, Row Your Boat

ANSWER

☐

☐

☐

☐

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<p>| | | | | | |</p>
<table>
<thead>
<tr>
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<tbody>
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<td>Time</td>
<td></td>
<td>22</td>
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<tr>
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<td>29</td>
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<td>10</td>
<td>Rhythm</td>
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<td>30</td>
<td>Rhythm</td>
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<td>Rhythm</td>
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<td>40</td>
<td>Loudness</td>
</tr>
</tbody>
</table>
Dear Parent:

During this school year, I have been doing research on methods of teaching music to fourth graders. It will help me evaluate each child's learning if I have the following information concerning your child's musical background and his contact with music outside the school. It is important that I have information on all of my fourth grade children. Thank you.

Sincerely,

Mr. Vance Young, Music Teacher

Fourth Grade Child's Name __________________________ His Age __

Teacher's Name _______________________________________

He (She) has gone to school in Ulysses ___ in Kindergarten, ___ in 1st grade, ___ in 2nd grade, ___ in third grade, ___ only in 4th grade.

He (She) has taken music lessons on __________________ for ___ years. (instrument)

The instrument(s) the child's father plays (or has played) is (are): 

The instrument(s) the child's mother plays (or has played) is (are):

His brothers and sisters play (or have played):

Including parents, there are _____ in our family.

Did you sing in a choir when you were in high school or college? Mother: Yes__ No__ Father: Yes__ No__

Does anyone in your family sing in a choir now? (Church, high school, or college)
Do you have a T.V. at home? Do you ever listen to musical programs on T.V.? Which ones? About how often?

Do you have a record player at home? What are some of the records (or types of records) your family enjoys?

Does anyone in your family sing around the house? (Housework or "Shower" singing, singing songs together, etc.)

Do you have a piano (or organ in your home? Who plays it? How often is it used? How is it used? (piano music, with singing, children taking lessons, playing "by ear," etc.)

Any additional remarks you feel I might be interested in knowing about contacts your child has with music. Use other side if needed.

THANK YOU
1. Orff Instruments


*This illustration is a Xerox reproduction from the book by Doreen Hall, Teacher's Manual, p. 33.

FIGURE 17

THE ORFF INSTRUMENTS
APPENDIX C
THE DEMONSTRATION GROUP

The demonstration group, made up of the ten team captains, was organized as the result of a request made by the Musical Arts Club of Ulysses, Kansas (where this research was conducted). The club is made up of local women of various occupations who enjoy music and desire to further their knowledge and share their interests. When the club learned that an educational experiment in music was being conducted in the schools, they requested that the investigator provide a program to explain the Orff method. The demonstration group was then formed and practiced outside of class time to prepare a program.

The fact that a demonstration group had been organized and that a prepared program was available led to other requests for similar programs. The performances of the demonstration group were as follows:

<table>
<thead>
<tr>
<th>Organization</th>
<th>Location</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Musical Arts Club</td>
<td>Ulysses, Kansas</td>
<td>February, 1964</td>
</tr>
<tr>
<td>Kansas State Teachers College</td>
<td>Emporia, Kansas</td>
<td>April, 1964</td>
</tr>
<tr>
<td>Rotary Club</td>
<td>Ulysses, Kansas</td>
<td>May, 1964</td>
</tr>
<tr>
<td>Kansas Music Educators Association held in conjunction with the divisional meeting of the Kansas State Teachers Association</td>
<td>Garden City, Kansas</td>
<td>November, 1964</td>
</tr>
<tr>
<td>Parent-Teacher Association</td>
<td>Ulysses, Kansas</td>
<td>April, 1965</td>
</tr>
</tbody>
</table>
This demonstration group was not a part of the intended study. The learning results of this group were not used in the data comparing the control class and the experimental class because the group was much smaller than either of the classes and because the children in the demonstration group had received many additional hours of instruction and help. The demonstration group, however, did provide the investigator with invaluable information concerning the effectiveness of the Orff method when used in a smaller group than the rather large experimental class.