This study investigated the effectiveness of a music program designed especially for disadvantaged children and implemented by personnel already involved in the operation of Headstart programs. A total of 12 Headstart centers in Texas and Louisiana were included, 2 of which constituted the control group. Each teacher participated in a 3-day workshop and was supplied with simple instruments, several recordings, and a lesson manual (containing 90 lessons). Subjective and objective evaluations of the teachers were made during the workshops. Measures of final ability and amount and percentage of improvement were used to determine the progress of the 76 experimental and 33 control children. Individually, the experimental children showed comparatively fewer regressions and far more individual improvement than did the control group. It was found that Headstart teachers, given minimal training and direction, produced substantial improvement in the music ability of their children. The report is divided into three sections: (1) introduction and methods, (2) results, and (3) conclusions and recommendations.Appendices make up two-thirds of the report and include source materials and the full teaching manual. (ED)
FINAL REPORT

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MUSIC AND THE DISADVANTAGED:
A TEACHING-LEARNING PROJECT
WITH HEADSTART TEACHERS AND CHILDREN

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November 1, 1973

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U.S. Department of
Health, Education, and Welfare
Office of Education
Bureau of Research
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Willie Parker  Marie Washington
Doris Means   Maxine Session

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Dr. William Turner, Dean, School of Fine Arts
Dr. M.E. Hall, Head, Department of Music
Dr. Richard Voigtel, Office of Development

Dr. William T. Young
Associate Professor
Music Education
SECTION ONE

SUMMARY

INTRODUCTION

METHODS
SUMMARY

The purpose of the present study was to investigate the effectiveness of a music program, designed especially for disadvantaged children, when this program was implemented by personnel already involved in the operation of Headstart and similar preschools. The study had two primary objectives:

1. To discover if a typical Headstart teacher could be trained, in a limited amount of time, to conduct a remedial preschool music program for disadvantaged children.

2. To discover if the progress shown by these children was significantly superior to the progress of similar children in identical situations where such a program was not offered.

This study was the fourth in a series of research studies dealing with teaching music to disadvantaged children conducted by this investigator. In summary, the findings of the previous studies were as follows:

1. Disadvantaged children have less musical ability than advantaged children of the same age at the time they enter elementary school.

2. As they progress through school, this disparity becomes greater due to differences in learning rate.

3. This initial disparity between the abilities of the two groups can be practically eliminated if remedial instruction is provided at the preschool level.

4. Relatively untrained and inexperienced university students can achieve acceptable results in teaching music to disadvantaged preschool children through the use of prestructured music lessons.

5. Black children have lower voices than White children of the same age and sex. Materials for use with these children should be selected so as to reflect this difference.
6. Materials, devices, and techniques for teaching disadvantaged children should be matched to their vocal development as well as to their singing range.

Acting upon these previous findings, the present study sought to determine if teachers of the kind employed in the typical Headstart school could achieve satisfactory results in teaching music to their children.

Twelve Headstart teaching centers in Texas and Louisiana were included in the project. Two of these were designated as control schools and the remaining ten as experimental. Each experimental school sent one teacher to a three-day training workshop held on the campus of Stephen F. Austin State University. Each teacher was supplied with an autoharp, hand drum, triangle, tambourine, woodblock, twenty-four pairs of rhythm sticks, several recordings, and a lesson manual to use during the subsequent teaching year. During the workshop, teachers were taught to use these instruments and materials, and practiced the songs and teaching techniques in the manual. A predetermined order of introduction for music concepts to be taught was followed:

1. Rhythm: Feeling for the steady beat
2. Melodic: Feeling for the resting tone (tonal center)
3. Rhythm: Feeling for duplce meter
4. Melodic: Feeling for major tonality
5. Rhythm: Feeling for triple meter
6. Melodic: Feeling for minor tonality
7. Rhythm: Recognition of specific rhythm patterns (aurally)
8. Aural harmony: partner songs & chants
9. Recognition of five specific musical instruments (aurally)
10. Rhythmic improvisation

A total of 90 lessons was included in the manual and these constituted the basic teaching guide for the project. Teachers were encouraged to repeat lessons, omit lessons, or insert some of their own according to the needs of their children.

Objective evaluation of each teacher during the training workshop was provided by the Iowa Tests of Music Literacy, Level One. Four tests from this battery were administered at the beginning and again at the termination of the training workshop. These results
suggested that, as a group, the teachers had a music literacy level commensurate with that of typical elementary children in 4th to 6th grade, as defined by the ITML norms table. Preworkshop and postworkshop test results revealed that five teachers made gains in music literacy, as measured by this test, while five made no gains, or regressed from one to ten points, a fact which was to prove of some significance to the progress shown by the children.

Subjective evaluations of each teacher during the training workshop were made by the workshop director, by the teachers of each other (peer group ratings), and by each teacher of herself (self-rating). All these subjective and objective evaluations were correlated with the amount of improvement shown by the various experimental preschool groups.

A culture-free music ability test was orally administered to each of the 277 children enrolled in the twelve schools in September. Their individual responses were tape recorded for later evaluation. The test consisted of four sections, each designed to measure a separate music ability:

1. Melodic perception
2. Rhythmic perception
3. Musicianship (ability to sing familiar song material)
4. Voice range within which pitch accuracy was obtained

At the end of the teaching year, in May, this test was again given to the children. Of the original group, only 109 children were still enrolled in the schools; of these, 76 were in the experimental schools and 33 in the control group. While this was a rather large attrition, it was generally consistent with that encountered in previous studies with Headstart children in this series.

Results

The progress of the children was measured in three ways: (1) final ability at the termination of the teaching period; (2) the amount of improvement they were able to make, in terms of the criterion test; and (3) the percentage of improvement (the amount of improvement in relation to what they were able to do before the project started. The comparative progress of the experimental and control groups determined
by all three methods, is displayed in Summary Table One.

Final Ability. As shown in the table, the experimental children were superior to the control group in overall musical ability as well as in melodic perception and rhythmic perception. Only in the area of singing familiar songs was the control group more advanced than the experimental group.

Amount of Improvement. The experimental children were substantially superior to the control children in all areas in terms of amount of improvement. Generally, the improvement shown by the experimental group was two to three times that of the control schools.

Percentage of Improvement. The percentage of gain shown by the experimental children ranged from 54% to 64% in the areas measured. The percentage of improvement of the control group ranged from 12% to 30%. Thus, in terms of where they were to begin with, the experimental group made very large gains in comparison with the gains of the control children.

Individually, the experimental children showed comparatively fewer regressions and far more individual improvement than did the control group. For example, 59 of the experimental children improved significantly while only 14 remained unchanged and 3 regressed. The control children, on the other hand, produced 16 children who improved significantly, 15 remained unchanged and 2 regressed. Again, a far larger percentage of the experimental children improved than was the case with the control group.

Considering all these assessments collectively, it appears that the experimental program was a success. Significant and measurable improvement was definitely produced by the Headstart teachers who attended the workshop.

The Successful Teacher. In an effort to determine what teacher qualities were most related to group improvement in children, correlations were obtained between all workshop ratings and scores, and children's improvement in terms of the criterion test. These coefficients revealed that children's improvement in melodic perception was most related to teachers' songflute playing ability (which, in turn, implies some music reading ability on the part of the teachers), teachers' ability to use tonal syllables properly, their lesson presentation ability, their Tonal Reading Recognition scores from ITML, and their improvement on the Aural Perception tests of ITML.
### SUMMARY TABLE ONE

**COMPARISONS OF IMPROVEMENT AND FINAL MUSICAL ABILITY FOR EXPERIMENTAL AND CONTROL SCHOOLS**

<table>
<thead>
<tr>
<th>Ability</th>
<th>Experimental</th>
<th>Control</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Melodic Ability</strong> (possible score = 50)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Ability (posttest)</td>
<td>30.5</td>
<td>27.4</td>
<td>3.1</td>
</tr>
<tr>
<td>Amount Improved</td>
<td>10.7</td>
<td>3.0</td>
<td>7.3</td>
</tr>
<tr>
<td>% Improved</td>
<td>54 %</td>
<td>12 %</td>
<td>42 %</td>
</tr>
<tr>
<td><strong>Rhythmic Ability</strong> (possible score = 50)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Ability (posttest)</td>
<td>22.3</td>
<td>19.0</td>
<td>3.3</td>
</tr>
<tr>
<td>Amount Improved</td>
<td>8.7</td>
<td>4.5</td>
<td>4.2</td>
</tr>
<tr>
<td>% Improved</td>
<td>64 %</td>
<td>29 %</td>
<td>35 %</td>
</tr>
<tr>
<td><strong>Musicianship Ability</strong> (possible score = 5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Ability (posttest)</td>
<td>2.7</td>
<td>3.0</td>
<td>-0.3</td>
</tr>
<tr>
<td>Amount Improved</td>
<td>1.1</td>
<td>0.7</td>
<td>0.4</td>
</tr>
<tr>
<td>% Improved</td>
<td>61 %</td>
<td>30 %</td>
<td>31 %</td>
</tr>
<tr>
<td><strong>Composite Musical Ability</strong> (possible score = 105)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Ability (posttest)</td>
<td>55.4</td>
<td>49.7</td>
<td>5.7</td>
</tr>
<tr>
<td>Amount Improved</td>
<td>20.6</td>
<td>7.4</td>
<td>13.2</td>
</tr>
<tr>
<td>% Improved</td>
<td>59 %</td>
<td>17 %</td>
<td>42 %</td>
</tr>
</tbody>
</table>

* All differences (with one exception marked with a minus sign) are in favor of the experimental group.
Children's improvement in rhythm perception appeared to be most related to teachers' ITML Rhythm Aural Perception scores, their improvement in aural perception, and their improvement in Rhythm Reading Recognition (ITML).

Children's ability to sing songs, was most highly related to teachers' singing ability, their ability to employ tonal syllables, ability to present music lessons, their understanding of tonality, and their scores in the ITML Tonal Reading Recognition test.

A comparison of overall teacher abilities with improvement in children, indicated that musical knowledge possessed by the teachers was only moderately related to the amount of improvement shown by their preschool groups. \( r = .52 \). The greatest relationship was seen between children's improvement and the amount of improvement shown by the teachers during the three-day training workshop. \( r = .79 \) (Based on the ITML pre-posttest improvement). The reason for this phenomenon could not be determined from the factual data, but it appeared to be definitely related to individual teacher traits observed during the workshop such as determination, industry, and willingness to take the initiative. Summary Table Two displays all coefficients for teacher qualities and children's improvement.

**Voice range.** An analysis of the voice range test indicated that children's vocal abilities and singing range develop in the following progressive order:

- **Development**
  1. Children sing from 1-3 pitches with accuracy.
  2. Children sing with increased accuracy and in a slightly lower pitch range.
  3. Accuracy increases as range begins to extend upward. Voice break appears around the pitch 'A' (indicated by black notation).
**SUMMARY TABLE TWO**

**CORRELATIONS OF SELECTED TEACHER QUALITIES WITH GROUP IMPROVEMENT IN EXPERIMENTAL CHILDREN**

<table>
<thead>
<tr>
<th>Teacher Quality</th>
<th>Melodic</th>
<th>Rhythmic</th>
<th>Musicianship</th>
<th>Composite</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Workshop Ratings:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Songflute Ability</td>
<td>.63 *</td>
<td>.31</td>
<td>.44</td>
<td>.56</td>
</tr>
<tr>
<td>Singing Ability</td>
<td>.38</td>
<td>.27</td>
<td>.51</td>
<td>.38</td>
</tr>
<tr>
<td>Syllable Knowledge</td>
<td>.49</td>
<td>.29</td>
<td>.70 *</td>
<td>.48</td>
</tr>
<tr>
<td>Lesson Demonstration</td>
<td>.47</td>
<td>.12</td>
<td>.67 *</td>
<td>.20</td>
</tr>
<tr>
<td>Understanding Tonality</td>
<td>.38</td>
<td>.02</td>
<td>.51</td>
<td>.21</td>
</tr>
<tr>
<td>Understanding Rhythm</td>
<td>-.02</td>
<td>-.25</td>
<td>-.14</td>
<td>-.22</td>
</tr>
<tr>
<td><strong>Peer Group Rating:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self Esteem</td>
<td>-.52</td>
<td>.15</td>
<td>.52</td>
<td>.40</td>
</tr>
<tr>
<td><strong>ITML Scores: (2nd test)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ITML Tonal Tests</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aural Perception</td>
<td>.22</td>
<td>-.61</td>
<td>.25</td>
<td>-.24</td>
</tr>
<tr>
<td>Reading Recognition</td>
<td>.59 *</td>
<td>.48</td>
<td>.46</td>
<td>.66</td>
</tr>
<tr>
<td><strong>ITML Rhythm Tests</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aural Perception</td>
<td>.11</td>
<td>.59</td>
<td>-.45</td>
<td>.43</td>
</tr>
<tr>
<td>Reading Recognition</td>
<td>.32</td>
<td>.35</td>
<td>.34</td>
<td>.42</td>
</tr>
<tr>
<td>ITML 4 Test Total</td>
<td>.49</td>
<td>.35</td>
<td>.22</td>
<td>.52</td>
</tr>
<tr>
<td><strong>Improvement on ITML</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Tonal Aural Perception</td>
<td>.54</td>
<td>.43</td>
<td>.31</td>
<td>.61</td>
</tr>
<tr>
<td>Tonal Reading Recognition</td>
<td>.28</td>
<td>.10</td>
<td>.08</td>
<td>.20</td>
</tr>
<tr>
<td>Rhythm Aural Perception</td>
<td>.56</td>
<td>.70 *</td>
<td>.17</td>
<td>.79 *</td>
</tr>
<tr>
<td>Rhythm Reading Recognition</td>
<td>.18</td>
<td>.69</td>
<td>.19</td>
<td>.57</td>
</tr>
<tr>
<td>ITML 4 Test Total</td>
<td>.50</td>
<td>.77 *</td>
<td>.23</td>
<td>.79 *</td>
</tr>
</tbody>
</table>

* indicates two highest coefficients for each aspect of children's improvement.
Data also revealed that songs, within these ranges, are more easily performed by children if they possess one or more of the following characteristics: major mode, descending melodic direction, and scalewise movement. Those melodies which incorporated one or more of the following characteristics were found to be more difficult: minor mode, descending melodic direction, and melodies which skip along chord tones.

Information from the rhythm test indicated that duple rhythms were apparently more natural and easier to learn than triple rhythms. Both the experimental and control children performed a greater number of duple patterns correctly on the pretest (before any teaching was done) and again on the posttest.

**Conclusion**

The final conclusion offered was that Headstart teachers of the type typically employed in a Southern Headstart teaching center, can, indeed, make a significant and measurable improvement in their children if given minimal training and direction. The teachers in this project, largely through their own efforts, produced substantial improvement in the preschool children with whom they worked.

The fact that they were able to noticeably improve the music ability of their children carries great implications for future activity in this area. A training center should be organized in which large numbers of Headstart teachers, as well as other preschool teachers, could be taught the system used in this study. Recommended improvements in the procedure would be periodic "refresher" meetings of an in-service type, to help the teachers maintain their teaching skills. In addition, a means of pre-selecting teachers who are to receive the initial training should be devised which would include some kind of an assessment of initiative, industry, and ambition.
INTRODUCTION

There are two premises which most music educators hold to be true. One, is that music instruction should be started at an early age. The leading music educators of our time all agree on this subject. Shinichi Suzuki, the renowned Japanese music educator, advocates playing recordings and singing to the young child as soon as one year of age. He also believes that formal instruction (playing the violin) should begin at age three. The German composer Carl Orff, whose pedagogical ideas have greatly influenced music teaching in the United States, has stated that effective music instruction begins at birth. Zoltan Kodaly, known throughout the United States for his approach to music literacy, has been quoted as saying music instruction should start nine months before the child is born. In his later years, when alluding to the effect of home environment on musical learning, he even expressed the opinion that the child would be much better off if his music training was begun nine months before the mother was born.

The second premise affirmed by most music educators is that all people are musical to some degree. Just as no human being is devoid of intelligence, no person is completely without musical ability. What causes some individuals to possess more (or less) musical talent, or ability, than others is still being researched. It is generally accepted, however, that musical talent, ability, aptitude, or whatever name one chooses to employ, is a product of innate factors and early childhood environment. If this theory is acceptable, it is obvious that early childhood environment can play an important part in a child's later musical development, no matter what his innate endowments may be.

Whether one is disadvantaged, or not, is generally measured in terms of economics. If an individual has less than a given amount of income, or less than a specified number of "essential" possessions to enable him to exist at a certain living standard, then he is judged to be disadvantaged. While this is undoubtedly true, these are not the real misfortunes of being disadvantaged. Incomes can be raised and essential hardware can be purchased for modern living, but these cannot offset the lifelong effect of poor early childhood environment. Many educators now believe that the development of musical aptitude ceases, or slows noticeably after the individual passes age seven. The same is thought to be true of aptitudes and abilities in many other areas of learning. Thus, while equal opportunity is a commendable practice, and should be everyone's right, success is still often unattainable for the young adult from a disadvantaged background.
Thus, it is important to begin music instruction, as well as instruction in other areas, at an early age for all children, and most especially for the disadvantaged. Moreover, this instruction must be started before the child reaches the age for enrollment in the public schools. Fortunately, for the disadvantaged child, the Headstart program can fill this need. While some criticism, as well as praise, has been directed toward the operation of the Headstart program, few will dispute the fact that the idea is sound. A means of providing remedial instruction for disadvantaged children in music, and other areas of learning, is of vital necessity. How this may be efficaciously accomplished is the problem toward which this study is directed.

Purpose of the Study

The purpose of the present study was to investigate the effectiveness of a music program, designed especially for disadvantaged children, when this program was implemented by personnel already involved in the operation of Headstart and similar preschools. The study had two primary objectives:

1. To discover if a typical Headstart teacher could be trained in a limited period of time to conduct a remedial preschool music program for disadvantaged children.

2. To discover if the progress shown by children taught under such a program was significantly superior to the progress of similar children in identical situations where such a program was not offered.

It was reasoned that, if the answers to these questions proved favorable, then by simply duplicating the materials and procedures used, similar teachers in many localities could be assisted in establishing meaningful music programs in their schools, to the benefit of numerous disadvantaged youngsters.

Background Research

The present study is one of a series of research studies dealing with teaching music to disadvantaged children in progress at Stephen F. Austin State University. The impetus for this series was a research project
completed by Dr. John Hill in 1967. That study, along with the studies subsequently completed in the current series, are outlined in the sections following.

A Study of the Musical Achievement of Culturally Deprived and Culturally Advantaged Children at the Elementary School Level. 1/

This study, by Dr. John Hill, employed a sample of 614 students in kindergarten, first, fourth, fifth, and sixth grades, selected equally from disadvantaged and advantaged areas. The investigator found that there were significant differences in the musical abilities demonstrated by children from the two backgrounds. He also reported that there seemed to be a noticeable difference in learning rate which tended to allow these differences to become greater through subsequent grade levels. This phenomenon, commonly known as the "cumulative deficit factor," led to the conclusion that, not only did the children from disadvantaged areas begin school with less musical ability, but that the disparity between their ability and that shown by children from advantaged backgrounds increased as they progressed through school.

A Study of Remedial Procedures for Improving the Level of Musical Attainment among Preschool Disadvantaged. 2/

This study, the first in the current series, was completed in 1971 through the auspices of the U.S. Office of Education. The purpose of the study was to compare the effect of a structured program of musical training on the musical abilities of preschool children from advantaged and disadvantaged environments. It was hypothesized that, if the musical abilities of disadvantaged children could be improved sufficiently, they might then be able to enter elementary school on a level more nearly commensurate with that of their more fortunate counterparts. A total of 128 children were employed. These were formed into two groups of 32 children each, selected from disadvantaged areas and two groups of 32 children from advantaged areas. One of the advantaged groups and one disadvantaged served as control subjects while the other two groups were exposed to a series of music lessons taught by a university music education professor and three university elementary education students.

The results of the study suggested that a program such as the one employed was effective for raising the level of musical ability of disadvantaged as well as advantaged children. (See Figure 1.) The final posttest scores of the disadvantaged children who received the musical instruction were not significantly different, at the .01 level, from those of the advantaged children. Thus, it appeared that the effect of disadvantage in music, as originally reported in the Hill Study, could be overcome at this age level.
Information in this figure is taken from: A Study of Remedial Procedures for Improving the Level of Musical Attainment among Preschool Disadvantaged. (See footnote 1 for complete bibliographic information.)

PRETEST, POSTTEST, AND GAIN SCORES FOR FOUR PRESCHOOL GROUPS

<table>
<thead>
<tr>
<th>Group</th>
<th>Experimental</th>
<th>Control</th>
<th>Experimental</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest Means</td>
<td>47.5</td>
<td>66.5</td>
<td>77.6</td>
<td>111.2</td>
</tr>
<tr>
<td>Posttest Means</td>
<td>109.9</td>
<td>64.8</td>
<td>120.6</td>
<td>113.3</td>
</tr>
<tr>
<td>Gain or Loss</td>
<td>62.4</td>
<td>-1.8</td>
<td>43.0</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Figure 1.
Other findings reported in this study suggested further research. (1) The voice range, common to all children in the study, was noticeably lower than that usually suggested by writers of music education textbooks. (2) The Negro children employed in the study appeared to sing with greater accuracy when the pitch level of the songs was placed lower than was necessary for Anglo-Saxon children. (3) No apparent difference was found in the teaching results obtained by a trained and experienced music teacher and those obtained by inexperienced persons, only minimally trained in music.

An Investigation of the Singing Abilities of Kindergarten and First Grade Children in East Texas. The purpose of this study was to further investigate the common singing range of a large number of kindergarten and first grade children in the East Texas area. A total of 212 children in seven schools were given individual voice tests. Taken as a whole, the best singing range for the kindergarten children appeared to be those pitches found between low A and the F# above. For the first grade children, this range appeared between low A and G above:

![Voice Range Diagram](image)

Kindergarten

First Grade

Substantial differences were found to exist, however, between the singing ranges of boys compared to girls. White children compared to Black, and the total voice range compared to the accurate voice range for all children. Data also strongly confirmed the existence of a "voice break" or loss of control centered on the pitch A. (See Figure 2.)

A Study of the Vocal Singing Ranges of Black Kindergarten and First Grade Children. Since most of the disadvantaged children in this immediate area are of Negro ancestry, it was considered desirable to conduct a more extensive study of the singing ranges and vocal development of Black children. Accordingly, data were collected in the form of individual tape recordings of the singing voices of 732 Black children in 17 separate schools in Texas and Louisiana. The results of this study indicated that many Black children could sing well within the range of low A to F or F# above, but the greatest accuracy was
Figure 2.

MAXIMUM VOCAL RANGE OF KINDERGARTEN AND FIRST GRADE CHILDREN
(shown by black notation)
PITCH REGION WITHIN WHICH ACCURACY WAS ATTAINED BY
25% OR MORE OF EACH CLASSIFICATION
(shown by white notation)
achieved by most within the more limited range of low B-flat to F above. In general, this range is slightly lower and somewhat more restricted than that found for comparable White children. The existence of a voice break centered on the pitches G and A was again re-affirmed in this study. Only a very small percentage of these Black children, however, were able to sing with accuracy above the voice break. Most preferred to sing below and often lowered songs an entire octave in order to perform in the low range.

Definite stages of development were also reported in this study. The least advanced children attempted to sing in a speaking voice while the most advanced sang at the correct pitch level and in tune. Between these stages were those who sang with inconsistent melodic direction, those who sang out-of-tune, and those who transposed the melodies to other, more comfortable pitch ranges. Figure 3 outlines these stages and the order in which they appeared with the children in this study.

**Design of the Present Study**

The design of the present study was directly influenced by the findings reported in the previous studies in this series. Those findings in summary were:

1. Disadvantaged children have less musical ability than advantaged children at the time they enter elementary school.

2. As they progress through school, this difference becomes greater due to differences in learning rate.

3. This difference can be practically eliminated if remedial work is initiated at the preschool level.

4. Relatively untrained and inexperienced teachers can achieve acceptable results in teaching music to disadvantaged preschool children through use of a pre-structured lesson series.

5. Black children have lower voices, therefore song material for their use should be pitched lower in order to allow them greater chances for success.

6. Materials, devices, and techniques for teaching disadvantaged children should be selected to coincide with their vocal development, as well as singing range.
* Information for this figure, taken from *A Study of the Vocal Singing Ranges of Black Kindergarten and First Grade Children* (See footnote 4 for complete bibliographic information).

**Figure 3**

**THE DEVELOPMENT OF SINGING ABILITY IN CHILDREN**
Acting upon these previous findings, the present study was designed to determine if teachers, of the kind typically employed in Headstart preschools, could achieve comparable success in teaching music to their children.

The design included twelve Headstart centers, ten to be designated experimental groups and two to be control groups. The total enrollment of each school or teaching center was to be included in the student sample-population. Originally, it was estimated that each of the centers would contain an average of thirty children, which would have provided a total of 360 subjects. Actual enrollments were smaller, however, resulting in a total $N = 300$ at the beginning of the project. All children were to be pretested and posttested with an oral-aural music ability test to determine initial and final levels of musical ability. Differences between pretest and posttest scores (gain scores) were to be used as measures of improvement.

One teacher, regularly involved with each experimental school was to be designated as the experimental teacher for that school. These ten people were to attend a short training workshop and upon returning to their respective schools, each was to function as the only music teacher for all the children in their school for the entire subsequent school year. Figure 4 illustrates the design.

**Data Analysis.** Data were to be analyzed in the following ways.

1. Data from the teacher-training workshop to be reported and analyzed in terms of initial ability, final ability, improvement, attitude, and ease of learning.

2. Data from the experimental schools to be presented and analyzed in terms of initial and final ability, improvement, time to learn, rate of learning, and amount of learning.

3. Statistical comparisons of data from the teacher-training workshop and that from the experimental schools.

4. Comparison of data from the experimental children to that obtained from the control groups.

5. Subjective assessments of the project by the experimental teachers and by the project director.
Experimental Groups

Control Groups

Figure 4.

EXPERIMENTAL DESIGN
METHODS

Selecting teachers. The initial step in the project was to secure cooperating schools. A list of all Headstart-Community Action districts within a radius of one hundred miles of Nacogdoches, Texas, the headquarters for the project, was obtained from the Dallas Area Office of the Community Action Program. The one hundred mile limit was deemed the maximum distance that could be conveniently reached for morning testing and observation.

Letters were then sent to each district director, outlining the purpose and design of the project and soliciting their cooperation. If a director agreed to participate in the project, they were asked to submit the names of four teachers working in separate teaching centers, or rooms, and who would be able to attend a three-day training workshop to be held in August at Stephen F. Austin State University. When all had replied, a table of random numbers was employed to select ten people to serve as experimental teachers and two additional for a control group. The teachers, the center in which they taught, and the city in which the centers were located are listed in the order drawn:

<table>
<thead>
<tr>
<th>Order</th>
<th>Teacher</th>
<th>Center</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Casie Hines</td>
<td>Westside Headstart</td>
<td>Carthage, Texas</td>
</tr>
<tr>
<td>2</td>
<td>Willie Parker</td>
<td>Headstart - Room #1</td>
<td>Nacogdoches, Texas</td>
</tr>
<tr>
<td>3</td>
<td>Virginia Oates</td>
<td>Headstart School</td>
<td>Alabama-Coushatta Indian Reserve (Texas)</td>
</tr>
<tr>
<td>4</td>
<td>Marie Washington</td>
<td>Headstart School</td>
<td>Henderson, Texas</td>
</tr>
<tr>
<td>5</td>
<td>Judy Sears</td>
<td>Headstart Center</td>
<td>Mt. Enterprise, Texas</td>
</tr>
<tr>
<td>6</td>
<td>Margaret Crawford</td>
<td>Headstart Center</td>
<td>Jacksonville, Texas</td>
</tr>
<tr>
<td>7</td>
<td>Maxine Session</td>
<td>Headstart Center</td>
<td>Rusk, Texas</td>
</tr>
<tr>
<td>8</td>
<td>Joshie Henderson</td>
<td>Child Development Ctr.</td>
<td>Nacogdoches, Texas</td>
</tr>
<tr>
<td>9</td>
<td>Patricia Taylor</td>
<td>Full-year Headstart</td>
<td>Nachitoches, Louisiana</td>
</tr>
<tr>
<td>10</td>
<td>Doris Means</td>
<td>Headstart - Room #2</td>
<td>Nacogdoches, Texas</td>
</tr>
</tbody>
</table>

Control Schools Selected

<table>
<thead>
<tr>
<th>Order</th>
<th>School</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Carter Street Headstart Center</td>
<td>Marshall, Texas</td>
</tr>
<tr>
<td>12</td>
<td>Mansfield Headstart Center</td>
<td>Mansfield, Louisiana</td>
</tr>
</tbody>
</table>

Figure 5 shows the location of these schools in relationship to the project headquarters in Nacogdoches, Texas.
Figure 5.

HEADSTART SCHOOLS INVOLVED IN THE STUDY

- 21 -
Selection of song materials. Several factors influenced the selection of children's songs for use in the project. Of primary concern was the pitch range of the songs. Those selected had to possess tessaturas (most frequently recurring pitches) which fit within the accurate singing range of kindergarten children as determined by previous research.

A second consideration of importance to the selection of speech verses, as well as to song material, was the subject of the texts. Preschool children, in general, like to sing about themselves, their immediate environment, or the things they have seen. Of particular interest to those children who had participated in previous research projects were songs about animals (dogs, lions, worms, etc.) and trains. All of the songs employed in the project met one or more of the above criteria.

In addition to range and text subject, preference was given to songs using harmonies derived from the three primary chords (I, IV, V7) and which used few chord changes. As much as possible, songs were selected that could also be obtained on a good quality recording. A list of song titles and sources may be found in the Appendices.

Teaching Outline. Due to the limited musical training of the majority of the experimental teachers, plus the brevity of the training workshop, the number of musical concepts to be introduced to the children was limited. The concepts incorporated into the teaching outline are listed in Figure 6 in the order they were introduced.

Teaching Manual. The format of the teaching manual was designed to coincide with the Rhythmic-Melodic division of concepts within the teaching outline. A split page, plastic bound, flip book was constructed. That part of the lesson dealing with rhythmic concept teaching was placed on the left side of the book while the melodic portion was placed on the right. Each song, or verse rhythm, was repeated three times when it was introduced and again later in the year. Many songs were employed for melodic teaching then later on for rhythmic teaching. A total of 90 lessons were formulated. This format had the following advantages:

1. It could be laid flat on a desk or stood up.
2. The entire daily lesson was visible without turning a page.
Rhythm Concepts

1. Feeling for a Steady Beat.
2. Feeling for Duple Meter
3. Feeling for Triple Meter
4. Recognition of these Melodic Rhythms: (by sound)
   a. Duple
   b. Duple
   c. Triple
   d. Triple
   e. Triple
5. Rhythmic Improvisation

Melodic Concepts

1. Feeling for the Resting Tone (key feeling, tonic feeling)
2. Feeling for Major Tonality
3. Feeling for Minor Tonality
4. Aural Harmony (partner songs, and chants)
5. Recognition of these musical instruments
   a. violin
   b. horn
   c. flute
   d. clarinet
   e. drum

Figure 6.

MUSICAL CONCEPTS IN THE ORDER INTRODUCED

- 23 -
3. By splitting the lesson pages, one page could be repeated if necessary while a new page could be introduced on the opposite side.

4. By supplying three lessons for each song or activity the teacher would have ample material for reinforcement or, if she desired, she could skip one or two repetitions and move ahead, if the concept was well-enough established.

A complete copy of the manual may be found in the Appendices. A much larger number of lessons was prepared than was expected to be needed. This was done as a precaution since neither the abilities of the teachers nor those of the students with whom they would be working were known to the investigator at the time the manual was structured. In actual practice, most of the teachers taught approximately half of the lessons.

**Other Teaching Materials.** Each of the ten experimental teachers was supplied with a copy of the teaching manual. The manual contained the song titles, speech verses, and teaching procedures for each daily lesson. In addition, each teacher was provided with an autoharp for accompanying the songs, and a 12" hand drum & beater, an 8" triangle with beater and holder, a 7" tambourine, and a tone block. These instruments are illustrated in the preliminary pages of the teaching manual. Each teacher was also given a songflute for melody playing and 25 pairs of rhythm sticks for use with her students. Three recordings containing many of the songs used in the lessons plus a set of posters depicting various musical instruments were also given to each teacher. (The posters were provided free of charge through the courtesy of the Allyn & Bacon Publishing Company)

**Supplementary Materials.** A number of additional recordings and books were rotated among the schools on a loan basis during the duration of the project. These consisted of listening records of children's stories, songs, African songs, Indian Songs, and similar things. The occasional insertion in the lesson manual stating "play a portion of a loan record" alludes to these materials. These materials as well as those initially given to the teachers and described in the previous paragraph were distributed to the participating schools at the conclusion of the teaching portion of the project.

**Teacher-training Workshop.** A three-day training workshop was held on the campus of Stephen F. Austin State University on August, [page number]
Sessions were held in the mornings, afternoons, and two evenings to introduce the teachers to the manual, materials, and instruments they were to use. Instruction in teaching techniques, playing the autoharp, playing the songflute, and rudimentary knowledge of music reading were offered. A workshop schedule is shown in Figure 7.

Rooms in the SFA University Dormitories and meals in the University Cafeterias were provided all teachers attending the workshop. These were provided free of cost to the participants along with a small stipend to cover expenses.

**Teacher Characteristics.** All teachers in attendance had from one to three years experience working with Headstart children. Two were Headstart Center directors or head teachers while the remaining eight were teachers or assistant teachers. Three had attended college one had a college degree, while the others had a high school education or less. Only one of the ten had had any previous musical training. Six were Negro, four were Anglo-saxon, and all were women.

**Evaluation of Teachers.** Portions of the *Iowa Test of Music Literacy, Level One* was employed for objective evaluation of each teacher's musical ability. This test battery is designed to measure an individual's capabilities in the areas of rhythm perception, rhythm pattern reading, rhythmic notation, melodic perception, melodic pattern reading, and melodic notation. It is divided into two parts which are subdivided as follows:

<table>
<thead>
<tr>
<th>Rhythm Concepts Test</th>
<th>Tonal Concepts Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aural Perception</td>
<td>Aural Perception</td>
</tr>
<tr>
<td>Reading Recognition</td>
<td>Reading Recognition</td>
</tr>
<tr>
<td>Rhythmic Notation</td>
<td>Rhythmic Notation</td>
</tr>
</tbody>
</table>

For purposes of teacher evaluation in this project, only the Aural Perception and Reading Recognition portions of each of the two total tests were used. These were administered before the workshop began and again at its conclusion.
Day One:

9-10 AM  Orientation & Testing (Iowa Test of Mus. Literacy)
10-11 AM  Songflute instruction
11-12 AM  Autoharp instruction, review of song materials
1-2 PM    Songflute instruction
2-3 PM    Autoharp instruction
3-4 PM    Teaching to individual differences in children
4-5 PM    Records for teaching
6-7 PM    First lessons in the manual

Day Two:

9-10 AM  Songflute instruction
10-12 AM  Autoharp playing of songs & lessons in manual
1-2 PM    Records for teaching
2-5 PM    Lessons from manual
6-7 PM    Lessons from manual

Day Three:

9-10 AM  Songflute instruction
10-12 AM  Lessons from the manual
1-3 PM    Demonstration lessons by teachers
3-4 PM    Posttest (ITML) & final instructions

Figure 7.

TEACHER TRAINING WORKSHOP SCHEDULE
In addition, three subjective evaluations of each teacher were made at the conclusion of the workshop. These were in the form of ratings on a three-point scale in which 2 was average, 3 above, and 1 below:

1. A rating was assigned each teacher by the project director. The rating was assigned on the basis of the quality of the demonstration lessons presented by the teacher during the workshop and the apparent progress in musical awareness shown by each.

2. Each teacher was asked to assign a rating to all the other teachers as to the probable success in teaching music they felt each would have. This rating was arrived at through their observation of each other.

3. Each teacher was asked to rate herself as to how she felt about her own probable success as a music teacher. Each was asked to base their rating on their own sense of accomplishment and their confidence in their preparedness.

Evaluation of Children. The children in the study were evaluated by means of a specially designed test. The structure of the test was an outgrowth of two previous tests, one of which had been used by John Hill in his study and again in the 1971 teaching experiment. (See footnotes 1 and 2) This test was refined for use in the subsequent studies in this series. In the second version, items were rewritten in a more suitable singing range and reordered as to tonality, melodic direction, and item difficulty. For the present study, the test was again refined, items were again adjusted for range and the total number of items was reduced.

In the form used in this study, the test contained four parts. Part One consisted of ten items and was designed to measure melodic perception. The items were randomly assorted and consisted of equal numbers of major, minor, ascending, descending, scalewise and interval combinations. Part Two was a rhythm perception measure and consisted of ten items, each containing two beats of either triple or duple rhythm patterns. Part Three was simply a question asking the child to sing a song of his choice which he knew and might feel familiar with. This item was included in the test to determine if the children sang differently on a familiar song than on unfamiliar items as in Parts One and Two. Part Four of the test consisted of ten melodic patterns.
which, taken as a whole, encompassed a tonal range of low G to high E-flat.

A complete copy of the test, as given, may be found in the Appendices.

The testing procedure was as follows: The test was introduced to the child as a "game" which the examiner was to play with the child. The examiner had a tape recorder which was in operation during the entire testing period so that all test items and child responses were recorded for later evaluation. The melodic portions of the test were played on a song bell set by the examiner, sung by the examiner to the child, and the child was then asked to repeat the item. This system allowed the child two hearings of the item before he was asked to sing. Parts One and Four of the test were administered in this manner. For Part Two, the rhythm portion, the examiner presented the item on a pair of rhythm sticks and the child was asked to play the item on a drum with a drum beater.

As a means of motivation, each child was given a candy bar provided he completely finished the "game." This type of motivation had been used on several occasions prior to this with success. In this project, very few children elected to leave before the test was completed, or refused to participate.

The testors employed in the project were five university students. All were music majors, competent musicians, and women. Two were Negro, three were Anglo-saxon. It is often stated that children of a given racial group will respond better for a teacher, or testor of the same race and it is for this reason that it was considered an asset to have a racially mixed testing group. It is, therefore, of more than passing interest to note that better results (on the basis of cooperation and response) were obtained when the Black testors tested White children and the White testors worked with the Black children. When the Black testors worked with Black children, there was much more evidence of belligerency and less inclination toward cooperation than was true when the testors worked with children of the opposite race. Perhaps this was due to the particular situation, the children, or the personalities of these particular testors. On the other hand, it is possible that the idea that a group of children from a particular race will respond better for a teacher
or in this case a testor, of the same racial extraction, is a figment of adult thinking rather than an existing fact with the children involved.

The items on Parts One, Two, and Three were scored on a five point scale. A score of five was assigned for a completely accurate rendition of the item. Less accurate performances were given smaller scores down to a score of one for a response which was entirely wrong. A zero score was given only when the child was unable to make a response which could be identified, or refused to do so. Specific scores were as follows:

Part One - Melodic Test (10 items, 50 possible points)

5 – All three pitches of the item correct (In-tune Singer)
4 – Two of the three pitches correct (Insecure Singer)
3 – Only one pitch correct (Out-of-tune Singer)
2 – Correct melodic direction only (Directional Singer)
1 – Wrong melodic direction, or tries to speak rather than sing (Non-directional Singer or a Speaker)

Part Two – Rhythm Test (10 items, 50 possible points)

5 – Entire rhythm pattern performed correctly (Rhythmically Secure)
4 – All correct but with errors of less than one beat (Rhy. Insecure)
3 – One beat or less of the two-beat pattern performed correctly (Rhythmically Unstable)
2 – A rhythmic response but not related to the item (Rhy. Undeveloped)
1 – A non-rhythmical response (Non-rhythmical Performer)

Part Three – Musicianship (1 item, 5 possible points)

5 – A musical performance in all respects
4 – A good performance with only slight errors in pitch or rhythm
3 – A satisfactory performance but parts of the song difficult to recognize, song incomplete
2 – Sings out-of-tune, loss of tonality and/or rhythm
1 – An unmusical performance

The total possible score on these three parts was 105 points. These three portions of the test formed a Composite Test referred to in later sections as the Criterion Test.

Part Four - Voice Range Test

In this part, credit was given for each correctly performed pitch and no credit for pitches sung more than a quarter tone different.
from the criterion pitch. The scores for this part were not averaged
with the others since voice range seemed to be related differently to
musical concept development than the first three parts of the test.

**Project Supervision.** Each teacher was advised to call
the project director for advise or help when she felt the need. Beginning
in October, one of the experimental schools was visited each week by
the project director. Visits were conducted on Tuesday morning. This
system should have provided the director two opportunities to observe
each teacher at work. In actual fact, due to changing schedules,
unannounced teacher meetings at the schools, vacations, illness, and
similar factors, only two of the teachers were observed in the teaching
process on both visits. Some were observed teaching once, while a
few were never observed in action. While many helpful discussions
were held with the teachers on these visits, it would have been more
beneficial to have observed more actual teaching and followed this
with the discussions. In every case, however, all the teaching was
done by the experimental teachers and any improvement in the children
must be credited to their teaching activities.
REFERENCES FOR SECTION ONE


SECTION TWO

RESULTS
RESULTS

Sample Size. The original design of the project assumed an average of thirty children in each teaching center. If this assumption had been realized, the experimental group would have numbered 300 and the control group, 60. When all children in the twelve participating schools had been pretested in the Fall, it was found that the actual number of children was 210 in the ten experimental schools and 67 in the two control schools.

Due to the itinerant nature of many of the parents of Headstart children, several of these children left the school during the year. When this occurred, they were usually replaced by other children who had not been pretested in the Fall and who could not therefore be included in the project. The final number of children for whom pre and posttests were available at the conclusion of the project was 76 experimental and 33 control. The data reported in succeeding sections refer to this number of children.

The original experimental group of ten teachers also was subjected to some shrinkage. In the case of one teacher, it was found that none of the children who had been pretested in the Fall were still in her teaching group at the time of posttesting in the Spring. In addition, a second teacher terminated her employment at her school prior to the end of the year. The data for these two teachers was therefore deleted from the teacher data reported on the following pages, as was the data for the children in the school where the teacher left early since they had not received the same amount of instruction as the rest of the experimental children.

Experimental Teacher Data

Iowa Tests of Music Literacy. Portions of the Iowa Tests of Music Literacy, Level One were administered twice to the experimental teacher group. The first administration was performed prior to the first teacher training workshop session on August 1 and the second, immediately after the final session on August 3.
oral discussions and interviews had revealed that little or no musical training had been experienced by most. In view of this, it was decided to use only four of the six subtests in the ITML-Level One battery:

- T-1 Tonal Aural Perception
- T-2 Tonal Reading Recognition
- R-1 Rhythm Aural Perception
- R-2 Rhythm Reading Recognition

The scores obtained from the preworkshop and postworkshop test administrations are displayed as Table One. For comparison, the published scores for elementary children and for high school students are also shown. These latter were obtained from students employed as subjects in the standardization study from which the norms for the ITML battery were derived. It should be noted that these students were enrolled in schools which were characterized by the exceptional quality of their music programs. For this reason, these norm scores may tend to be a little higher than might be true of children in general. It should also be noted that the majority of the norm sample students were from Midwestern cities and none were from the Southern states nor from Texas. School policies, teaching procedures, customs, heredity, environment, and other factors unique to the Southern culture would not be reflected in the published norms and might, therefore, render these norms less useful for comparison with test subjects in the South. The information given in Table One should be interpreted in the light of these limitations.

It may be seen from the table that the musical achievement level of the experimental teacher group was less than that published for high school students, or of elementary students in the ITML manual. This means that, at the time the teachers began working with their children, their own musical ability was somewhat less than that of a "typical" upper elementary-school student. Individually, two of the teachers were above the elementary level on the Tonal Aural Perception test, five were above on the Tonal Reading Recognition test, two on the Rhythm Aural Perception test, while one was above the elementary level on the Rhythm Reading Recognition test. Only one of the teachers scored above the high school norm level on the Tonal Reading Recognition and Rhythmic Aural Perception tests.
TABLE ONE

MEANS AND STANDARD DEVIATIONS ON FOUR ITML TESTS FOR EXPERIMENTAL TEACHERS AND ITML NORMS SAMPLE STUDENTS

<table>
<thead>
<tr>
<th></th>
<th>Melodic</th>
<th></th>
<th>Rhythmic</th>
<th></th>
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</thead>
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<tr>
<td></td>
<td>Aural</td>
<td>Reading</td>
<td>Aural</td>
<td>Reading</td>
</tr>
<tr>
<td>Norms Sample</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Grades 4-5-6</td>
<td>Mean</td>
<td>11.0</td>
<td>15.9</td>
<td>12.4</td>
</tr>
<tr>
<td>ITML Manual *</td>
<td>S.D.</td>
<td>4.49</td>
<td>3.47</td>
<td>2.98</td>
</tr>
<tr>
<td>Norms Sample</td>
<td>Mean</td>
<td>15.9</td>
<td>20.0</td>
<td>15.2</td>
</tr>
<tr>
<td>Grades 10-11-12</td>
<td>S.D.</td>
<td>4.78</td>
<td>2.20</td>
<td>3.98</td>
</tr>
<tr>
<td>Pre-Training Scores</td>
<td>Mean</td>
<td>7.1</td>
<td>14.8</td>
<td>11.8</td>
</tr>
<tr>
<td>Experimental Teachers</td>
<td>S.D.</td>
<td>3.69</td>
<td>4.44</td>
<td>2.63</td>
</tr>
<tr>
<td>Post-training Scores</td>
<td>Mean</td>
<td>8.9</td>
<td>14.5</td>
<td>10.0</td>
</tr>
<tr>
<td>Experimental Teachers</td>
<td>S.D.</td>
<td>2.57</td>
<td>3.91</td>
<td>3.08</td>
</tr>
<tr>
<td>Gain on ITML (Pre to Post)</td>
<td>Mean</td>
<td>+1.8</td>
<td>-3.3</td>
<td>-1.8</td>
</tr>
</tbody>
</table>

* From Iowa Tests of Music Literacy, Manual, Table 8, page 100.
While there were only three days of workshop training between the two administrations of the ITML, some changes were noticeable. Group gains were observed in melodic aural perception and in rhythmic reading, but a group loss of about equal magnitude was seen in rhythmic aural perception. No change of significance was observed on the tonal reading test. This last was somewhat surprising since a substantial amount of emphasis had been placed on learning to read music through playing the songflute. Apparently the effect of this activity did not reflect in the group-melodic reading ability. The group gains were probably the result of practicing melodic echo songs and performing simple rhythm patterns from notation, activities which consumed a substantial amount of time. The loss might have been due to an underdeveloped understanding of duple and triple meter which was observed throughout the training period. It seemed consistently easier for the teachers to recognize rhythms if they were accompanied by notation examples. The limited amount of gain on the tests, and possibly some of the losses sustained by some of the teachers, were due to the physical exhaustion of the participants. Learning activities had been compressed and the concentration of the teachers had been extremely intense during the three day training period with the result that the posttest scores of the ITML may not have been indicative of the actual learning that had taken place.

Workshop Performance Ratings. During, and at the conclusion of the training workshop, several subjective assessments of each teacher's abilities were made by the workshop director. These were based on a scale of 7 points in which 4 was "average", 7 was virtually perfect in the quality being assessed, and 1 was no ability in the quality. Other numerals indicated graduations of the quality from 1, 4, and 7. Ratings were assigned on the following skills and abilities:

1. **Songflute playing ability.** The songflute was the medium by which the teachers were taught to read pitches and simple rhythms. The instrument was also intended to be used as a means of echo singing practice during the teaching year with the children.

2. **Singing ability.** Tone quality, pitch accuracy, and the ability to accompany themselves while singing with the autoharp.
3. Knowledge of tonal syllables. Teachers were asked to learn to sing and use tonal syllables (do, ray, me, fa, so, la, te, do). Phonetic spellings, rather than the traditional Italian, were used when writing the syllables and in the introductory pages of the teaching manual.

4. Lesson demonstration. Near the conclusion of the workshop, each teacher taught a demonstration lesson in front of the rest of the group.

5. Understanding of tonality. The ability of each one to hear, and imitate pitches, maintain major or minor tonality, find the beginning pitch from the tonic chord played on the autoharp, and identify the "resting tone", or key center.

6. Understanding of rhythm. The ability to 'feel' and maintain a steady beat, ability to comprehend duple and triple meter differences, and ability to identify by ear and perform the rhythm patterns listed in the introductory pages of the teaching manual.

Peer Group Rating. At the conclusion of the workshop, each teacher was asked to assign a rating of (3) excellent, (2) good, (1) satisfactory, to each of the other teachers. These ratings were to reflect their opinions as to the probable success of each one in their role as music teacher in the coming year. They were to base their assessments on their observations of each other during the course of the workshop. These ratings were then averaged and the resulting mean rating was counted as the teacher's peer group rating. The figure shown in Table Two is the mean of these means.

Self Rating. Also at the conclusion of the workshop, each teacher was asked to rate herself as to her confidence in her own ability to function as a music teacher during the coming year. The same rating scale was used as for the peer group rating (1, 2, or 3). As might be expected, modesty, lack of self confidence, or other factors tended to cause the teachers to assign slightly lower ratings to themselves than the others had assigned to them. Perhaps the teachers' confidence in the others was higher than their confidence in themselves.

Attitude. The overall attitude of the teachers was excellent. All seemed eager to learn and all were apprehensive to
## Table Two

**Subjective Ratings of Abilities Acquired During the Pretraining Workshop**

<table>
<thead>
<tr>
<th>Abilities</th>
<th>Teachers</th>
<th>Group Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A  B  C  D  E  F  G  H</td>
<td></td>
</tr>
<tr>
<td>Songflute Playing</td>
<td>5  4  6  4  5  7  7  6</td>
<td>5.5</td>
</tr>
<tr>
<td>Singing Ability</td>
<td>6  5  6  5  6  7  6  7</td>
<td>6.0</td>
</tr>
<tr>
<td>Tonal Syllables</td>
<td>6  4  5  4  6  7  6  7</td>
<td>5.6</td>
</tr>
<tr>
<td>Lesson Demonstration</td>
<td>4  3  2  3  4  6  4  6</td>
<td>4.0</td>
</tr>
<tr>
<td>Understanding Tonality</td>
<td>5  2  1  2  3  7  3  6</td>
<td>3.6</td>
</tr>
<tr>
<td>Understanding Rhythm</td>
<td>5  6  4  5  4  7  3  6</td>
<td>5.0</td>
</tr>
<tr>
<td>Peer Group Rating</td>
<td>1.6  1.6  1.9  1.3  1.9  2.6  2.0  2.5</td>
<td>1.9</td>
</tr>
<tr>
<td>Self Rating</td>
<td>1  2  1  1  2  2  1  3</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Note: Teacher 'F' appeared to be the best potential teacher, she scored at the top in everything except her self rating. Teacher 'E' appeared to be the most "average" potential teacher, she scored nearest the group mean on most of the ratings.
varying degrees about their own abilities. Individual differences made it impossible to assign any meaningful ratings for this attribute, however, it appeared that these teachers could be broadly classified into four identifiable groups:

Group 1: The teacher who felt she knew the materials and would do a good job. (1 teacher)

Group 2: The teacher who felt she could do a good job if she could just master all the materials in time. (4 teachers)

Group 3: The teacher who felt she would do as much as she could but would never be able to master the materials. (2 teachers)

Group 4: The teacher who felt she could not master the materials and would never do a good job. (1 teacher)

All subjective ratings are displayed as Table Two. Based on the workshop ratings, the best potential teacher in the group was Teacher F, followed closely by Teacher H. These two individuals also were given the highest ratings by the peer group. Teacher F, who actually received the highest ratings of all the teachers, rated herself as average. The individual with the poorest potential was Teacher D. She received the lowest workshop ratings, the lowest peer group rating, and rated herself low on the self rating. She was also the teacher classified in Group 4 in the preceding paragraph. She was never able to develop any feeling of self confidence in anything during the workshop period. It should be noted that she had a good understanding of rhythm, a fact which seemed to help her teaching a lot during the year.

**ITML Intercorrelations.** Intercorrelations between ITML subtests for the pretest administration, those for the posttest administration and the pre-post correlations of each individual subtest are displayed in Table Three.

In general, the subtest intercorrelations for the pretest administration (the lower left triangle of the table) as well the subtest intercorrelations for the posttest administration (upper right triangle of the table) were low. In comparison, these coefficients are very close to those given in the ITML manual, Table 9, page 107. This similarity suggests that apparently the tests were functioning properly.
# Table Three

Intercorrelations between pretest scores, posttest scores, and correlations between pre and post administrations of ITML subtests

<table>
<thead>
<tr>
<th>Pretests</th>
<th>Posttests</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TAP</td>
</tr>
<tr>
<td>Tonal Aural Perception</td>
<td>.75</td>
</tr>
<tr>
<td>Tonal Reading Recognition</td>
<td>.25</td>
</tr>
<tr>
<td>Rhythmic Aural Perception</td>
<td>.25</td>
</tr>
<tr>
<td>Rhythmic-Reading Recognition</td>
<td>.74</td>
</tr>
</tbody>
</table>

Note: The lower left triangular area of the table includes intercorrelations between ITML subtests on the Preworkshop administration. The upper right triangular area displays intercorrelations between ITML subtests on the Postworkshop administration. The diagonal strip through the middle of the table shows pretest-posttest correlations for each subtest.
The correlation coefficients displayed in the strip through the middle of the table are for pretest and posttest administrations of each subtest. These are noticeably higher than the intercorrelations. The magnitude of these coefficients may be interpreted as the degree of change in the teacher group between the two administrations. The higher the coefficient, the less change in teacher performance on the test. A case in point is the Tonal Reading Recognition test. As pointed out earlier, there was very little change in the teachers' performances on this test between the pre and post administrations, thus, the high coefficient of .94.

The lower coefficients for the pre-post administration of the Rhythm subtests reflect the fact that, on the Rhythmic Aural Perception test, five teachers showed a loss on the posttest compared to the pretest and two showed improvement. Similarly, on the Rhythmic Reading test, six showed improvement while two showed a loss.

Perhaps it should also be mentioned that due to the intense training given these teachers between the pretest and posttest administrations of this battery, these coefficients should not be interpreted as pretest-posttest measures of reliability. Since every effort was made to change their standing on the test, to use these as indicators of reliability would be to employ them in an invalid manner. Information as to the statistical reliability of these subtests may be found in the ITML manual beginning on page 99. The subtests used in this project have split-halves reliabilities ranging from .71 to .88. (ITML Manual, Table 8)

Intercorrelations of Subjective Ratings. These coefficients are displayed as Table Four. As might be expected, the abilities related to singing ( #2 singing, #3 tonal syllables, and #5 understanding of tonality) all showed a high relationship to each other - .95, .80, & .83. Also playing a song flute, and lesson demonstrations, both of which involve an understanding of tonality, showed high relationships with these first three abilities.

The rating on understanding rhythm related moderate to low with all other abilities, the highest relationship being .68 with lesson demonstration.

It is of interest to note that the peer group rating related highest with singing (.93) and knowledge of tonal syllables (.86). Apparently the group was most impressed with the singing
TABLE FOUR

INTERCORRELATIONS BETWEEN EIGHT SUBJECTIVE RATINGS
OF TEACHER ABILITIES

<table>
<thead>
<tr>
<th>Abilities</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Song flute Playing Ability</td>
<td>1.00</td>
<td>.79</td>
<td>.75</td>
<td>.51</td>
<td>.48</td>
<td>-.09</td>
<td>.80</td>
<td>.08</td>
</tr>
<tr>
<td>2. Singing Ability</td>
<td>.79</td>
<td>1.00</td>
<td>.95</td>
<td>.80</td>
<td>.80</td>
<td>.29</td>
<td>.93</td>
<td>.51</td>
</tr>
<tr>
<td>3. Knowledge of Tonal Syllables</td>
<td>.75</td>
<td>.95</td>
<td>1.00</td>
<td>.85</td>
<td>.83</td>
<td>.18</td>
<td>.86</td>
<td>.46</td>
</tr>
<tr>
<td>4. Lesson Demonstration</td>
<td>.51</td>
<td>.80</td>
<td>.85</td>
<td>1.00</td>
<td>.95</td>
<td>.54</td>
<td>.79</td>
<td>.68</td>
</tr>
<tr>
<td>5. Understanding of Tonality</td>
<td>.48</td>
<td>.80</td>
<td>.83</td>
<td>.95</td>
<td>1.00</td>
<td>.37</td>
<td>.72</td>
<td>.53</td>
</tr>
<tr>
<td>6. Understanding of Rhythm</td>
<td>-.09</td>
<td>.29</td>
<td>.18</td>
<td>.54</td>
<td>.37</td>
<td>1.00</td>
<td>.37</td>
<td>.59</td>
</tr>
<tr>
<td>7. Peer Group Rating</td>
<td>.80</td>
<td>.93</td>
<td>.86</td>
<td>.79</td>
<td>.72</td>
<td>.37</td>
<td>1.00</td>
<td>.63</td>
</tr>
<tr>
<td>8. Self Rating</td>
<td>.08</td>
<td>.51</td>
<td>.46</td>
<td>.68</td>
<td>.53</td>
<td>.59</td>
<td>.63</td>
<td>1.00</td>
</tr>
</tbody>
</table>
abilities of the other group members and least influenced by their understanding of rhythm. On the other hand when they rated themselves on the self rating scale, they were apparently influenced by their own ability to teach the demonstration lessons and their own understanding of rhythm. This apparent difference in values when rating others and when rating themselves probably accounts for the relatively lower correlation between the peer group ratings and the self ratings, .63.

Relationships of subjective ratings to ITML. Table Five displays correlation coefficients between the eight subjective ratings and the four subtests of the Iowa Tests of Music Literacy. It may be observed that songflute ability, singing ability, and knowledge of tonal syllables all relate highest with the two reading subtests. Ability to teach a demonstration lesson, on the other hand seems to relate very little to anything measured by ITML and even shows a high negative relationship with rhythm perception. In like manner, the assessment of the teachers' understandings of tonality and of rhythm did not relate to the ITML subtests in these areas. Apparently a subjective rating takes into account more, or different, facets of rhythm and tonality understanding than are measured by the ITML.

The peer group ratings seemed to be influenced by ability to read rhythm and melody and very little by ability to hear these elements. The self ratings on the other hand seemed to correlate higher with ability to hear major-minor differences (aural tonal perception) and less with the abilities to read rhythm and melody.

With one exception, the ITML tonal aural perception test did not correlate highly with the subjective ratings. Similarly, the ITML rhythmic aural perception test correlated negatively with everything but songflute playing. It may be that these two subtests were not fully understood by the teachers or it may be that three days workshop training is insufficient to develop much ability to hear with people who are not used to listening or performing music.
TABLE FIVE

RELATIONSHIPS OF EIGHT SUBJECTIVE RATINGS TO IOWA TESTS OF MUSIC LITERACY TESTS

<table>
<thead>
<tr>
<th>Abilities</th>
<th>ITML Posttest Scores *</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TAP</td>
</tr>
<tr>
<td>Songflute Playing Ability</td>
<td>.20</td>
</tr>
<tr>
<td>Singing Ability</td>
<td>.07</td>
</tr>
<tr>
<td>Knowledge of Tonal Syllables</td>
<td>-.02</td>
</tr>
<tr>
<td>Lesson Demonstration</td>
<td>.22</td>
</tr>
<tr>
<td>Understanding of Tonality</td>
<td>-.01</td>
</tr>
<tr>
<td>Understanding of Rhythm</td>
<td>.20</td>
</tr>
<tr>
<td>Peer Group Rating</td>
<td>.38</td>
</tr>
<tr>
<td>Self Rating</td>
<td>.53</td>
</tr>
</tbody>
</table>

* TAP = Tonal Aural Perception subtest
  TRR = Tonal Reading Recognition subtest
  RAP = Rhythmic Aural Perception subtest
  RRR = Rhythmic Reading Recognition subtest
Experimental School Data

In this section, the experimental schools are identified by the letter 'X' followed by a numeral (X-1, X-2, ..., X-8). This numbering order was intentionally changed from that used to identify individual teachers in Table Two. Therefore, Teacher 'A' was not necessarily the teacher in experimental school X-1, and so on. It should also be noted that the order of teacher selection, given in the Methods Section does not correspond to either of the orders above. This means that comparisons may not be made of specific teachers, their scores on the rating scale, nor how their schools improved. While this may cause some inconvenience to the reader, it assures the anonymity of the individuals involved.

Improvement in Melodic Ability. The scoring method used for evaluation of melodic items of the Criterion Test was discussed in detail in the Methods Section. It will be recalled that a score of 5 indicated that the response was perfect. A score of 1 was the lowest possible score with 2, 3, and 4 graduated between these extremes. There were ten items in the melody part of the test, thus, a child who achieved a score of 50 performed perfectly on all the items. In terms of this test, he/she would be classified an "In-tune" singer. A child who received a score of 40, or more correctly 35.1-45, could be called an insecure singer. In like manner, a score of 30 (25.1-35) identifies the out-of-tune singer, a score of 20 (15.1-25) the directional singer, and 10 (5.1-15) the non-directional singer and speaker. Since zero was given for no response, any child who received five points or less in this test could be termed a non-singer.

Using this as a guide, it may be seen in Table Six that, as a group, the experimental children were directional singers at the beginning of the project. (Group mean = 19.8, pretest) This would suggest that the hypothetical "average" child in this group possessed no vocal accuracy but could hear melodic direction correctly. (Actually the scoring range on the pretest extended all the way from 1 to 50 with a standard deviation of 10.76 for the group, indicating a large variation in the individual abilities of the children.) A 54% improvement in melodic ability for the year resulted in a posttest mean of 30.5. Thus, at the end of the project this "average" child was an out-of-tune singer, that is, he/she sang the correct melodic direction and reached the correct pitch about a third of the time. While this is a small improvement, the fact that some accuracy was present indicates that tonal hearing was beginning to be developed.
### Table Six

**Experimental Children**

**Improvement in Melodic Ability**

<table>
<thead>
<tr>
<th>School</th>
<th>Criterion Test</th>
<th>Improvement</th>
<th>% Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
<td>Gain</td>
</tr>
<tr>
<td>X - 1</td>
<td>21.3</td>
<td>36.5</td>
<td>15.2</td>
</tr>
<tr>
<td>X - 2</td>
<td>8.0</td>
<td>11.3</td>
<td>3.3</td>
</tr>
<tr>
<td>X - 3</td>
<td>24.9</td>
<td>36.4</td>
<td>11.5</td>
</tr>
<tr>
<td>X - 4</td>
<td>15.2</td>
<td>28.2</td>
<td>13.0</td>
</tr>
<tr>
<td>X - 5</td>
<td>15.8</td>
<td>29.3</td>
<td>14.0</td>
</tr>
<tr>
<td>X - 6</td>
<td>17.1</td>
<td>26.7</td>
<td>9.6</td>
</tr>
<tr>
<td>X - 7</td>
<td>15.4</td>
<td>22.5</td>
<td>7.1</td>
</tr>
<tr>
<td>X - 8</td>
<td>29.9</td>
<td>41.1</td>
<td>11.2</td>
</tr>
<tr>
<td>All Experimental (X)</td>
<td>19.8</td>
<td>30.5</td>
<td>10.7</td>
</tr>
<tr>
<td>Children (S.D)</td>
<td>19.8</td>
<td>30.5</td>
<td>10.7</td>
</tr>
</tbody>
</table>

Interpretation:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Mean</th>
<th>Range</th>
<th># Schools</th>
<th>Start &amp; End</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-tune singer</td>
<td>50</td>
<td>45.1-50</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Insecure singer</td>
<td>40</td>
<td>35.1-45</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Out-of-tune singer</td>
<td>30</td>
<td>25.1-35</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Directional singer</td>
<td>20</td>
<td>15.1-25</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Non-directional</td>
<td>10</td>
<td>5.1-15</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
On an individual basis, it may be noted that one school, X-8 began the year with a pretest average of 29.9, considerably higher than the mean average for all schools. Similarly, school X-2 began more than one standard deviation below the group mean. In terms of the posttest, school X-8 was still a standard deviation above the mean at the end of the year while X-2 was one and one-half sigmas below the group average. The other six schools were grouped closer to the mean in both pretest and posttest scoring.

While the final average of school X-8 was the highest of any school, the amount of gain shown by the students in this school was only slightly better than the mean gain for all experimental students. The schools that improved the most were schools X-1, X-4, and X-5. In terms of pretest standing compared to gain scores, these same three schools showed the highest percentage of gain. In summation then, it may be concluded that schools X-1, X-4, and X-5 improved the most during the year in melodic ability but the children of school X-8, as a group, possessed the greatest amount of this ability.

Impovement in Rhythmic Ability. The scoring method used for the rhythm test was similar to that employed with the melody test. A score of 5 was assigned to those students rendering the given rhythm criterion item perfectly while a score of 1 indicated an un rhythmic response. As in the melody test, there were ten items in this test. A child who achieved a score of 45.1 to 50 could be said to be secure in his concept of rhythm. Those who scored in the range 35.1 to 45 were less secure but still were able to achieve a fairly high degree of rhythmic accuracy. In like manner, a score of 25.1 to 35 included those children who could achieve 50% or less accuracy and could be termed rhythmically unstable. A score of 15.1 to 25 included those children who could respond with a rhythmic pattern but could not repeat any of the one being presented. While, in a sense, they were rhythmic, they had not yet begun to develop their rhythmic feeling. Finally, 5.1 to 15 was the scoring range of children who were largely non-rhythmic in their responses.

The mean scores for the rhythm test are displayed as Table Seven. As a group, the experimental children began the year as non-rhythmic performers. The mean score of 13.8 on the pretest indicated that the "average" student could not hear a rhythm pattern and repeat any of it nor could he/she respond with an original pattern which could be called rhythmical. As in the case of the melody test, the actual scoring range of these children extended from 2 to 49.
# TABLE SEVEN

## EXPERIMENTAL CHILDREN IMPROVEMENT IN RHYTHMIC ABILITY

<table>
<thead>
<tr>
<th>School</th>
<th>Criterion Test Pretest</th>
<th>Improvement Gain</th>
<th>% Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X - 1</td>
<td>14.1</td>
<td>16.4</td>
<td>116 %</td>
</tr>
<tr>
<td>X - 2</td>
<td>10.0</td>
<td>11.3</td>
<td>113 %</td>
</tr>
<tr>
<td>X - 3</td>
<td>11.5</td>
<td>11.7</td>
<td>102 %</td>
</tr>
<tr>
<td>X - 4</td>
<td>12.3</td>
<td>7.9</td>
<td>64 %</td>
</tr>
<tr>
<td>X - 5</td>
<td>10.0</td>
<td>9.6</td>
<td>98 %</td>
</tr>
<tr>
<td>X - 6</td>
<td>12.8</td>
<td>6.0</td>
<td>47 %</td>
</tr>
<tr>
<td>X - 7</td>
<td>14.6</td>
<td>3.8</td>
<td>26 %</td>
</tr>
<tr>
<td>X - 8</td>
<td>20.8</td>
<td>4.7</td>
<td>22 %</td>
</tr>
<tr>
<td>All Experimental Children</td>
<td>13.6</td>
<td>8.7</td>
<td>64 %</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classification</th>
<th>Mean</th>
<th>Range</th>
<th># Schools start &amp; end</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhythmically Secure</td>
<td>50</td>
<td>45.1-50</td>
<td>0</td>
</tr>
<tr>
<td>Rhy. Insecure</td>
<td>40</td>
<td>35.1-45</td>
<td>0</td>
</tr>
<tr>
<td>Rhy Unstable</td>
<td>30</td>
<td>25.1-35</td>
<td>2</td>
</tr>
<tr>
<td>Rhy. Undeveloped</td>
<td>20</td>
<td>15.1-25</td>
<td>6</td>
</tr>
<tr>
<td>Non-rhythmical</td>
<td>10</td>
<td>5.1-15</td>
<td>7</td>
</tr>
</tbody>
</table>

Interpretation:
When the posttest scores were tabulated, it was found that the experimental children, as a group, had gained 8.7 points on the criterion test and had a group mean of 22.3. Thus, the hypothetical "average" student had learned to feel the beat of music and could perform rhythmically, but as yet was unable to repeat heard rhythm patterns.

As in the melody test, school X-8 scored the highest on the pretest while school X-2 again scored low along with school X-5. On the posttest, school X-1 was by far the highest but X-3 and X-8 also scored high. High gain scores were also shown by X-1, X-2, and X-3. These three schools also showed the largest percentage of gain.

In summary, it may be said that school X-1 was clearly superior in rhythmic learning. Their mean in the posttest was the highest of any, they made the most gain and showed the largest percentage of improvement. (116%) As in the case of the melody test, all schools showed some improvement in rhythm.

**Improvement in Musicianship.** Musicianship in the criterion test was determined by having each child sing a song of his choice which he knew. He was judged on his ability to carry through the musical phrases, his ability to maintain pitch, ability to maintain tonality, ability to maintain a steady beat, ability to perform rhythms correctly, his overall singing quality, and the use of expression. A score of 5 indicated a very musical performance, a score of 4 was also a good performance but with slight errors. A score of 3 indicated a less musical performance with major sections of the song done incorrectly. A 2 was assigned those who suffered a loss of tonality, pitch, or rhythm, or to those who sang out-of-tune. A 1 rating was assigned those who tried but made unmusical responses.

It will be noted from the interpretation table in Table Eight that at the beginning of the year half of the schools showed mean ratings in the "unmusical" region. At the conclusion of the year, however, all but one school had moved out of this region and the largest number (3) scored in the "variable" region. An additional two schools produced means in the "moderately musical" region. In these schools the "average" child could sing a song of his choice with only slight errors.

The overall musicianship mean for the experimental children was 1.6, a rather poor beginning. At the end of the year...
TABLE EIGHT

EXPERIMENTAL CHILDREN
IMPROVEMENT IN MUSICIANSHIP

<table>
<thead>
<tr>
<th>Schools</th>
<th>Criterion Pretest</th>
<th>Test Posttest</th>
<th>Improvement Gain</th>
<th>% Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>X - 1</td>
<td>1.6</td>
<td>3.8</td>
<td>2.2</td>
<td>137 %</td>
</tr>
<tr>
<td>X - 2</td>
<td>2.0</td>
<td>2.0</td>
<td>.0</td>
<td>.0 %</td>
</tr>
<tr>
<td>X - 3</td>
<td>1.3</td>
<td>2.3</td>
<td>1.0</td>
<td>76 %</td>
</tr>
<tr>
<td>X - 4</td>
<td>1.5</td>
<td>3.7</td>
<td>2.2</td>
<td>147 %</td>
</tr>
<tr>
<td>X - 5</td>
<td>1.4</td>
<td>2.6</td>
<td>1.2</td>
<td>86 %</td>
</tr>
<tr>
<td>X - 6</td>
<td>1.7</td>
<td>2.6</td>
<td>.9</td>
<td>53 %</td>
</tr>
<tr>
<td>X - 7</td>
<td>.6</td>
<td>1.4</td>
<td>.8</td>
<td>133 %</td>
</tr>
<tr>
<td>X - 8</td>
<td>2.8</td>
<td>3.2</td>
<td>.4</td>
<td>14 %</td>
</tr>
</tbody>
</table>

All Experimental Children  \( \bar{X} \) 1.6 2.7 1.1 61 %
S.D. 1.4 1.4 1.1

Interpretation:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Mean</th>
<th>Range</th>
<th># Schools</th>
<th>start &amp; end</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Musical</td>
<td>5</td>
<td>4.6-5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Moderately Musical</td>
<td>4</td>
<td>3.6-4.5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Variable</td>
<td>3</td>
<td>2.6-3.5</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Poor Musicianship</td>
<td>2</td>
<td>1.6-2.5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Unmusical</td>
<td>1</td>
<td>.6-1.5</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>
the posttest mean score for all experimental children was 2.7, a 61% gain. While the final posttest mean is not particularly impressive, improvement was considerable.

Probably the most notable feature of Table Eight is the mean scores for School X-2. This school which was second from the top in the pretest made no gain at all. Individually, some of the children in this school made slight improvements and some slight regressions, but overall, the group stayed the same. Schools X-1 and X-4 produced the highest posttest means and also made the most actual gain plus having the highest percentage of gain. 'Quite clearly, these two schools progressed the most in musicianship. School X-8 also had an impressive posttest mean but was much higher than the others on the pretest, thus while their final ability was quite good, they made little actual progress, (14% gain) Similarly, the children of School X-7 made a 133% improvement in musicianship but were very low on the pretest, made only nominal actual gains and were still lowest on the posttest.

**Overall Improvement.** The composite mean scores, representing overall improvement of the experimental children, are displayed as Table Nine. A composite score represents the total amount of improvement in several areas. However, since melodic ability and rhythmic ability, and to some extent musicianship ability, are distinctly different, develop at differing rates, and are probably derived from different musical aptitudes, the composite score has a tendency to "average out" any significant change in one area, unless it occurs in the others. It will be noticed in Table Nine that there are no startling changes from pretest to posttest. This is due to the averaging effect of a composite score.

As one would expect, School X-1 had the most actual gain and the highest percentage of improvement. School X-3 also scored well on the posttest but the gain of 24.0 amounted to only 64% improvement. Almost the same amount of gain was shown by the children in School X-5 but in this case, it amounted to an improvement of 90%. School X-4 also made impressive gains which amounted to 80% improvement. As before, School X-8 scored high on the pretest, and was also high on the posttest, but improved only slightly.

**Individual Improvement—Experimental Children.** Tables Six through Nine displayed the mean improvement of each school compared to the overall mean improvement for all experimental children. It will be noted from all these tables that the variability of the children
TABLE NINE

EXPERIMENTAL CHILDREN
IMPROVEMENT IN TOTAL MUSICAL ABILITY

<table>
<thead>
<tr>
<th>Schools</th>
<th>Criterion Test</th>
<th>Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td>X - 1</td>
<td>37.0</td>
<td>70.8</td>
</tr>
<tr>
<td>X - 2</td>
<td>19.0</td>
<td>31.3</td>
</tr>
<tr>
<td>X - 3</td>
<td>37.7</td>
<td>61.7</td>
</tr>
<tr>
<td>X - 4</td>
<td>29.0</td>
<td>52.1</td>
</tr>
<tr>
<td>X - 5</td>
<td>27.2</td>
<td>51.7</td>
</tr>
<tr>
<td>X - 6</td>
<td>31.6</td>
<td>48.1</td>
</tr>
<tr>
<td>X - 7</td>
<td>30.6</td>
<td>42.3</td>
</tr>
<tr>
<td>X - 8</td>
<td>53.5</td>
<td>69.8</td>
</tr>
</tbody>
</table>

Total for all schools combined

| Composite Test | 34.8 | 55.4 | 20.6 | 59% |
| Standard Deviation | 16.4 | 19.7 | 14.4 |    |
as shown by the magnitude of the standard deviations, was substantial. Some children improved a lot, some remained unchanged from pretest to posttest, while a few regressed. The numbers of children who improved, remained unchanged, and regressed are displayed as Table Ten.

In the case of the melodic test, about 80% of the children showed significant improvement. In the case of the rhythmic and musicianship tests, slightly more than 60% of the children improved. A child was classified as improved only if his score increased by ten percent or more of the total possible points. For example, a gain of more than 5 points was necessary to be classified as improved on the melodic and rhythmic tests. The same restriction was placed on the classification of regression. If the child's score did not change up or down by more than 5 points on these tests, he was classified as unchanged. Precision in testing children of this age is sometimes difficult to attain and a gain or loss of ten percent often happens where there is really no change at all. Even this margin for test error is probably a minimum which should be allowed.

In examining the individual improvement of the children in relation to the school they were in, it was noted that all the children in schools X-1, X-4, and X-5 improved significantly. It may also be recalled from the data presented in Table Nine, that these same schools produced the highest percentage of gain on the composite test. As might be expected, the three schools who produced the smallest percentage of gain as shown in Table Nine were the three schools in which some of the children regressed. In spite of these few who regressed, over half of the remaining children in these schools improved. Only in school X-2 did more children remain in the unchanged category than showed improvement.

In summary, it may be said that the experimental children with a few exceptions, began the year with little musical ability. As they progressed through the year, a large majority of them made some improvement and in some cases startling gains. At the end of the year, again with some exceptions, they possessed moderate musical ability. The fact that so many improved and so few regressed speaks well for the efforts of the teachers involved.

Control School Data

The two control schools included in this study are designated as C-1 and C-2. A total of thirty-three children were pretested and posttested. As in the case of the experimental schools,
<table>
<thead>
<tr>
<th>Criterion Ability</th>
<th>Progress</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Improved</td>
<td>Unchanged</td>
<td>Regressed</td>
<td></td>
</tr>
<tr>
<td>Melodic</td>
<td>60</td>
<td>13</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Rhythmic</td>
<td>47</td>
<td>25</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Musicianship</td>
<td>49</td>
<td>24</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Composite Ability</td>
<td>59</td>
<td>14</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Schools in which all children showed significant improvement:
X - 1, X - 4, X - 5

Schools in which regressions occurred:
X - 6, X - 7, X - 8

* A child was classified as unchanged in ability if his total improvement, or regression, amounted to 10% or less of the total possible score for that part of the test.
A rather large number of children who were pretested at the beginning of the year were not attending the schools at the end of the year and were, therefore, lost to the project as subjects. Every effort was made to avoid alerting the control school teachers as to the intent of the project, but to what degree this was successful is not known. It is known that one of the control schools had no organized music program while the other had some singing sessions two or three times weekly under the direction of one of the teachers. Under these circumstances, it can be stated with reasonable assurance that any improvement in the control groups was natural and might be of the magnitude one would expect from children attending schools with no organized program of music instruction.

The pretest, posttest, gain score means and percentages of gain for the melodic, rhythmic, musicianship, and composite tests are all displayed as Table Eleven. As with the experimental children, there was much variation in individual abilities as suggested by the large standard deviations for pretests and posttests in all ability areas. The dispersion of gain scores around the mean was less than was the case with the experimental groups, as evidenced by the smaller standard deviations. In melodic ability, School C-1 made a 23% gain while C-2 experienced a 3% loss. In terms of final posttested ability, the children in School C-1, as a group, were beginning to approach some melodic accuracy, whereas before they had been only directional singers. The children of School C-2 made little actual change, as a group, and were still out-of-tune singers with about one-third accuracy in melodic perception.

In the rhythm test, the percentage of gain was larger for the control children as a whole, but the amount of gain was not impressive. The children in both control schools did not score well on the rhythm test at the beginning of the year and only moderately well on the posttest. Here, as in the melody test, gains were small, indicating only a small improvement in the children’s rhythm perception.

School C-2 was impressive in the musicianship test. The children in this school scored well on the pretest and made a substantial improvement. As a group, they sang very well on songs they had been taught to sing during the year. The fact that many elected to sing the same song in the same manner was indicative of the fact that someone had spent some time with the children teaching them songs.

The composite test scores reflected the "averaging" effect of summing part scores, as it had with the experimental groups.
### Table Eleven

#### Control Children

**Improvement in All Musical Ability Areas**

<table>
<thead>
<tr>
<th>Ability</th>
<th>Criterion Test</th>
<th>Improvement</th>
<th>Gain</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Melodic Ability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School C-1</td>
<td>21.2</td>
<td>26.0</td>
<td>4.8</td>
<td>23%</td>
</tr>
<tr>
<td>School C-2</td>
<td>31.7</td>
<td>30.6</td>
<td>-1.1</td>
<td>-3%</td>
</tr>
<tr>
<td>Control Average</td>
<td>24.4</td>
<td>27.4</td>
<td>3.0</td>
<td>12%</td>
</tr>
<tr>
<td>(Standard Dev.)</td>
<td>(12.7)</td>
<td>(12.1)</td>
<td>(5.6)</td>
<td></td>
</tr>
<tr>
<td><strong>Rhythmic Ability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School C-1</td>
<td>15.9</td>
<td>19.0</td>
<td>3.1</td>
<td>19%</td>
</tr>
<tr>
<td>School C-2</td>
<td>14.6</td>
<td>19.9</td>
<td>5.3</td>
<td>36%</td>
</tr>
<tr>
<td>Control Average</td>
<td>15.5</td>
<td>19.0</td>
<td>4.5</td>
<td>29%</td>
</tr>
<tr>
<td>(Standard Dev.)</td>
<td>(9.8)</td>
<td>(10.3)</td>
<td>(8.1)</td>
<td></td>
</tr>
<tr>
<td><strong>Musicianship Ability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School C-1</td>
<td>1.9</td>
<td>2.4</td>
<td>.5</td>
<td>26%</td>
</tr>
<tr>
<td>School C-2</td>
<td>3.3</td>
<td>4.4</td>
<td>1.1</td>
<td>33%</td>
</tr>
<tr>
<td>Control Average</td>
<td>2.3</td>
<td>3.0</td>
<td>.7</td>
<td>30%</td>
</tr>
<tr>
<td>(Standard Dev.)</td>
<td>(1.6)</td>
<td>(1.4)</td>
<td>(9)</td>
<td></td>
</tr>
<tr>
<td><strong>Composite Musical Ability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School C-1</td>
<td>39.0</td>
<td>47.4</td>
<td>8.4</td>
<td>22%</td>
</tr>
<tr>
<td>School C-2</td>
<td>49.6</td>
<td>54.9</td>
<td>5.3</td>
<td>11%</td>
</tr>
<tr>
<td>Control Average</td>
<td>42.3</td>
<td>49.7</td>
<td>7.4</td>
<td>17½%</td>
</tr>
<tr>
<td>(Standard Dev.)</td>
<td>(19.5)</td>
<td>(19.9)</td>
<td>(9.9)</td>
<td></td>
</tr>
</tbody>
</table>
Gains were relatively small and percentage of gain was also minimal. Overall, the control children made improvements of 17% from pretest to posttest.

Individual Improvement in Control Children. The numbers of children who showed improvement, loss, or were unchanged in musical abilities are shown in Table Twelve. As was done with the experimental children, a child was classified as unchanged in ability unless his total gain or loss amounted to more than ten percent of the total possible score for that part of the test. The melodic and rhythmic tests, as noted previously, were tests which required some perceptive ability on the part of the children. The ability to aurally perceive melodic or rhythmic patterns was relatively undeveloped in these children which probably accounts for the fact that substantially less than one-half of the children made gains in these tests. In contrast, almost two-thirds of the control children made significant gains in musicianship attesting to their ability to sing songs they had heard or sung repeatedly.

In overall ability, as shown by the composite tests, about one-half of the children improved and only two regressed. Apparently those who regressed in melodic abilities were not the same individuals who regressed in rhythm which accounts for the fact that fewer regressed on the composite test.

Experimental and Control Group Comparisons

One of the primary objectives of this study was to see if untrained teachers could produce significant improvements in Headstart School children. This has occurred in this study, as has been shown by the data from the experimental schools. The next problem of interest is to examine the data to determine whether the teachers, briefly trained in the workshop and supplied with equipment and lesson plans, could induce more improvement in their children than would have happened normally. In order to determine what is "normal" development, two control schools were included in the study. The data for the children in those schools was reported in the previous section. If one assumes that the children in the control schools developed as much as a typical child without substantial outside help, then we can reasonably assume that any improvement over and beyond that of the control schools, observed in the experimental children, was due to some other factors.
TABLE TWELVE

INDIVIDUAL IMPROVEMENT OF CONTROL CHILDREN

N = 33

<table>
<thead>
<tr>
<th>Criterion Ability</th>
<th>Improved</th>
<th>Unchanged</th>
<th>Regressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melodic</td>
<td>14</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Rhythmic</td>
<td>11</td>
<td>19</td>
<td>3</td>
</tr>
<tr>
<td>Musicianship</td>
<td>20</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Composite Ability</td>
<td>16</td>
<td>15</td>
<td>2</td>
</tr>
</tbody>
</table>

Both control schools contained children who regressed in all areas.

* A child was classified as unchanged in ability if his total improvement, or regression, amounted to 10% or less of the total possible score for that part of the test.
TABLE THIRTEEN

COMPARISONS OF IMPROVEMENT AND FINAL MUSICAL ABILITY FOR EXPERIMENTAL AND CONTROL SCHOOLS

<table>
<thead>
<tr>
<th>Ability</th>
<th>Experimental</th>
<th>Control</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Melodic Ability</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Ability (posttest)</td>
<td>30.5</td>
<td>27.4</td>
<td>3.1</td>
</tr>
<tr>
<td>Amount Improved</td>
<td>10.7</td>
<td>3.0</td>
<td>7.3</td>
</tr>
<tr>
<td>% Improved</td>
<td>54 %</td>
<td>12 %</td>
<td>42 %</td>
</tr>
<tr>
<td><strong>Rhythmic Ability</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Ability (posttest)</td>
<td>22.3</td>
<td>19.0</td>
<td>3.3</td>
</tr>
<tr>
<td>Amount Improved</td>
<td>8.7</td>
<td>4.5</td>
<td>4.2</td>
</tr>
<tr>
<td>% Improved</td>
<td>64 %</td>
<td>29 %</td>
<td>35 %</td>
</tr>
<tr>
<td><strong>Musicianship Ability</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Ability (posttest)</td>
<td>2.7</td>
<td>3.0</td>
<td>-.3</td>
</tr>
<tr>
<td>Amount Improved</td>
<td>.1</td>
<td>.7</td>
<td>.4</td>
</tr>
<tr>
<td>% Improved</td>
<td>61 %</td>
<td>30 %</td>
<td>31 %</td>
</tr>
<tr>
<td><strong>Composite Musical Ability</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Ability (posttest)</td>
<td>55.4</td>
<td>49.7</td>
<td>5.7</td>
</tr>
<tr>
<td>Amount Improved</td>
<td>20.6</td>
<td>7.4</td>
<td>13.2</td>
</tr>
<tr>
<td>% Improved</td>
<td>59 %</td>
<td>17 %</td>
<td>42 %</td>
</tr>
</tbody>
</table>

* All differences (with one exception marked with a minus sign) are in favor of the experimental group.
There were three methods for determining student progress used in this project: (1) their final ability at the termination of the teaching period, (2) the amount of improvement they were able to make on the criterion test, and (3) the percentage of improvement, or, the amount of improvement in relation to what they were able to do before the project started. The comparative progress of the experimental and control groups, determined by all three methods, is displayed as Table Thirteen.

As may be seen, the experimental children, as a group, were somewhat superior to the control group in melodic ability and in rhythmic ability. In the area of musicianship, the difference was of about the same magnitude, but in favor of the control group. The composite score being simply a total of the first three, was heavily in favor of the experimental group.

The interpretation of these final posttest scores should be accomplished in the light of the objectives of the experimental program. First of all, the primary emphasis was directed toward the development of perception in the children. Much time and effort were devoted to teaching the children to hear and feel melodic and rhythmic elements and then to physically employ these in song materials. This type of approach has several advantages. It provides a program which is relatively culture-free in that the influence of specific ethnic backgrounds is reduced to the minimal. In addition, the emphasis on musical concepts, as opposed to meaningless repetition of 'favorite' songs, enables the student to better appreciate and meet the challenge of new song materials, which, in turn, enhances his subsequent musical development.

This perhaps explains why the experimental schools did not exceed the control group in final overall musicianship ability. It should also be recalled from Table Eleven, that one of the control schools had an unusually large number of children who could sing a favorite song very well. This also tended to inflate the musicianship score of the control group as a whole. In overall final musical ability as posttested, it may be said that the experimental group was superior to the control group, although the difference was not large.

In considering the amount of improvement, the experimental group was substantially superior to the control group. They made from two to three times the improvement of the control children in all areas, which attests to the effectiveness of the teaching program.
In relation to where they were to begin with, the difference is even more impressive. The experimental children tested lower than the control group at the beginning of the project and higher at the end, in almost every area. Their percentage of improvement ranged from 54% to 64% compared to the 12% to 30% observed in the control group. The overall improvement of 59% for the experimental group compared to 17% for the control group reaffirms the inference regarding the effectiveness of the experimental teaching program.

While the data were overwhelmingly in favor of the experimental groups, there were wide differences in individual school achievement. If one assumes, as in previous sections, that no real difference in test score exists unless it exceeds 10% of the possible score, then a slightly different picture emerges.

It was on this basis that Table Fourteen was constructed. The information in this table was derived from that presented previously in Tables Six, Seven, Eight, Nine, and Eleven. If a statistic for an experimental school was above the mean of the control group by more than 10%, it was placed in the superior column; if below by more than 10%, in the inferior column. If the difference was less than 10%, either direction, the score was adjudged the same as the control group. As shown, in the majority of instances, the experimental schools were superior to, or the same as, the control group. This table also clearly shows that in some of the experimental schools much progress was being made while in others no more progress was shown than occurred in the control schools. While this is to be expected in a study of this type, the consistency with which some schools exceeded the control means would indicate a difference in the teachers themselves.

For example, School X-1 was superior in all areas. Schools X-3, X-4, and X-5 were superior in over half of the areas displayed in Table Fourteen. School X-6 was the same as the control group in six areas and superior in six, while Schools X-2, X-7, and X-8 were the same or below the control level in one-half or more of the areas. These differences in school achievement could, of course, be due to differences in the children themselves. Racially and environmentally, there was no difference in the children in the eight experimental schools and the two control schools, with one exception; School X-2 contained a higher proportion of Mexican children than the other schools. Otherwise there were no outward differences.
## Table Fourteen

**Relative Achievement of Individual Experimental Schools Compared to the Control Group**

<table>
<thead>
<tr>
<th>Ability Area</th>
<th>Relationship to the Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inferior</td>
</tr>
<tr>
<td>Melodic: Final ability</td>
<td>2, 7</td>
</tr>
<tr>
<td>Melodic: Improvement</td>
<td>2, 7</td>
</tr>
<tr>
<td>Melodic: Improved</td>
<td></td>
</tr>
<tr>
<td>Rhythm: Final ability</td>
<td>2, 3, 4, 5, 6, 7, 8</td>
</tr>
<tr>
<td>Rhythm: Improvement</td>
<td>4, 5, 6, 7, 8</td>
</tr>
<tr>
<td>Rhythm: Improved</td>
<td>7, 8</td>
</tr>
<tr>
<td>Syntactic: Final ability</td>
<td>2, 3, 4, 5, 6, 7, 8</td>
</tr>
<tr>
<td>Syntactic: Improvement</td>
<td>2, 3, 5, 6, 7, 8</td>
</tr>
<tr>
<td>Syntactic: Improved</td>
<td>2, 8</td>
</tr>
<tr>
<td>Composite: Final ability</td>
<td>2, 7</td>
</tr>
<tr>
<td>Composite: Improvement</td>
<td>2, 7</td>
</tr>
<tr>
<td>Composite: Improved</td>
<td></td>
</tr>
</tbody>
</table>

1. Numbers identify the eight experimental schools.
2. A school was classified as superior if their mean was more than 10% of the possible score above the control mean; similar if their mean was 10% or less above or below the control mean, and inferior if their mean was more than 10% below that of the control group.
Teacher Qualifications and Group Improvement

Teacher Improvement on ITML. In an effort to determine if there were outstanding teacher qualities in existence which might have influenced the amount of improvement shown by the children, correlations were calculated between the teacher qualities displayed in Tables One and Two and the progress shown by the experimental children, displayed in Tables Six, Seven, Eight, and Nine. The resulting coefficients of correlation are shown in Table Fifteen.

Of interest is the fact that the degree of teacher improvement on the ITML, between the pre-training and posttraining administrations, related highly with improvement in the children. For example, overall improvement in the children correlated .79 with the overall improvement on the ITML shown by the teachers. Similarly, teacher improvement in ITML Tonal Aural Perception, Rhythm Aural Perception, and Rhythm Reading all correlated highly with improvement in the children. It will be recalled that little change occurred in the teachers' standings on the ITML Tonal Reading between the pre and post administrations, therefore one would not expect a high correlation for this test. Even though teacher improvement was negligible on this test, this small improvement still correlated .20 with children's gains. When these coefficients are compared to those found for teachers final ITML test scores (an indication of their knowledge of the subject of music literacy) and improvement in the children, it may be seen that in this project, teacher improvement was a far more important factor than actual musical knowledge.

These data give rise to some interesting conjecture, namely, what factors contributed to teacher improvement on ITML? Apparently these same factors are associated with improvement in the children. Possibly it was intelligence. Perhaps, the brighter teachers learned more during the three-day workshop and were able to pass this knowledge on to their students, even though they did not actually possess as much total knowledge about the subject as some of the other teachers. Or, possibly the answer lies in personality factors such as, industriousness, determination, or aggressiveness which made them try harder to improve both themselves and their children.

It is, of course, impossible to prove or disprove these statements with the data in Table Fifteen. It is of more than passing interest however, that the teachers who improved the most on ITML (and whose children improved the most) were all in Group 2, in the
# Table Fifteen

<table>
<thead>
<tr>
<th>Teacher Quality</th>
<th>Improvement in Children *</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Melodic</td>
<td>Rhythmic</td>
<td>Musicianship, Composite</td>
<td></td>
</tr>
<tr>
<td>Workshop Ratings:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Songflute Ability</td>
<td>.63*</td>
<td>.31</td>
<td>.44</td>
<td>.56</td>
</tr>
<tr>
<td>Singing Ability</td>
<td>.38</td>
<td>.27</td>
<td>.51</td>
<td>.38</td>
</tr>
<tr>
<td>Syllable Knowledge</td>
<td>.49</td>
<td>.29</td>
<td>.70*</td>
<td>.48</td>
</tr>
<tr>
<td>Lesson Demonstration</td>
<td>.47</td>
<td>-.12</td>
<td>.67*</td>
<td>.20</td>
</tr>
<tr>
<td>Understanding Tonality</td>
<td>.38</td>
<td>.02</td>
<td>.51</td>
<td>.21</td>
</tr>
<tr>
<td>Understanding Rhythm</td>
<td>-.02</td>
<td>-.25</td>
<td>-.14</td>
<td>.22</td>
</tr>
<tr>
<td>Peer Group Rating</td>
<td>.52</td>
<td>.15</td>
<td>.52</td>
<td>.40</td>
</tr>
<tr>
<td>Self Esteem:</td>
<td>.12</td>
<td>-.27</td>
<td>.47</td>
<td>-.08</td>
</tr>
<tr>
<td>ITML Scores: (2nd test)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ITML Tonal Tests</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aural Perception</td>
<td>.22</td>
<td>-.61</td>
<td>.25</td>
<td>-.24</td>
</tr>
<tr>
<td>Reading Recognition</td>
<td>.59*</td>
<td>.48</td>
<td>.46</td>
<td>.66</td>
</tr>
<tr>
<td>ITML Rhythm Tests</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aural Perception</td>
<td>.11</td>
<td>.59</td>
<td>-.45</td>
<td>.43</td>
</tr>
<tr>
<td>Reading Recognition</td>
<td>.32</td>
<td>.35</td>
<td>.34</td>
<td>.42</td>
</tr>
<tr>
<td>ITML 4 test Total</td>
<td>.49</td>
<td>.35</td>
<td>.22</td>
<td>.52</td>
</tr>
<tr>
<td>Improvement on ITML</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tonal Aural Perception</td>
<td>.54</td>
<td>.43</td>
<td>.31</td>
<td>.61</td>
</tr>
<tr>
<td>Tonal Reading Recog.</td>
<td>.28</td>
<td>.10</td>
<td>.08</td>
<td>.20</td>
</tr>
<tr>
<td>Rhythm Aural Perception</td>
<td>.70*</td>
<td>.17</td>
<td>.79*</td>
<td></td>
</tr>
<tr>
<td>Rhythm Reading Recog.</td>
<td>.18</td>
<td>.69</td>
<td>.19</td>
<td>.57</td>
</tr>
<tr>
<td>ITML 4 Test Total</td>
<td>.50</td>
<td>.77*</td>
<td>.23</td>
<td>.79*</td>
</tr>
</tbody>
</table>

* Indicates two highest coefficients for each aspect of children's improvement.
Discussion on teacher attitude presented earlier in this section. These were the teachers who thought they could do a good job if they could just master the materials. They were also the middle scorers on the ITML test. Apparently, determination to do the job accounts for far more than mere knowledge of the subject matter.

Specific Teacher Abilities. Coefficients also indicated that Tonal Reading and Songflute Ability showed the highest relationship to melodic improvement in the children. (Table 15) From this, one may infer that the ability of the teacher to read melodically is important to the development of melodic perception in the children. Also highly related to the children's melodic improvement was the teachers' knowledge of syllables and their ability to present music lessons to the class. Finally, the development of aural listening skills on the part of the teacher are important to the improvement of the children as indicated by the \( r = .54 \) for teacher improvement in tonal aural perception and \( r = .56 \) for teacher improvement in rhythm aural perception.

Factors that related well to student improvement in rhythm were: teacher improvement in aural rhythm perception, \( r = .70 \), and rhythm reading, \( r = .69 \); and teacher final ability in rhythm aural perception, \( r = .59 \), all measured by ITML. The negative \( r = -.25 \) for the workshop rating given the teachers for their understanding of rhythm was either invalid at the time it was assigned, or the teachers improved after they left the workshop. Due to the fact that this rating correlated negatively with ITML rhythm scores (Table 5) it is likely that factors other than pure rhythm understanding influenced the rating. An obvious inference from these particular data is that a teacher must be able to hear rhythms before she can teach them. The most improvement in children's musicianship (ability to perform whole songs of their choice) was apparently brought about by teachers who rated well in singing, \( r = .51 \); knowledge of tonal syllables, \( r = .70 \); ability to present lessons, \( r = .67 \); and those who had a good understanding of tonality, \( r = .51 \). Also important to this aspect of child development was the teachers' ability to read melodic notation. (ITML Tonal Reading \( r = .46 \), Songflute playing \( r = .44 \))

Subjective Assessments

Every investigation must have a research design. The
design of this project specified a three-day training workshop followed by intermittent visits by the project director. The primary objective of the project was to see if the typical Headstart teacher could sustain a music program on her own, with a minimum of assistance. This design was adhered to continuously throughout the project.

Post-project conferences with some of the teachers revealed that all felt much more improvement would have taken place in the children had there been provision in the design for bi-weekly meetings between the group of teachers and the project director for the purpose of reviewing song materials and techniques to be used in subsequent lessons. Most felt that their own ability was so minimal that a periodic refresher meeting of 1-2 hours would have been helpful to them as well as beneficial to the children.

The lesson plans appeared to work extremely well. Most of the teachers taught about half the number included in the manual. The pace of the lessons and the difficulty of the materials seemed to coincide with the development in the children. The recordings and musical equipment used in the project also was adjudged as satisfactory by the teachers.

The system of loan recordings in which a quantity of records were passed from school to school did not work well due to several factors. Two sets of records were somehow lost in the mails. Some of the teachers wanted to keep some records longer than others which caused considerable delay and inconvenience to other teachers. Mailing the records between the schools took longer than had been anticipated in the original project design, which also caused more delays. In subsequent projects of this type, a larger quantity of recordings should be available to offset the effect of the delays in "turn-around" time for the transfer of materials.

Musical Development in Children

For several decades there has been animated debate among some music educators concerning the nature of musical aptitude and its subsequent development. One school of thought holds that musical aptitude is one entity which cannot, or should not, be separated. An individual either is or is not musical and will develop according to the amount of aptitude he possesses. The other school of thought considers musical aptitude as a composite collection of specific aptitudes which develop at different rates. This school claims that each aptitude must be determined and teaching directed.
toward the strengths and weaknesses of each. Whether musical aptitude consists of inseparable attributes, or is a collection of unique abilities was not a problem for investigation in this study. The data from the project, however, tends to support the latter position.

**Overall Musical Development.** Table Sixteen displays the intercorrelation coefficients for children's improvement in melody, rhythm, and musicianship, as measured by the criterion test. It may be observed that rhythmic development correlates rather low with melodic development, \( r = .31 \). Apparently, these two abilities did not develop simultaneously, but rather at different rates in individual children. If this is true of children in general, the theory that musical aptitude is a collection of separate and unique abilities is plausible. Additional support for this view may be seen in the high relationship of melodic development and musicianship (singing familiar songs), \( r = .62 \). That melodic perception and the ability to sing familiar songs should develop at a more or less commensurate rate is expected. The almost complete lack of relationship between musicianship and rhythmic improvement however, \( r = .02 \) indicates that these abilities develop independently of one another.

If, as these data suggest, melody and rhythm are unique abilities whose separate development occurs at differing rates and times in individuals, care should be taken to assure that both aspects of musical development are taught in the music classroom. While rhythm and melody development may be dependent upon different aptitudes, both are important to overall musical progress.

**Melodic Development.** Criterion Test One contained ten items, each consisting of three pitches. Each item was unique in that a different combination of mode, progression, and melodic direction was used in its construction. In an effort to determine which melodic characteristics were more easily learned, all items which were performed with no errors, and therefore received a score of 5, were tabulated. The characteristics of each item, the number of children who performed it correctly on the pretest, the number who performed it correctly on the posttest, and the increase in number between the pre and posttest for each item are shown in Table Seventeen.

Of the 76 children in the experimental group, the largest number (31) sang item number 2 correctly, the descending major scale. Two items were performed correctly by only eleven students; number 5, which contained an ascending minor sixth interval; and number 8, an ascending chordskip melody. It is also interesting to note that the number of children who performed an item correctly on the posttest.
TABLE SIXTEEN

INTERCORRELATIONS OF IMPROVEMENT IN SPECIFIC MUSIC ABILITIES FOR EXPERIMENTAL CHILDREN

<table>
<thead>
<tr>
<th>Improvement</th>
<th>Melody</th>
<th>Rhythm</th>
<th>Mus'ship</th>
<th>Total Imp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melody</td>
<td>-</td>
<td>.31</td>
<td>.62</td>
<td>.80</td>
</tr>
<tr>
<td>Rhythm</td>
<td>.31</td>
<td>-</td>
<td>.02</td>
<td>.81</td>
</tr>
<tr>
<td>Musicianship</td>
<td>.52</td>
<td>.02</td>
<td>-</td>
<td>.43</td>
</tr>
<tr>
<td>Total Improvement</td>
<td>.80</td>
<td>.81</td>
<td>.43</td>
<td>-</td>
</tr>
</tbody>
</table>

TABLE SEVENTEEN

MELODY TEST: ITEM CHARACTERISTICS AND EASE OF PERFORMANCE

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Characteristic</th>
<th>Ease of Performance*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Melodic Dir.</td>
<td>Mode</td>
</tr>
<tr>
<td>1</td>
<td>Ascending</td>
<td>Minor</td>
</tr>
<tr>
<td>2</td>
<td>Descending</td>
<td>Major</td>
</tr>
<tr>
<td>3</td>
<td>Ascending</td>
<td>Major</td>
</tr>
<tr>
<td>4</td>
<td>Descending</td>
<td>Major</td>
</tr>
<tr>
<td>5</td>
<td>Changing</td>
<td>Major</td>
</tr>
<tr>
<td>6</td>
<td>Ascending</td>
<td>Major</td>
</tr>
<tr>
<td>7</td>
<td>Descending</td>
<td>Minor</td>
</tr>
<tr>
<td>8</td>
<td>Ascending</td>
<td>Minor</td>
</tr>
<tr>
<td>9</td>
<td>Descending</td>
<td>Minor</td>
</tr>
<tr>
<td>10</td>
<td>Changing</td>
<td>Maj-min</td>
</tr>
</tbody>
</table>

* Number of children performing each item correctly on pretest, posttest, and increase in number between pre and posttest.
and the increase in the number of children performing the item were generally comparable. For example, item 2 was performed by the largest number of children on the posttest and was third in increase. Item 1 was sixth in the number performing it correctly on the posttest and sixth in increase. Item 10 was second on the posttest and second in the increase column. Items 5 and 8 were performed by the fewest number of children on the posttest and had the smallest increase in the number of correct performances.

If items 5 and 10 (the two that employed a changing melodic direction) are disregarded, the eight remaining may be classified into six equal groups according to one of three characteristics, melodic direction, mode, and progression. Four items have melodic direction which ascends, four descend, four are in the major mode, four are minor, four proceed in a scalewise progression while four skip along chord tones. By counting the number of correctly performed items, and adding them by characteristic, the following tabulations result:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Items</th>
<th>Correct Performances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ascending</td>
<td>1 - 3 - 6 - 8</td>
<td>69</td>
</tr>
<tr>
<td>Descending</td>
<td>2 - 4 - 7 - 9</td>
<td>100</td>
</tr>
<tr>
<td>Minor mode</td>
<td>1 - 7 - 8 - 9</td>
<td>76</td>
</tr>
<tr>
<td>Major mode</td>
<td>2 - 3 - 4 - 6</td>
<td>91</td>
</tr>
<tr>
<td>Scalewise progression</td>
<td>1 - 2 - 6 - 7</td>
<td>99</td>
</tr>
<tr>
<td>Chord skip progression</td>
<td>3 - 4 - 8 - 9</td>
<td>68</td>
</tr>
</tbody>
</table>

From these data, it appears that melodies which produce the greatest tonal accuracy are characterized by descending melodic direction, major mode, and scalewise progression. Minor melodies that ascend by chord tone skipping appear to be the most difficult to perform with accuracy. If these tabulations are indicative of preschool children in general, then songs such as "Twinkle twinkle little star" or "Hot Cross Buns", a type which contain a large proportion of descending scalewise progressions are learned and sung with the greatest ease and accuracy. In like manner, songs such as "Fanny Puppy" or "I'm a little teapot" contain musical characteristics which are more difficult to perform with accuracy. See Figure 8.

In order to determine which characteristics in combination seemed to provide the greatest accuracy, the items were recounted according to all possible combinations of paired characteristics.
Hot Cross Buns

Twinkle Twinkle Little Star

I'm a Little Teapot

Funny Puppy

FIGURE 8.

FOUR SONGS CONTAINING MUSICAL CHARACTERISTICS OF VARYING DIFFICULTY
The following information resulted:

<table>
<thead>
<tr>
<th>Paired Characteristics</th>
<th>Items</th>
<th>Number of children Singing item correctly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descending + Scalewise</td>
<td>2 &amp; 7</td>
<td>56</td>
</tr>
<tr>
<td>Descending + Major</td>
<td>2 &amp; 4</td>
<td>55</td>
</tr>
<tr>
<td>Major + Scalewise</td>
<td>2 &amp; 6</td>
<td>54</td>
</tr>
<tr>
<td>Minor + Scalewise</td>
<td>1 &amp; 7</td>
<td>45</td>
</tr>
<tr>
<td>Descending + Minor</td>
<td>7 &amp; 9</td>
<td>45</td>
</tr>
<tr>
<td>Descending + Chordskip</td>
<td>4 &amp; 9</td>
<td>44</td>
</tr>
<tr>
<td>Ascending + Scalewise</td>
<td>1 &amp; 6</td>
<td>43</td>
</tr>
<tr>
<td>Chordskip + Changing Dir.</td>
<td>5 &amp; 10</td>
<td>39</td>
</tr>
<tr>
<td>Major + Chordskip</td>
<td>3 &amp; 4</td>
<td>37</td>
</tr>
<tr>
<td>Ascending + Major</td>
<td>3 &amp; 6</td>
<td>36</td>
</tr>
<tr>
<td>Minor + Chordskip</td>
<td>8 &amp; 9</td>
<td>31</td>
</tr>
<tr>
<td>Ascending + Minor</td>
<td>1 &amp; 8</td>
<td>31</td>
</tr>
<tr>
<td>Ascending + Chordskip</td>
<td>3 &amp; 8</td>
<td>24</td>
</tr>
</tbody>
</table>

From these tabulations, it is possible classify paired characteristics into five general groups of progressive difficulty. The easiest to sing (sung correctly by the largest number of children) were the first group; Descending-Scale, Descending-major, and Major-scale. A typical song, used in this project, which contains these characteristics was:

*Hop Old Squirrel*

This selection contains four measures of descending-major-scalewise motion and four measures of non-moving repeated tones. This song, according to the data above, should be one of the easiest possible songs for children to sing.
The second group of paired characteristics was performed accurately by fewer children. This group included: minor scale, descending minor, descending chord-skip, and ascending scale. A song used in this project which illustrates these qualities was:

Bakerman

A third group of characteristics, somewhat more difficult than the preceding comprised: chord-skip, changing direction, major chord-skip, and ascending major progressions. A song using these characteristics which was employed in this project was the well known Paw Paw Patch. The fourth and fifth groups contained those characteristics sung correctly by the smallest number of children and were apparently the most difficult to perform. These characteristics are illustrated in the song Funny Puppy illustrated earlier.

Rating Children's Songs for Melodic Difficulty. From the preceding information, it is possible to devise a five point rating scale which could be used as an aid in determining the melodic difficulty of songs. In analyzing specific selections, measures which contained mostly melodic characteristics from the easiest group, as presented in the preceding section, would be assigned a rating of one. Those in the second group a two, and so on up to the most difficult group which would be rated five. Measures which contained no melodic movement, would be assigned a zero.

If this system of rating is applied to the four songs illustrated in Figure 8, the following composite difficulty ratings result.

Hot Cross Buns = 5
Twinkle, twinkle = 20
I'm a little teapot = 16
Funny puppy = 16

These ratings, of course, not only reflect the difficulty of the melodic characteristics, but are heavily influenced by the length of the song. A longer song such as Twinkle, twinkle containing 12 measures, is rated more difficulty than a shorter song such as Funny puppy, (8 meas.)
To correct for the length of the song, the ratings may be divided by the number of measures in the song. The resulting figures would then be a reasonable approximation of the difficulty of the song for preschool use. If this computation is accomplished, the four songs would be rated as follows:

<table>
<thead>
<tr>
<th>Song</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot Cross Buns</td>
<td>1.25</td>
</tr>
<tr>
<td>Twinkle, twinkle</td>
<td>1.58</td>
</tr>
<tr>
<td>I'm a little teapot</td>
<td>2.00</td>
</tr>
<tr>
<td>Funny Puppy</td>
<td>2.00</td>
</tr>
</tbody>
</table>

The value of this type of rating system is not for rejecting songs, although this might be desirable in some instances, but rather for determining in what order the songs should be introduced to the children. Since voice quality and melodic accuracy are important to the developing young singer, the easiest songs should be used first. In this manner, correct concepts of pitch and sound could be established from the beginning and a lot of voice strain and out-of-tune singing might be avoided.

The preceding discussion of song assessment takes into account only melodic progression, mode, and direction. A factor which has a large influence on the difficulty of any song is the level at which it is pitched and the relationship of this pitch level to the range of the voices that will be performing it.

**The Child Voice Range.** Part 4 of the criterion test was designed to measure the accurate singing range of the children. Most children possess a wide range of vocal pitches which they are capable of producing. The range within which accurate singing takes place, however, is much more restricted. Since the development of melodic perception and the accurate reproduction of musical pitch occur simultaneously, it is important that songs used with preschool children conform to the limitations of the child voice.

The total pitch range included in Part 4 of the criterion test extended from low G to high E-flat.

\[
\begin{array}{c}
\text{G} \\
\text{B} \\
\text{E-flat}
\end{array}
\]

As might be expected, a few children could reproduce all of these pitches.
Several others could reproduce none of the pitches with accuracy. To learn how accurate singing develops in the young child, the data were classified into four groups, as follows:

Group 1, the data for the children who could sing one, two, or three pitches accurately.
Group 2, the data for those who could sing 4 to 6 pitches accurately.
Group 3, the data for those who could sing 7 to 9 pitches accurately.
Group 4, the data for those who could sing ten or more pitches accurately.

Figure 9 shows the number of times each pitch was reproduced by children who could sing only one, two, or three pitches accurately. The majority of these children could sing some of the pitches in the B-flat to F range. Since most of the children could sing only one or two pitches, the graph actually indicates the pitch centers where accuracy begins to develop. The primary centers where this occurs appear to be D and F. Apparently this is the pitch area where most beginning singers first attain vocal accuracy. A less numerous group develops at a lower level as indicated by the number who could sing B-flat and low G. Previous studies, cited in the introductory section of this report, have shown that Negro children, especially, first achieve vocal accuracy at these lower pitch levels.

Figure 10 shows the pitches reproduced by children who could accurately sing from four to six different pitches. At this stage of development, the majority can sing in the range of A up to F. This range is quite similar to the range cited for the previous group of children. Apparently, as the voice develops, greater accuracy is attained while the total overall range remains about the same. It is perhaps significant that the only increase in range, at this stage, was downward. A substantial number of children in this group could sing low A. Some development also occurred in the upper part of the range on the pitches G, A, and B-flat, but the majority of these children were unable to sing these pitches.

Figure 11 shows the number of times each pitch was reproduced by children who could sing from seven to nine different pitches. As shown, the most accuracy is still within the A to F range but many children are beginning to sing the G, A, B-flat pitches.
(Each 'X' indicates one child / total number of X's indicates the number of children able to sing the given pitch)
FIGURE 14.

To avoid extending the figure past the top of the page, this part was compressed: each X within the dotted lines stands for four students.

Each X indicates one child. Total number of X's indicates the number of children able to sing the "given pitch."
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Figure 14.

Vocal accuracy of children with ability to sing ten or more pitches correctly

(Each 'X' indicates one child / total number of X's indicates the number of children able to sing the given pitch)
It is interesting to note that more children were able to sing B-flat in the upper range than were able to sing G or A below. This is due to the occurrence of the "voice break", a loss of control common to young children, which almost always happens around the pitch A. This phenomenon has been noted before by various researchers. A few children are also beginning to be able to sing the high pitches, C, D, and E-flat. These are exceptions, however, and the majority of this group of children do not sing this high. It should also be noted that the vocal quality at these pitch levels was quite poor. While a few children seem to be able to hear and reproduce these tones, their voices are not ready to be used for singing in this range, and should not be so employed.

Figure 12 illustrates the capabilities of those children who could accurately sing ten or more pitches from criterion test 4. At this stage of development, most of the children sing from low A up to third line B-flat. Some can sing higher (C, D, & E-flat) and some can sing lower (to low G below the treble staff) but as with the previous group, many of these children must strain to reach these tones resulting in poor singing quality. Again it is recommended that these pitches be reserved for use at subsequent stages of development.

In summary, it may be seen that the development of vocal accuracy begins in the B-flat to F range.

\[ \begin{align*}
\text{The child at first sings from one to three pitches from this range.} \\
\text{Most sing near the pitches D or F. As further development occurs,} \\
\text{the lower pitches are sung by more children and many sing on down} \\
\text{to low A, resulting in a range of A to F.}
\end{align*} \]

The next stage of development occurs in the upper range. Many children now sing up to B-flat and many are beginning to experience difficulty with loss of control in the voice break area. Still, the majority do their best singing in the range A to F, as before. Finally, the most advanced stage found with the children in this project shows
a solid range of low A to B-flat. Higher and lower pitches are being sung by several children in this stage, but the basic range of a ninth seems best for the majority. It should be emphasized that only 25% of the children tested at the end of the teaching year were in this classification.

These data indicate quite clearly the type of song material which should be used for preschool children. For those in the first stage of development, "Hop Old Squirrel" or "Hot Cross Buns" both of which contain only three adjacent tones, should be used. These should be presented at a pitch level centered on D. Unfortunately, few three note songs exist and the teacher may have to make up some original three-tone tunes for use with these children.

For children in the second stage of development, songs such as "Come on and Join Into the Game" or "Jim A-long Josie" which contain five or six notes should be used. These should be kept within the A to F range. For the third stage, songs such as "Funny Puppy" which are mostly in the lower range with occasional higher pitches are suitable. As Gordon states, songs which require the child to sing up through the voice break should be avoided. Melodies which leap over the voice break, or descend down through it in a scalewise progression are most suitable for this stage. When children reach the fourth stage of development, songs which encompass an octave or a ninth are possible.

Rhythmic Development. Traditionally, music teachers in the United States have taught duple meter first and presented triple meter later, or not at all. The validity of this practice has been questioned by some music educators who hold that the natural rhythm of children's playground chants is triple and therefore triple meter is of at least equal importance as duple. The opposing school of thought holds that most of the English language is duple sounding, thus this meter should be emphasized.

Part two of the criterion test contained ten rhythm items, five duple and five triple. As with the melodic analysis, all pretests and posttests were examined and all perfect performances of each item were tabulated. The results of this tabulation are displayed in Table Eighteen. As shown, both the experimental and control groups on the pretests and posttests, performed more duple items correctly than they did triple. While this seems to indicate that duple meter may be more natural, or easier to learn, the differences were not so great that it
<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Duple Rhythms</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>22</td>
<td>81</td>
</tr>
<tr>
<td>Group</td>
<td></td>
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</tr>
<tr>
<td>Control Group</td>
<td>14</td>
<td>37</td>
</tr>
<tr>
<td><strong>Triple Rhythms</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>17</td>
<td>56</td>
</tr>
<tr>
<td>Group</td>
<td></td>
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<tr>
<td>Control Group</td>
<td>12</td>
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</tr>
</tbody>
</table>
might be possible that both may be learned with equal facility. The rhythm items, in order of ease of performance were as follows:

\[
\begin{align*}
\text{fit1-411} & = 20 \\
\text{ail-pk} & = 19 \\
\text{20} & = 13 \\
\text{19} & = 12 \\
\text{13} & = 8 \\
\text{14} & = 3
\end{align*}
\]

The duple patterns most frequently performed correctly were those that contained beats entirely subdivided by the same kind of pattern, for example (fit1, and \( \text{20} \)). Those with unequal subdivision (fit1, \( \text{19} \), \( \text{13} \)) were correctly performed less frequently.

An unusual result may be seen in the triple patterns. What was supposed to be one of the more difficult triple patterns was correctly performed more often than any of the others, (fit1, \( \text{13} \)). Furthermore, what was considered to be the easiest triple pattern (fit1) was only performed correctly by three children on the posttest. Perhaps some unusual circumstance connected with the testing procedure caused this happening or perhaps a more varied pattern is more easily heard and performed by children.
REFERENCES FOR SECTION TWO

7. Gordon, Edwin. PSYCHOLOGY OF MUSIC TEACHING
SECTION THREE

CONCLUSIONS
CONCLUSIONS AND RECOMMENDATIONS

Conclusions:

There were two primary objectives of this study. The first, as stated in the introduction, was to discover if a typical Headstart teacher could be trained in a limited amount of time to conduct a remedial preschool music program for disadvantaged children.

The results reported in the preceding section suggest the conclusion that a teacher of this type, even possessing a limited knowledge and ability in the field of music and music pedagogy, can be trained sufficiently in a brief period of time to successfully conduct a meaningful music program for her students.

The amount of training given the teachers in this project consisted of only three days of intense work. They were provided with the proper equipment to complete the task, they were given a detailed curriculum guide to follow, and they were shown how to use these materials. In short, a structured program was provided which required only that they learn the process of teaching in order to teach effectively.

The three day span was barely sufficient in some cases. Those individuals who achieved the most success in their teaching were the ones who appeared to be the most determined, energetic, and seemed to be willing to take the initiative. Those who had less success seemed to lack these qualities. A longer training period of perhaps five days would have possibly increased the margin of success for all teachers, especially those who were less competent or who had insufficient confidence in their own abilities.

The second major objective was to discover if the progress shown by the children taught in the experimental program was significantly superior to the progress of similar children in identical situations where such a program was not offered.

Again, the results presented in the previous section indicated that from two to three times more improvement was achieved by the children taught in the experimental program than was attained.
by the children in the control groups. Thus, not only did the experimental teachers successfully conduct a music program, but the progress shown by their children was markedly superior to that of children who did not experience the program.

The major conclusion of this study, therefore, is that a teacher who is relatively untrained, and who is basically without music ability, can be taught how to initiate and sustain an effective program of remedial music at the preschool level. Children taught under such a program improve much more than would otherwise occur thus, it appears that such an effort is well worthwhile from the standpoint of the children themselves. Furthermore, this type of program is economically feasible and, viewed in the physical-logistical sense, is an extremely practical and efficacious solution to the problem of music and the disadvantaged child.

Recommendations:

The four studies in this series, of which the present one is the most recent, have shown that a need for improvement definitely exists in disadvantaged children. It has also been proven that perhaps the greatest benefit can result from a remedial program at the preschool level. The preschools themselves already exist in the form of hundreds of operational Headstart schools. And, as the current study indicates, a "self-help" program can enable teachers ordinarily employed in typical Headstart schools to do a credible job. The next logical step, which is the sole recommendation of this investigator, is that a permanent training center be established which will train Headstart and other preschool personnel to teach music to the children in their charge in an effective manner. The importance of this next necessary step need not be reiterated at this point. It suffices to say that the neglect of such a large segment of our population, represented by the disadvantaged, is something which we, as a nation, cannot afford.

The establishment of an early childhood musical training center for teachers would develop the abilities of thousands of children, would provide them with an opportunity to achieve success which they might not otherwise enjoy, and would assist them in becoming aware of the National culture as well as the cultures of the various peoples which make up the United States.
BIBLIOGRAPHY


Young, William T. AN INVESTIGATION OF THE SINGING ABILITIES OF KINDERGARTEN AND FIRST GRADE CHILDREN IN EAST TEXAS (Stephen F. Austin State University: Faculty Research, 1971)

Young, William T. A STUDY OF THE VOCAL SINGING RANGES OF BLACK KINDERGARTEN AND FIRST GRADE CHILDREN (Professional Research Paper read to the Southwestern Division of Music Educator’s National Conference, Wichita, Kansas 1973)
APPENDIX ONE: Sources of songs and other materials

A. Songs

Making Music Your Own series, Silver-Burdeett
Discovering Music Together series, Follett
Who Am I?, Follett
Music With Children series, Grace Nash (Kitching Educational)

B. Verses

Oxford Nursery Rhyme Book, Oxford University Press
The Folk Songs of North America, Alan Lomax, Doubleday
Music with Children, Grace Nash, Kitching Educational

C. Recordings

Making Music Your Own recordings, Silver-Burdeett
Discovering Music Together recordings, Follett

D. Musical Equipment

Rhythm Band Incorporated, Fort Worth
Allyn & Bacon (Instrumental wall charts)

* Song titles may be found in Appendix Two (Teaching manual) in the order in which they were introduced.
APPENDIX TWO: Teaching Manual

The teaching manual format was as shown in the drawing below. The pages on each side were 6" x 9" and the total book was 12" x 9". The manual was spiral bound at the top of the pages. The pages on the left dealt with rhythm concepts and those on the right with melodic concepts. In this appendix, the pages on the left are those that appeared on the left side of the manual and those on the reader's right are the ones that appeared in the right side of the manual. This format was deemed advantageous in that a lesson in rhythm, for example, could be repeated while the adjacent melody page could be turned and a new one presented. At all times, the complete lesson outline for a given day was visible to the teacher.
DAILY LESSON PLAN

PART ONE
Rhythm or Melody

PART TWO
Rhythm or Melody

CLOSING
Song or activity of your choice, or one selected by children
MELODY SYLLABLES

DO  RAY  ME  FA  SO  LA  TE  DO

- Major songs end on DO
- Minor songs end on LA
RHYTHM SYLLABLES

DUPLE:

The beat

Meter

Pattern 1

Pattern 2

Pattern 3

Pattern 4

Pattern 5

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RHYTHM SYLLABLES

TRIPLE:

The beat

Meter

Pattern 1

Pattern 2

RESTS: (Both meters)
INSTRUMENTS - Rhythm

- Hand drum
- Triangle
- Woodblock
- Tambourine
- Rhythm Sticks

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INSTRUMENTS - Melody

- Autoharp

- Songflute
A. RHYTHM ECHO GAME
- Use children's names
- Teacher play beat on rhythm sticks
- Echo style: Teacher to Group

Example:
- (Teacher) "Margaret Johnson"
- (Group) "Margaret Johnson"
- (Student) "I am Here"
- (Group) "She is Here"

B. RECORD
- S-B Record 1, Side 2, Band 6
- CLAP YOUR HANDS
  - 1st playing: Listen
  - 2nd playing: Clap on instrumental interludes (as is done on recording)
A. ECHO GAME SONGS
   - All on descending minor third
     "Hello" - "How are you"
     Rain, rain, go away,
     Please come back some other day.
     Little Johnny wants to play.
     I'm a farmer big and strong
     Drive my tractor all day long
     I found a dog, he was alone
     Fed him a bone and took him home.

B. GAME SONG
   - HELICOPTER
     Teach melody and actions at the same time.
A. RHYTHM ECHO GAMES

- Use Children's names (as in R-1)
- Use Day's of Week
- Teacher play beat on hand drum
- Echo style: Teacher to Group

Example:

"To-day is Tuesday"
"Yesterday was Monday"
"Tomorrow is Wednesday"

B. GAME SONG

HELIICOPTER

Sing song for review of words.
Sing while stepping beat in place.
A. ECHO SONG

- I'M A PERSON
  - Introduce tuning sounds d-m-s-m-d
  - Stress good voice quality
  - (Use voices on S-B recording as examples)

B. ACTION SONG

- I'M A LITTLE TEAPOT
  - Teach melody and actions at the same time

C. RECORD

- S-B Record 1, Side 2, Band 6

CLAP YOUR HANDS

1st playing: Listen & clap

(as was done in R-1)

2nd playing: Sing words with voices on recording
A. RHYTHM ECHO GAMES
   - Use colors
   - Teacher play beat on drum
   - Echo style: Teacher to group
     Example:
     (Teacher) "Who has Red on?"
     (Group) "Who has Red on?"
     (Teacher) "Joe has Red on"
     (Group) "Joe has Red on"

B. GAME SONG
   - HELICOPTER
     - Review for words
     - Select two students to play rhythm instruments on beat

C. GAME SONG
   - I'M A LITTLE TEAPOT
     - Review for words
     - Select two different students to play rhythm instruments on beat
M = 3

A. GAME SONG
   - I'M GONNA PAT MY LIL OL' HEAD
     - Do actions suggested by the words

B. SINGING IN TUNE
   - LITTLE BIRD
     - Stress singing in tune
     - Tuning sounds

C. RECORD
   - S-B Record 1, Side 1, Band 3
     - SANDY LAND
     - Show picture of violin (first instrument heard)
     - Identify violin when heard again (last verse & tag)
A. SPEECH RHYTHM

- Alternate paschen & hand clapping
- TWO LITTLE DICKY BIRDS,
  SITTING ON A WALL,
  ONE NAMED PETER,
  ONE NAMED PAUL,
  FLY AWAY PETER,
  FLY AWAY PAUL!
  COME BACK PETER
  COME BACK PAUL!

B. RECORD

- S-B Record 1, Side 2, Band 6
- CLAP YOUR HANDS
- March to beat of the music

(Select one as leader. Let him carry a baton or small flag at the head of the line)
A. ECHO GAME SONGS

- Use descending minor 3rd & d-m-s

  "Hello" - "How are you?"

  "I hear a woodpecker tapping on
   a tree"

  "Hey Mr Woodpecker, where can
   you be?"

  "Please Mr Woodpecker, tap
   once more"

  "Hey Mr Woodpecker, I see you!"

(Also use: "Robin" - "singing in a tree" or

  "Squirrel" - "running up a tree")

B. SINGING IN TUNE

- LITTLE BIRD

  Sing for review, stress singing in tune

C. RECORD

- S-B Record 1, Side 1, Band 3

- SANDY LAND (SING ALONG W/RECORD)
A. SPEECH RHYTHM

- Alternate paschen & hand clapping
- TWO LITTLE DICKEY BIRDS
  SITTING ON A WALL,
  ONE NAMED PETER
  ONE NAMED PAUL.
  FLY AWAY PETER!
- FLY AWAY PAUL!
  COME BACK PETER
  COME BACK PAUL!

B. CONCEPT OF BEAT

- Emphasize steady beat
- Introduce the term 'Beat'
- HELICOPTER (Autoharp accomp.)
  Sing once for review
  Let selected students strum the
  autoharp while teacher fingers
  correct chords.
A. ECHO GAMES
   - Echo style: Teacher to Individual student
   - Use so-me and do-me-so on a neutral syllable, such as 'loo'

B. SINGING IN TUNE
   - SANDY LAND (Autoharp accompaniment)
     - Substitute the word 'watermelon' for 'sweet potato' used in song

C. RECORD
   - S-B Recording 1, Side 2, Band 8
   - THE CARPENTER
   - Let children dramatize words
A. SPEECH RHYTHM

- Alternate paschen & hand clapping
- TWO LITTLE DICKEY BIRDS
  SITTING ON A WALL
  ONE NAMED PETER
  ONE NAMED PAUL
  FLY AWAY PETER
  FLY AWAY PAUL
  COME BACK PETER
  COME BACK PAUL

B. BEAT CONCEPT

- Record I, Side 2, Band 6

- Let record play for just 4 beats. Lift needle. Ask children how many beats they heard. Repeat with 6 beats, 8 beats, or any number you wish.
A. ECHO GAMES
   - Use s-m and d-m-s, later add s-m-d, m-r-d, a-r-m
   - Echo style: Teacher (songflute)
     to Group (voices on "ioo")

B. RESTING TONE CONCEPT
   - Introduce term 'resting tone' as last note in a song/tone that sounds most "restful"/home tone/
   - Review these songs to identify resting tone: (Teacher sing)
     - I'M A PERSON
     - LITTLE BIRD
     - SANDY LAND
A. SPEECH RHYTHM.

- Do with finger play (Left thumb = Peter; Right thumb = Paul)

TWO LITTLE DICKEY BIRDS
SITTING ON A WALL.
ONE NAMED PETER
ONE NAMED PAUL
FLY AWAY PETER
FLY AWAY PAUL
COME BACK PETER
COME BACK PAUL

B. BEAT CONCEPT.

- Select two or three to play beat
- Provide choice of instruments, let them choose.

I'M GONNA PAT MY LITTLE OLE HEAD
- Repeat with several different students
A. ECHO GAMES
   - Any combination of d-r-m-s
   - Echo Style: Teacher to Group
   - Songflupe (Tchr) - Group (loo)

B. RESTING TONE CONCEPT
   - Review these songs to "find" resting tone
     - HELICOPTER
     - I'M A LITTLE TEAPOT
     - I'M GONNA PAT MY HEAD

C. RECORD
   - S-B Record 1, Side 2, Band 6
   - CLAP YOUR HANDS
   - Clap & sing with record
   - 2nd playing: all stand, close eyes, sit when they hear the first tone that sounds like resting tone
A. RHYTHM GAME

- Echo Rhythms
- Echo style: Teacher to student
- Use clapping, paschen, stamping

B. ENHANCED SONG

- "OLD MAC DONALD HAD A FARM"
- Do as many 'animals' as children can remember.
- Substitute an instrumental sound for the portion that is usually sung "here quack, there quack, everywhere quack, quack". For example: Duck - triangle; Cow - woodblock; pig - drum..."
A. ECHO GAME SONGS
   - Use any combination of d-r-m-s
   - Echo style: Teacher (songflute)
     to Student (sing) and 1 student
     (sing to 2 student (sing))

B. RESTING TONE & MELODIC DIRECTION
   - SANDY LAND
   - I'M GONNA PAT MY HEAD

C. RECORD
   - S-R Record V, Side 1, Band 6
   - BINGO
     1st play: Listen to song
     2nd play: Sing along with record
A. RHYTHM GAME
   - Echo Rhythm patterns
   - Echo style: Teacher to student
   - Use clapping, paschen, stamping

B. LISTENING PERIOD
   - Play portion of loan recording
M. 9

A. ECHO GAMES
   - Any combination of d-r-m-s.
   - Echo style: Tchr (songflute) to Group (sing)

B. SINGING IN TUNE
   - OLD MAC DONALD
     1st time: stress in tune
     2nd time: sub instruments as in R-8

C. Resting Tone
   - HEY BETTY MARTIN
     - Identify resting tone
R - 10

A. RHYTHM GAME
   - Rhythm patterns (any used previously)
   - Echo style: Teacher to students
   - Teacher use a hand drum; students answer with rhythm sticks

B. LISTENING PERIOD
   - Play a portion of a loan recording
A. ECHO GAMES
- Any combination of d-r-m-s
- Play autoharp chords along w/echo
- Echo Style: Teacher sing to individual student (sing)

B. RESTING TONE
- HEY BETTY MARTIN
- Introduce the idea of loud & soft

C. RECORD
- S-B Record V, Side 1, Band 6
- BINGO
- Use rhythm sticks on beat (all students)
- Arrangement: Tambourine & Triangle on verse
  rhythm sticks on Spelling part.
R - 11

A. SPEECH RHYTHM

OLD JACK SPRATT, ONCE HAD A PIG
IT WASN'T VERY LITTLE AND IT
WASN'T VERY BIG
IT WASN'T VERY SKINNY, AND IT
WASN'T VERY FAT
IT'S A GOOD PIG TO GRUNT
SAID OLD JACK SPRATT

B. MELODIC RHYTHM

I'M A LITTLE TEAPOT
- Review once for words
- Play different instr with each line
- Last time each instr play rhythm of
  the words on it's line (no singing)
M - 11

A. ECHO GAMES

- Use words, then syllables (s-m-d)
- "Rain rain go away
  Please come back another day
  Little Johnny wants to play
- I'm a farmer big and strong
  Drive my tractor all day long
- I like pie and I like cake.
  All the things that Mama bakes

B. RESTING TONE & LOUD-SOFT

- I'M A PERSON
- Review for words
- Identify resting tone and loud-soft parts

C. RECORD

- S-B Record I, Side 2, Band 7
- Pinto MARCH LITTLE SOLDIER
  March to beat, choose leader
  Show picture of piano, relate.
A. SPEECH RHYTHM

OLD JACK SPRATT, ONCE HAD A PIG,
IT WASN'T VERY LITTLE AND IT
WASN'T VERY BIG
IT WASN'T VERY SKINNY AND IT
WASN'T VERY FAT
IT'S A GOOD PIG TO GRUNT
SAID OLD JACK SPRATT

B. CONCEPT OF BEAT

LITTLE FOO-FOO RABBIT
1st time for learning
2nd time all keep beat w/sticks
3rd time use sticks only on 'bash'
4th time think the tune, hit sticks
on 'bash'
A. ECHO GAMES
- Use s-m or s-m-d
- Echo style: Teacher to group
  - Tchr sing - Group sing on "loo"
  - Tchr sing syllables - Group sing
  - Tchr songflute - Group syllables

B. RESTING TONE
- LITTLE BIRD
- Identify resting tone sound

C. RECORD
- S-B Record I, Side 1, Band 3
- SANDY LAND
- Identify Violin, use chart
A. SPEECH RHYTHM

- OLD JACK SPRATT, ONCE HAD A PIG
- IT WASN'T VERY LITTLE AND IT
  WASN'T VERY BIG
- IT WASN'T VERY SKINNY AND IT
  WASN'T VERY FAT
- "IT'S A GOOD PIG TO GRUNT"
- SAID OLD JACK SPRATT

B. CONCEPT OF BEAT

- LITTLE FOO-FOO RABBIT
  Review for words & beat understanding
- POP GOES THE WEASEL
  Present for learning
- "Sing" silently, clap hands on word
  "pop."

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A. SOUND OF SO-DO

<table>
<thead>
<tr>
<th>I SEE A GIRL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Let class guess about whom you are singing</td>
</tr>
<tr>
<td>Have them sing song</td>
</tr>
<tr>
<td>Practice a few times last 3 tones</td>
</tr>
<tr>
<td>&quot;Who are you&quot;</td>
</tr>
<tr>
<td>&quot;So, So, Do&quot;</td>
</tr>
</tbody>
</table>

B. RECORD

<table>
<thead>
<tr>
<th>S-B Record I, Side 2, Band 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLAP YOUR HANDS</td>
</tr>
<tr>
<td>Clap with record, sing with record</td>
</tr>
<tr>
<td>Identify the instrument (violin)</td>
</tr>
<tr>
<td>S-B Record II, Side 2, Band 1</td>
</tr>
<tr>
<td>GOING AROUND THE MOUNTAIN</td>
</tr>
<tr>
<td>Identify violin again</td>
</tr>
</tbody>
</table>

(Verse 1 = big circle in pairs; Verse 2 = pairs revolve with each other; Verse 3 = "Freeze into a pose; Verse 4 = pairs swing each other again; Verse 5 = Freeze again)
A. RHYTHM ECHO GAME

- Echo duple patterns (1, 2; 1 ne 2; 1 2 ne; or 1 ne 2 ne)
- Echo style: Teacher (hand drum) to group (clap)

B. RHYTHM SONG GAME

- I'M A-Long JOSIE
  - Teacher start with one student
    - progressively add students
  - Also use walk, march, tiptoe
A. MELODY ECHO GAMES
   - Use s-m; s-m-d; d-m-s; plus any others you desire
   - Echo style: teacher to individual
   - Use songflute (tchr), voice (student).

B. RESTING TONE REVIEW
   LITTLE BIRD

C. LISTENING PERIOD
   - Loan Recording (portion)
A. RHYTHM ECHO
   - Duple patterns (\[\text{\textcopyright{\textbullet{}}\textnormal{\textbackslash\textbackslash}} \text{\textcopyright{\textbullet{}}\textnormal{\textbackslash\textbackslash}}\] or \[\text{\textcopyright{\textbullet{}}\textnormal{\textbackslash\textbackslash}}\].
   - Style: Teacher (hand drum) to
two students at same time
Student #1 has triangle
Student #2 has tambourine.
(These instruments sound differently
and it will be easy to tell which one
needs help)

B. RECORD
   - S - B Record II, Side 1, Band 2
   - ELEPHANT SONG
   - play once for listening & words
   - Teacher sing song (no record) use
     motions
   - Students sing w/motions, w/record
M - 15

A. MELODY ECHO GAME
- Use s-m; s-m-d; d-m-s; s-d; d-m-d
  and other combinations of these.
- Echo style: Teacher (voice) to group
  (voice)

B. RHYTHM GAME SONG
- JIM A-LONG JOSIE
- stress the correct tune
- stress the duple feeling
- play the game as in R-14

C. LISTENING PERIOD
- Second portion of Loon record
A. SPEECH RHYTHM

(tongue clicks)

Time marches on, Time marches on
Don't waste time, Don't waste time

(snap) (snap) (snap) (snap)

You may delay but time will not tick tock tick tock

B. ORCHESTRATION

BINGO

Sing song for review
Select 3 students to play rhythm instrs.
Use woodblock; triangle; tambourine
(Class sings first line; class does not sing the
spelling portion, on B the woodblock sounds;
on I the triangle; and on NGO the tambourine
sounds three times)
A. MELODY ECHO
- Any combination of d-m-s
- Style: Teacher (songflute) to group (syllables). Perhaps review w/ tchr syllables to group syllables first.

B. RESTING TONE & MELODIC DIRECTION
- ELEPHANT SONG
  - Sing for memory & use actions
  - Sing for pitch. Repeat any sections that need more accuracy
A. SPEECH RHYTHM

(tongue clicks)

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Time marches on, Time marches on

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Don't waste time, Don't waste time

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You may delay but time will not tick tock, tick tock

B. RHYTHM ECHO

Echo duple patterns

Teacher (drum) to individual students.

(students answer with syllables)
A. ECHO GAMES
   - Teach (song) flute to group (syllables)
   - Any combination of d-r-m-s
     *(Try to get the group to the point they can recognize the sound and sing back the syllables)*

B. MELODIC DIRECTION & RESTING TONE
   - ELEPHANT SONG
     - Review with autoharp
     - Review again with recording if needed

C. RECORD
   - S-B Record II, Side 2, Band 4 TRAIN IS A-COMIN
     - Step beat & listen (1st time)
     - Step beat & sing on "O yes" (2nd time)
A. SPEECH RHYTHM

(tongue clicks)

Time marches on, Time marches on

Don't waste time, Don't waste time
(snap) (snap) (snap) (snap)

You may delay but time will not tick tock tick tock

B. OSTINATO

- Select two students to play pattern
- Any duple pattern you have been drilling
- ELEPHANT SONG
  - First: chant words with ostinato
  - Second: Sing words with ostinato
  - Repeat with different students
A. MELODY ECHO
- Teacher Sing major patterns
- Play autoharp chords with them
- Students repeat echo style

B. PITCH ACCURACY
- TRAIN IS A COMIN'
- Stress singing in tune on 'O yes'
- Work with individuals on 'O yes'

C. RECORD
- 'S - B Record 1, Side 1, Band 8
- THE MILL
- 1st time: move to the record if desired
- Identify tonal syllables of 'clip clap'
  (1st time = so-mi; 2nd = so-mi; last line = so-mi; mi-re; re-do)
A. SPEECH RHYTHM (Enhanced)
- TWO LITTLE Dickey BIRDS
  SITTING ON A WALL
  ONE NAMED PETER
  ONE NAMED PAUL
- FLY AWAY PETER
- FLY AWAY PAUL
- COME BACK PETER
- COME BACK PAUL
- Select instruments for 1st 2 lines
  instrument for Peter and one for Paul
- Play beat on sticks, enhance with others

B. RECORD
- S-B Record II, Side 2, Band 4
- TRAIN IS A-COMIN'
- Have student select ostinato &
  have group play it on sticks w/
  recording. Try other groups.
A. MELODY ECHO
- Echo syllables on minor patterns
- Any combination of la-do-mi
- Teacher sing, group sings
- Play autoharp chords with them

B. MINOR SOUNDS
- FUNNY PUPPY
- Use autoharp chords
- Stress the minor sound

C. RECORD
S - B Record V, Side 1, Band 5
- WHO BUILT THE ARK
- listen & hold up 2, 3, 4 fingers when song says (teacher do this & child will copy without further instruction)
- Sing when children do on record
A. SPEECH RHYTHM (Enhanced)
   - TWO LITTLE DICKY BIRDS
     SITTING ON A WALL
     ONE NAMED PETER
     ONE NAMED PAUL
     FLY AWAY PETER
     FLY AWAY PAUL
     COME BACK PETER
     COME BACK PAUL
   - Teacher start, let students join in
   - Do whole verse silently, all tap
     rhythm on rhythm sticks

B. RECORD
   - S-B Record I Side 1, Band 8
     THE MILL
     a) play for review.
     b) use rhythm sticks on 'clip clap'
     c) step beat & r. sticks on 'clip—'
A. ECHO GAME
   - Minor patterns from l-d-m
   - Use autoharp chords with them
   - Style: Teacher to group (syllables)

B. MINOR SOUND
   - FUNNY PUPPY
   - Review
   - Introduce minor tuning sounds l-d-m
   - Contrast their sound with major
   - Introduce terms major & minor
A. ECHO GAME
   - Duple patterns (1, 2; 1 ne, 2; 1 ne, 2 ne; 1, 2 ne)
   - Style: Teacher hand drum to group (syllables)

B. RECORD
   - S-B Record 1, Side 1, Band 8
   - THE MILL
     - play for review (clap hands on 'clip clap' part)
     - Play beat on tambourine and all step
A. ECHO GAME
- Minor patterns based on I-d-m
- Use autoharp chords
- Style: Teacher sing to Group sing
- Alternate style: Tchr to Individual

B. MINOR SONG
- FUNNY PUPPY
  - Review for memory
  - Use tuning sounds I-d-m
  - Contrast their sound with major
  - If you are able, sing song to class
    In major to demonstrate the difference
A. SPEECH RHYTHM

- FIVE LITTLE SQUIRRELS SAT IN A TREE
  THE FIRST ONE SAID "WHAT DO WE SEE?"
  THE SECOND ONE SAID "A MAN WITH A GUN"
  THE THIRD ONE SAID "WE'D BETTER RUN"
  THE FOURTH ONE SAID "LETS HIDE IN THE SHADE"
  THE FIFTH ONE SAID "I'M NOT AFRAID"
  THEN BANG, BANG WENT THE GUN,
  AND THE FIVE SQUIRRELS
  AWAY THEY DID RUN

- Teach snap fingers to beat while teaching this

B. RECORD

- S-B Record 1, Side 2, Band 8
- THE CARPENTER
  - Assign a different instrument to each action
  - Have player perform rhythm of that line of the song
A. GAME SONG

- HELICOPTER
  Do with actions for review
  Try to get class to identify d-m-s in first line

B. RECORD

- WHO BUILT THE ARK
  Class sings on refrain
  Pictures or drawings of animals in pairs would help motivate song
A. SPEECH RHYTHM
FIVE LITTLE SQUIRRELS SAT IN A TREE
THE FIRST ONE SAID "WHAT DO WE SEE?"
THE SECOND ONE SAID "A MAN WITH A GUN"
THE THIRD ONE SAID "WE'D BETTER RUN"
THE FOURTH ONE SAID "LET'S HIDE IN THE SHADE"
THE FIFTH ONE SAID "I'M NOT AFRAID"
THEN BANG, BANG WENT THE GUN
AND THE FIVE SQUIRRELS WENT AWAY THEY DID RUN
Select some students to play beat on rhythm sticks

B. RECORD
- S-B Record V, Side 2, Band 6
- MARCHING TO PRETORIA
March to beat
Let someone be leader
Let someone also be the drummer (hand drum)
A. ECHO GAME
   - Any major pattern from d-r-m-s
   - Teacher sings; students syllables

B. ECHO SONG
   - I'M A PERSON
   - HEY BETTY MARTIN
   - Sing for review
   - Stress voice quality & in tune singing
SPEECH RHYTHM (Enhanced)

- Select child to play each instrument
- Players play rhythm of speech instead of speaking it

FIVE LITTLE SQUIRRELS

SAT IN A TREE. (Each plays his instrument in turn)

THE FIRST ONE SAID "WHAT DO WE SEE?"
(#1 plays rhythm of words in quotes)

THE SECOND ONE SAID "A MAN WITH A GUN"
(#2 plays rhythm of words in quotes)

THE THIRD ONE SAID "WE'D BETTER RUN"
(#3 plays rhythm of words in quotes)

THE FOURTH ONE SAID "LET'S HIDE IN THE SHADE"
(#4 plays rhythm of words in quotes)

THE FIFTH ONE SAID "I'M NOT AFRAID"
(#5 plays rhythm of words in quotes)

THEN BANG, BANG (2 drum beats) WENT THE GUN AND THE FIVE LITTLE SQUIRRELS AWAY THEY DID RUN (all play together)

--Instruments #1 triangle; #2 woodblock; #3 tambourine; #4 rhythm sticks; #5 autoharp (child can play any chord) & drum for gun
A. MELODY ECHO

- Any combination of major patterns
- Use songflute and children echo syl.

B. IN TUNE SINGING

- HEY BETTY MARTIN
- I'M A PERSON
- I'M GONNA PAT MY HEAD
- Use tuning sounds on all
- Stress good sounds
- Work with any individuals having trouble with tunes
A. GAME SONG
   - HELICOPTER
     Do with actions

B. GAME SONG
   - ELEPHANT SONG
     Do with actions

C. LISTENING LESSON
   - Play portion of loan record
A. ECHO GAME

- Have some child create the pattern
- Others echo it

B. IN TUNE

- LITTLE BIRD
- Sing for review
- Stress voice quality and in tune

C. MINOR SONG

- FUNNY PUPPY
- Stress that it sounds different from
Little Bird.
A. GAME SONG
   - MY LITTLE THUMBS
   - Do 2 or 3 verses only with actions

B. LISTENING
   - Play portion of Loan record
M - 2'6

A. GAME SONG
   - I'M GONNA PAT MY HEAD
   - Do actions

B. RECORD
   - S-B Record 1, Side 2, Band 9
   - OLD HOUSE
   - Listen for the story
   - 2nd time, students sing with children's voices on record if they can
A. RHYTHM ECHO
   - Teacher to group
   - Alternate rhythms in hands, paschen, feet
   - Any duple pattern

B. RECORD
   - S-B Record 1, Side 2, Band 8
   - THE CARPENTER
   - Sing with record
   - Use different instrument for each tool

C. GAME SONG
   - MY LITTLE THUMBS
     Do as many verses as they are able
A. ECHO GAMES
   - Mix major and minor (alternate)
   - Teacher syllables to group syllables
   - Teacher songflute to group syllables

B. SINGING IN TUNE
   - LITTLE BIRD
   - Review for words
   - Encourage solo singing if possible

C. RECORD
   - OLD HOUSE Section B, Record 1, Side 2, Band 9
   - Put actions to verses
A. RHYTHM ECHO GAME
   - Any dupl e pattern used before
   - Style: Teacher (drum) to Group (clap)
   - Also try one student to group (if ready)

B. BEAT
   - HELICOPTER
     - Perform up to three times
     - Select two or three students to provide beat on different instruments

C. BEAT
   - HOP OLD SQUIRREL
     - Do twice for teaching
     - Select 2 or 3 to provide beat as above
A. ECHO GAME
- Any major & minor 3-note pattern
- Teacher to individual students
  AUTOHARP CHORDS
  Both use voices

B. REVIEW SONG
- SANDY LAND
- With autoharp, change words if desired
- Put actions with changed words
  2nd time through
- Play recorded version, ask if they hear
  any differences (what are they?)
- Sing along with recorded version if desired
- S-B Record 1, Side 1, Band 3
A. RHYTHM ECHO

Teacher to Group use syllables
Pass along game.
Give drum to person at end of line
Whisper syllable pattern to head
of line. Each passes it in
turn to their neighbor. Last
person (with drum) plays pattern
All decide if he did it right.
Change end of line and try again.

B. RECORD

- S-B Record V Side 1, Bands 1, 2, 3.
- Play portion of song (4, 6, 8 beats)
- Group decides how many beats played
- Play all of song if they get it right
A. ECHO MELODIES
- Songflute (tchr) to group (syllables)
- Any d-r-m-s combination of three

B. RESTING TONE
- FUNNY PUPPY
  - Once with autoharp for review
  - Class identify resting tone as La.
- I'M A PERSON
  - Once through for review
  - Class identify resting tone as Do.
  - Mention La is minor, Do is major

C. RECORD
- S-B Record 1, Side 2, Band 8
- THE CARPENTER
  - All stand and perform actions of tools
    as they see fit
A. SPEECH

A BAKED POTATO BURNS THE FINGERS
CAREFUL BECAUSE IT'S HOT!
A BAKED POTATO BURNS THE FINGERS
WATCH OUT! YOU'LL LET IT DROP
LOOK OUT! IT'S IN THE FIRE
LOOK OUT! IT'S ON THE FLOOR
BETTER GO SLOW WITH BAKED POTATOES
TROUBLE IF YOU DO NOT

B. SONG

HOP OLD SQUIRREL

Once for review
Select someone to keep beat (drum)
Perform with drum
Select some to play sticks
Play duple meter (1 ne 2 ne) on sticks
Perform with drum (beat) & sticks (meter)
A. MELODY ECHO GAME
   - Teacher to Group (voices)
   - Autoharp background
   - Minor chords w/ syllables

B. MELODIC DIRECTION & RESTING TONE
   - PAW PAW PATCH
   - Teacher sing once w/autoharp
   - Identify direction and resting tone
   - All sing

C. RECORD
   - S-B Record V, Side 1, Band 6
   - Listen for beat and resting tone
   - Sing along with record second time
   - Repeat as desired
   - BINGO
A. SPEECH

- BAKED POTATO BURNS THE FINGERS
- CAREFUL BECAUSE IT'S HIT!
- A BAKED POTATO BURNS THE FINGERS
- WATCH OUT! YOU'LL LET IT DROP
- LOOK OUT IT'S IN THE FIRE!
- LOOK OUT IT'S ON THE FLOOR
- BETTER GO SLOW WITH BAKED POTATOES
- TROUBLE IF YOU DO NOT

B. BEAT & METER

- HOP OLD SQUIRREL
- Review for words
- All play sticks on beat
- 2nd time: All but one play rhythm of words on sticks, he plays beat on drum
A. ECHO GAME
- Major and minor patterns as desired
- Teacher (songflute) - Group (syllables)

B. INDIVIDUAL SINGING
- PAW PAW PATCH
- Sing once for review - w/ autoharp
- Have one (or two) sing refrain "Where..."
  All join in chorus "Pickin' up paw, paws.
- Repeat as desired with different 'soloists'

C. RECORD
- S-B Record V, Side 2, Band 1
- IL ETAIT UNE BERGERE
- Play for free movement
- If they hesitate, try swinging
A. SPEECH RHYTHM (ENHANCED)

- BAKED POTATO BURNS THE FINGERS,
  CAREFUL BECAUSE IT'S HOT (Triangle)
- A BAKED POTATO BURNS THE FINGERS,
  WATCH OUT YOU'LL LET IT DROP (Drum)
- LOOK OUT IT'S IN THE FIRE (TAMBOURINE)
- LOOK OUT IT'S ON THE FLOOR (W. Blk)
- BETTER GO SLOW WITH BAKED POTATOES
  TROUBLE IF YOU DO NOT (All sound)

- All during this performance have some
  children play a steady beat with rhythm
  sticks.

B. RECORD

- S-B Record V, Side 1, Band 6
- BINGO
  - Play record for review if needed
  - All sing along with record
  - Select some to keep beat on instrs.
A. LISTENING GAME
- Strum a chord on autoharp
- Children guess major or minor.
- Then see if they can find Resting Tone for this chord. (this is hard)
- Make a game of it (eyes shut, stand on major, sit on minor; when you miss you are out of game; see who is left at end of four or five tries)

B. LOUD-SOFT
   LITTLE BIRD
   Select lines to be done loud-soft
   Stress difference

C. ACTIVITY SONG
   GOING ROUND THE MOUNTAIN
   Play as you did in M-13.
   S-8 Record II, Side 2, Band 1
R - 33

A. SPEECH RHYTHM

- GREEN IS THE GRASS
AND THE LEAVES OF TREES
GREEN IS THE SMELL OF
COUNTRY BREEZE
RED IS A SUNSET
BLAZY AND BRIGHT
RED IS A FIRETRUCK
WITH SIREN AND LIGHT
BLUE IS THE SKY
AND BLUE IS THE SEA
BLUE IS A FEELING
WON'T YOU AGREE?
NOW YOU PICK A COLOR
THAT YOU LIKE BEST
AND TELL US IT'S NAME
THEN WE'LL TELL THE REST
- You may wish to do only one color
  at a time.

- 164 -
A. ECHO GAME
   - Echo with voice & autoharp
   - Any of these (use syllables)
     - s-m; s-m-d; d-m-s; l-d-m;
   - If some are able, let them be
     the leader for the group

B. RECORD
   - S-B Record II, Side 1, Band 2
   - ELEPHANT SONG
     - Listen to record once
     - Sing with actions (no record)
     - Sing w/actions with record
A. SPEECH

- Green is the grass, & the leaves of trees
- Green is the smell of a country breeze
- Red is the sunset, blazy and bright
- Red is a firetruck with siren and light
- Blue is the sky and blue is the sea
- Blue is a feeling, won't you agree

Now you pick a color that you like best
And tell us it's name, then we'll tell the rest

Pick a child to select and name his favorite color, then class name those that are left. (Colored pictures would work well)

B. ECHO GAME

- Teacher (drum) and voice to group
- Use syllables and/or children's names
A. COLOR SONG

- I SEE A GIRL (BOY)
- Sing verse about one child
- Ans. with child's name on pitch of last part of song (so-so-do)
- Do again and let class ans. on this pitch this time.
- Repeat as desired

B. REVIEW

- ELEPHANT SONG
- Sing with actions (no accomp.)

C. LISTENING PERIOD

- Loan record portion
A. SPEECH

- Green is the grass & the leaves of trees
- Green is the smell of a country breeze
- Red is the sunset, blazy & bright
- Red is a firetruck with siren and light
- Blue is the sky and blue is the sea
- Blue is a feeling, won't you agree

Now you pick a color that you like best

And tell us it's name, then we'll tell the rest

- Pick a child to select his color from those you have displayed at front.
- Use drum to keep beat, let one child point to colors as rest say speech

B. MOVEMENT

- JIM A-Long JOSIE
  - play this game as a group
  - use walk, march, or other
A. ECHO GAME

- Songflute (tchr) to Group (syllables)
- Use patterns that always end on do or la
- Now play this game

(Blindfold one student; all other students sit on floor any place; stand blindfolded student at one side of room; play a songflute pattern ending on do (major) or la (minor). If do, he moves one step left and one ahead; if la he moves one step right and one ahead. If he does it right he will go across room without running into seated students.

If wrong he will hit one and game is ended.

- Repeat as desired

B. LISTENING PERIOD

- Loan record portion
A. ECHO GAME
- With drum beat accompaniment
- Echo rhythms using children's names
  colors, phrases, syllables.

B. ECHO MEMORY GAME
- Perform a series using clap, paschen,
  stamp, snap.
- See if they can listen and repeat

C. ACTIVITY SONG
- GOING ROUND THE MOUNTAIN
- S-B Record II, Side 2, Band 1
- Play as you did in M-13 & M-32
A. ECHO SONG
   - I SEE A GIRL (BOY)
   - Do song once using name of a child
   - Answer with (so-so-do tune)
   - Repeat as needed
   - Stress in-tune of so-do interval

B. MINOR REVIEW
   - FUNNY PUPPY
   - Be sure to use tuning sounds
   - Class identify this as a minor song

C. RECORD
   - S-B Record II, Side 2, Band 4
   - TRAIN IS A-COMIN'
   - Play for review and clap beat
   - Sing along with record second time
A. ECHO GAME:
- Play rhythm of child's name on drum
- Class guess who's name you played
- Have them chant names as a group
  when they understand game
- Let individual children play a name
  and class answer

B. RECORD
- S-B Record V, Side 2, Band 6
- MARCHING TO PRETORIA
- Have a parade, use flag or baton
  for leader.
- All march to beat of music
- Pick best one for leader, second time
- Repeat as desired
A. ECHO GAME
   - Voice w/autoharp on minor
   - Use 1-d-m; m-d-l, m-d
   - Use syllables so they understand
     the m-d and m-d-l patterns

B. REVIEW
   - FUNNY PUPPY
     - Stress minor sounds
   - I SEE A GIRL
     - Review for memory
     - If possible, get one child to sing
       the song about another.
A. SPEECH RHYTHM (ENHANCED)

- Select instrument for 3 colors

- GREEN IS THE GRASS & THE LEAVES OF TREES (+)
- GREEN IS THE SMELL OF A COUNTRY BREEZE (+)
- RED IS THE SUNSET BLAZY AND BRIGHT (+)
- RED IS A FIRETRUCK WITH SIREN AND LIGHT (+)
- BLUE IS THE SKY AND BLUE IS THE SEA (!)
- BLUE IS A FEELING WON'T YOU AGREE? (!)

- NOW YOU PICK A COLOR THAT YOU LIKE BEST
  (Someone point to one of the students, they sound their instrument)

- AND TELL US IT'S NAME (child speaks)
- AND WE'LL TELL THE REST (sound-name; sound-name)

B. ECHO GAME

- Echo rhythms with clap, paschen, stamp

- Use triple rhythms
A. ECHO GAME
   - Songflute on minor patterns
   - Children ans with syllables

B. RECORD
   - S-B Record 1, Side 2, Band 9
   - OLD HOUSE
   - Group sings on "Tear it down"
   - Tell them that Tear it down is done to 2 different tunes
   - Maybe they can guess syllables
   - 1st, 3rd, 5th are la-lo-do ---
   - 2nd, 4th, 6th are la-la-la
   - Identify that this is a minor song

C. MINOR SONG
   - FUNNY PUPPY
   - Use tuning sounds - autoharp
A. ECHO GAME
- Teacher (tambourine) to group
  (rhythm sticks)
- Triple patterns

B. REVIEW SPEECH
- Do this to snap beat
- TWO LITTLE DICKY BIRDS
  SITTING ON A WALL
  ONE NAMED PETER
  ONE NAMED PAUL
  FLY AWAY PETER
  FLY AWAY PAUL
  COME BACK PETER
  COME BACK PAUL
- Repeat using finger play actions
A.  ECHO GAME
   - Teacher (voice) to group (voice)
   - Use syllables and/or names
   - Include minor, m-d and m-d-l.

B.  MAJOR - MINOR
   - Review FUNNY PUPPY
   - Identify as a minor song
   - Use tuning sounds

C.  RECORD
   - 5-8 Record V, Side 1, Band 5
   - WHO BUILT THE ARK
   - Play 1st for memory
   - Play 2nd—children sing on children’s
     parts of record, listen to soloist
   - Identify this as a major song not like
     Funny Puppy

- 177 -
A. REVIEW SPEECH

- Finger play + 1 child w/tambourine to keep beat

  TWO LITTLE DICEY BIRDS SITTING ON A WALL
  ONE NAMED PETER, ONE NAMED PAUL
  FLY AWAY PETER, FLY AWAY PAUL
  COME BACK PETER, COME BACK PAUL

- Use other instruments and enhance for a second time through

B. ECHO GAME

- Pass out woodblock, tambourine, sticks, drum, triangle to 5 students.

- Use triple patterns.

- Teacher - Group (clap) - woodblock - group - tambourine - group - stick - group - drum - triangle - group.

- Repeat with different pattern

- Point to players to help keep it going
M - 40

A. RECORD
   - S-B Record II, Side 2, Band 1
   - GOING ROUND THE MOUNTAIN
   - Play game as before with poses

B. REVIEW SONGS
   - HEY BETTY MARTIN
   - HOP OLD SQUIRREL
   - FOO FOO RABBIT
   - Identify as major and duple
   - Enhance with beat (step or clap)
A. SPEECH RHYTHM

(tongue clicks)

Time marches on, time marches on

Don't waste time.

(snap)

You may delay but time will not tick tock, tick tock

Identify this speech as a triple meter

Repeat if needed

B. RECORD

S-8 Record II, Side 2, Band 6

OVER THE RIVER & THROUGH THE WOODS

Listen once for the story (talk about it)

Listen again for meter - identify as triple
A. ECHO GAME
   - Song flute (echo) to group (syllables)
   - Any major or minor pattern used before

B. MELODIC DIRECTION
   - LOOK AROUND THE ROOM
   - Keep beat w/tambourine
   - Sing about particular child
   - Repeat for different children
**A. ECHO GAME**

- Any triple pattern
- Teacher to Group
- Alternate clap, paschen, stamp

**B. RECORD**

- S-B Record II, Side 1, Band 4
- **GRISETTE THE SQUIRREL**
- Listen to identify meter (it's triple)
- S-B Record II, Side 2, Band 6
- **OVER THE RIVER**
- Ask if the meter sounds same as in previous recording (yes)
A. ECHO GAME
   - Songflute to group (syllables)
   - Any major or minor pattern used before

B. DUPLÉ SONG
   - LOOK AROUND THE ROOM
   - Stress major-duple feeling
   - Do 2-3 times with dif children
   - Let one child sing to another if ready

C. RECORD
   - OVER THE RIVER AND THROUGH THE WOODS
   - Review for triple meter
   - Sing along with record
A. SPEECH REVIEW

Perform as in R-24 (with instruments)

FIVE LITTLE SQUIRRELS SAT IN A TREE
THE FIRST ONE SAID, "WHAT DO WE SEE?"
THE SECOND ONE SAID, "A MAN WITH A GUN"
THE THIRD ONE SAID, "WE'D BETTER RUN"
THE FOURTH ONE SAID, "LET'S HIDE IN THE SHADE."
THE FIFTH ONE SAID, "I'M NOT AFRAID"
THEN BANG, BANG, WENT THE GUN
AND THE FIVE LITTLE SQUIRRELS AWAY THEY DID RUN

B. TRIPLE FEELING

- RAINING AGAIN TODAY!
- Identify as triple and am minor
- Repeat for learning
A. ECHO GAME
- Any major or minor pattern
- Teacher sing loo syllable
- One student respond with syllables
- If he gets right, he sings one with loo
- Some other child answers with syllables

B. MELODY REVIEW
- LOOK AROUND THE ROOM
- Review for melodic direction, in-tune
- PAW PAW PATCH
- Review for in-tune singing
- Help with out-of-tune singers
- Encourage individual singing
A. SPEECH REVIEW

- FIVE LITTLE SQUIRRELS SITTING IN A TREE
  THE FIRST ONE SAID, "WHAT DO WE SEE?"
  THE SECOND ONE SAID, "A MAN WITH A GUN!"
  THE THIRD ONE SAID, "WE'D BETTER RUN!
  THE FOURTH ONE SAID, "LET'S HIDE IN THE SHADE"
  THE FIFTH ONE SAID, "I'M NOT AFRAID"
  THEN BANG, BANG WENT THE GUN.

AND THE FIVE LITTLE SQUIRRELS
AWAY THEY DID RUN!

B. TRIPLE FEELING

- RAINING AGAIN TODAY!
  identify as triple \& minor
  Relate the words to weather outside
  (Is it raining here today?)
A. ECHO GAME
   - Call names of children & objects
   - Use minor thirds and s-m-d + m-d-l
   - After children repeat, ask if was major or minor

B. PITCH CORRECTION & INDIVIDUAL WORK
   - LOOK AROUND THE ROOM
     - Stress in-tune + encourage solo singing
     - HOP OLD SQUIRREL
     - Stress in-tune, etc.

C. MINOR FEELING
   - BAKER MAN
     - Use minor tuning sounds
     - Identify song as minor
     - "What other minor song have we sung?"
A. ECHO GAME
- Any triple pattern
- Teacher (clap) Group (clap)

B. TRIPLE SONG
- RAINING AGAIN TODAY!
- Use woodblock on beat
- Use tambourine on beat
- Use rhythm sticks on triple ostinato

C. TRIPLE GAME SONG
- COME ON & JOIN IN THE GAME
- Clap on rest in this song
- Identify as triple song
M - 45

A. ECHO GAMES
   - Call children's names, animals, objects
   - Have them identify major or minor
   - Let those who can call some for class

B. MINOR SOUND
   - BAKER MAN
     - Stress the minor sound
     - Substitute other words for Bakerman
       (Lumberjack, Farmer man, Truck driver)

C. REVIEW SONG
   - HOP OLD SQUIRREL
     - Contrast this major with minor above
     - Stress in-tune
A. ECHO GAME
- Mix stamp, paschen, clap, snap
- Teacher to group
- Duple patterns

B. TRIPLE METER
- **COME ON A JOIN IN THE GAME**
- Use triple ostinato (one instr on beat another on meter)
- Identify as triple meter.

C. RECORD
- S-B Record II, Side 1, Band 4
- **GRISETTE THE SQUIRREL**
  - Listen for triple sound
  - Clap beat along with recording
A. ECHO GAME
   - Autoharp, any minor pattern
   - Teacher & students use syllables

B. MINOR SONG
   - BAKER MAN
   - Sing once for review

C. LISTENING LESSON
   - Play portion of loan recording
A. ECHO GAMES
   - Teacher (drum) Children (sticks)
   - Use triple patterns
   - Do this way: (tchr on drum; group echo on sticks; tchr syllables; Grp syllables)
   - Repeat for other patterns

B. REVIEW
   - COME ON AND JOIN IN THE GAME
   - Review for memory & meter

C. GAME SONG
   - S-B Record II, Side 1, Band 7
   - GO-GO
   - Review what they are to do before playing
     (Turn out toe; squat low; hump & clump)
M = 47

A. REVIEW SONGS
   - HEY BETTY MARTIN
   - HOP OLD SQUIRREL
   - Identify as major sounds
   - Stress in-tune singing

B. LISTENING PERIOD
   - Play second portion of loan record
A. SPEECH REVIEW
   - Review without instruments
   - Clap or snap beat
   - **OLD JACK SPRATT ONCE HAD A PIG.**
     - IT WASN'T VERY LITTLE AND IT WASN'T VERY BIG
     - IT WASN'T VERY SKINNY AND IT WASN'T VERY FAT.
     - "IT'S A GOOD PIG TO GRUNT" SAID OLD JACK SPRATT

B. BEAT REVIEW
   - **FUNNY PUPPY**
   - **BAKER MAN**
   - Let children strum autoharp on beat
     (while teacher fingers chords)

C. GAME SONG
   - S-B Record II, Side 2, Band 1
   - **GOING AROUND THE MOUNTAIN**
   - Play game as before
A. ECHO GAME
- Call children's names, colors, days of week, animals
- Use minor thirds and l-d-m or m-d-l
- Mix in s-m-d and/or d-m-s

B. PITCH ACCURACY
- COME ON AND JOIN IN THE GAME
- Use tuning sounds
- Stress in-tune singing, posture, etc.
A. SPEECH REVIEW

- OLD JACK SPRATT

- ONCE HAD A PIG
- IT WASN'T VERY LITTLE
- AND IT WASN'T VERY BIG
- IT WASN'T VERY SKINNY
- AND IT WASN'T VERY FAT

- "IT'S A GOOD PIG TO GRUNT"

- SAID OLD JACK SPRATT

- Use instrument(s) for beat.

B. TWO DUPLE PATTERNS AT SAME TIME

- Give two different sounding instrs.
- to two students

- Give each a pattern (1, 2 ne and 1 ne, 2)

- Play as background for these songs

- FUNNY PUPPY & BAKER MAN
A. DIALOGUE SONGS
- Ask question in short melody
- Have children answer with their own tune
- "Is it raining today?"
- "Where is Melinda?"
- "Do chickens lay eggs?"

B. MINOR SONG
- LIONS, LIONS
- Use minor tuning sounds
- Talk about Lions

C. RECORD
- S-B Record II, Side 1, Band 7
- LONE STAR TRAIL
  - Just listen and ask if they can re-tell the story

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00205
A. SPEECH RHYTHM REVIEW

- BAKED POTATO BURNS THE FINGERS
  CAREFUL BECAUSE IT'S HOT! ...
- A BAKED POTATO BURNS THE FINGERS
  WATCH OUT, YOU'LL LET IT DROP
  LOOK OUT IT'S IN THE FIRE
  LOOK OUT IT'S ON THE FLOOR
  BETTER GO SLOW WITH BAKED POTATOES
  TROUBLE IF YOU DO NOT!
  Step beat while saying this

B. RECORD

- S-B Record V, Side 1, Band 7
  LONE STAR TRAIL
  Rhythm stick accompaniment to record
  Let them join singing if they can.
A. ECHO GAMES
- Any major patterns
- Use autoharp chords
- Style: Teacher (voice) Group (voice)
- Both use syllables

B. MINOR SONG REVIEW
- BAKER MAN
  - Stress minor feeling, use tuning sounds
  - Substitute other words for Bakerman
  - Repeat two or three times
- LIONS, LIONS
  - Stress minor feeling as above
  - Teach "Big Brown Bear" verse
A. SPEECH RHYTHM REVIEW
   - enhance with instruments
   BAKED POTATO BURNS THE FINGERS
   CAREFUL BECAUSE IT'S HOT! (triangle)
   A BAKED POTATO BURNS THE FINGERS
   WATCH OUT! YOU'LL LET IT DROP! (drum)
   LOOK OUT, IT'S IN THE FIRE! (tambourine)
   LOOK OUT, IT'S ON THE FLOOR (woodblock)
   BETTER GO SLOW WITH BAKED POTATOES
   TROUBLE IF YOU DO NOT (All instr. sound)

B. RHYTHM GAME
   - COME ON JOIN IN THE GAME
   - Perform as song suggests
A. ECHO GAMES
- Any minor pattern
- Use songflute, children syllables

B. MINOR SONG
- LIONS, LIONS
- Stress minor feeling; use tuning sounds
- Sing both verses (Lions & Bears)

C. RECORD
- S-B Record V, Side 1, Band 8
- GOODBYE OLD PAINT
- Listen for story
- See if they can re-tell story
A. SPEECH REVIEW

- Enhance with instruments at ends of lines

GREEN IS THE GRASS AND THE LEAVES OF TREES (triangle)

GREEN IS THE SMELL OF A COUNTRY BREEZE (tambourine)

RED IS THE SUNSET BLAZY AND BRIGHT (drum)

RED IS A FIRETRUCK WITH SIREN AND LIGHT (triangle)

BLUE IS THE SKY AND BLUE IS THE SEA (tambourine)

BLUE IS A FEELING WON'T YOU AGREE? (drum)

NOW YOU PICK A COLOR THAT YOU LIKE BEST (point to one)

AND TELL US IT'S NAME - (......)

AND WE'LL TELL THE REST (..........)

B. BEAT REVIEW

- I'M GONNA PAT MY OLD HEAD

- Review for memory

- Teacher finger chords, pick children to strum on beat

- Repeat as desired

- 202 -
A. BLINDFOLD GAME

- Blindfold one student, others sit anywhere on floor
- Play major or minor pattern on song flute
- Blindfold student moves left on minor and right on major plus one step forward each time. If he is right he gets through, if he is wrong he will hit somebody sitting on floor

B. RECORD

- S-B Record V, Side 1, Band 8
- GOODBYE OLD PAINT
- Once more listen for story
- Talk about cowboys or story
A. SPEECH REVIEW

GREEN IS THE GRASS AND THE LEAVES OF TREES
GREEN IS THE SMELL OF A COUNTRY BREEZE
RED IS THE SUNSET, BLAZY AND BRIGHT
RED IS THE FIRETRUCK WITH SIREN AND LIGHT
BLUE IS THE SKY AND BLUE IS THE SEA
BLUE IS A FEELING, WON'T YOU AGREE

NOW YOU PICK A COLOR THAT YOU LIKE BEST
AND TELL US IT'S NAME, AND WE'LL TELL THE REST.

Identify this as a triple meter.

B. REVIEW SONGS'

- LITTLE BIRD
- SANDY LAND

Review these for memory.
Select student to strum while you finger chords on autoharp (beat practice).
M = 53

A. MELODY MEMORY GAME
- Teacher plays one line of past songs
- Use songflute, play enough of song for children to recognize
- They are to guess what song it is

B. PITCH PRACTICE
- LIONS, LIONS
- Identify as minor sound
- Use tuning sounds

C. RECORD
- S-B Record
- Copland BILLY THE KID
- Listen to as much as they want to
- Ask what songs they heard in the piece
  (Lone Star Trail)
A. SPEECH RHYTHM
   - Triple feeling
   BELL HORSES BELL HORSES
   WHAT TIME OF DAY
   ONE O'CLOCK, TWO O'CLOCK
   THREE AND AWAY
   ONE TO GET READY
   ONE TO PREPARE
   GOOD LUCK TO THE RIDER
   AND AWAY GOES THE MARE

B. INTRODUCE READING
   - Echo 1, 2 ne 1, 2 ne
   - Play on sticks
   - Show flash card how 1 2 ne looks
   - FUNNY PUPPY
   - Display card and play ostinato
      as you sing the song
A. NEW SONG

- **LITTLE WHITE DUCK**
- Use one, or two, verses only
- Identify as major and duple

B. LISTENING PERIOD

- Portion one of Loan record
A. SPEECH RHYTHM

BELL HORSES, BELL HORSES
WHAT TIME OF DAY
ONE O'CLOCK, TWO O'CLOCK
THREE AND AWAY
ONE TO GET READY
ONE TO PREPARE
GOOD LUCK TO THE RIDER
AND AWAY GOES THE MARE

B. READING

- OLD MAC DONALD
- Review sound of 1, 2 ne.
- Display card
- Play it as ostinato with song

C. RECORD

- S-B Record II, Side 1, Band 7
- GOGO Play game of the words

-208-

00216
M = 55

A. REVIEW

- Little White Duck
- Add more verses if they are ready
- Stress major-duple

B. LISTENING PERIOD

- Play portion two of loan record
A. SPEECH RHYTHM

- BELL HORSES, BELL HORSES
- WHAT TIME OF DAY
- ONE O’CLOCK, TWO O’CLOCK
- THREE AND ‘AWAY
- ONE TO GET READY
- ONE TO PREPARE
- GOOD LUCK TO THE RIDER
- AND ‘AWAY GOES THE MARE

B. READING

- Review sound of Flashcard (1, 2, ne)
- Introduce flashcard (1 ne, 2)
- Perform each with sticks
- LITTLE WHITE DUCK
- Sing with rhythm stick background on flashcard 1 followed by 2. (Use as rhythm ostinato)
A. ECHO GAMES
   - Play major or minor patterns on song-flute
   - Children guess which you play

B. MELODIC OSTINATO
   - Teach chant "Hop Old Squirrel"
   - on tones d-m-d-sh
   - Half class sing this while other half sings HOP OLD SQUIRREL song

C. REVIEW
   - LITTLE WHITE DUCK
     - Review for memory
   - Add more verses
   - Stress in-tune singing

D. MINOR SONG
   - LOTS OF WORMS
     - Do two verses only
A. SPEECH RHYTHM

WITH A SPADE, A RAKE, AND HOE
TO MY GARDEN I WILL GO
IT IS TIME FOR ME TO SOW
WHATEVER I LIKE BEST

--- Ethel Tewksbury

B. RHYTHM OSTINATO

- LOTS OF WORMS
  - Display two flashcards as before
  - Review their sound
  - Place in 1, 2 or 2, 1 order and play on
    sticks as background to song

C. RECORD

- S-B Record V, Side 2, Band 3
- LITTLE BOY OF THE SHEEP
  - Display picture of Flute
  - Listen for sound on record (1st thing
    you hear) Notice when flute comes
    in again later in song

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(0220)
A. ECHO GAME
   - Songflute on major & minor patterns
   - Children answer with syllables

B. MAJOR SONG REVIEW
   - LITTLE WHITE DUCK
   - Use tuning sounds
   - Sing all verses if possible

C. MINOR SONG REVIEW
   - LIONS, LIONS
   - Use tuning sounds
   - Sing Bear verse also
A. SPEECH RHYTHM

- WITH A SPADE, A RAKE, AND HOE
- TO MY GARDEN I WILL GO
- IT IS TIME FOR ME TO SOW
- WHATEVER I LIKE BEST

- All say verse with teacher snapping fingers on beat:
  - Second time play rhythm of words on rhythm sticks but don't say them.
  - Third time play rhythm sticks and say words

B. RHYTHM OSTINATO

- Use one flashcard, play this as a background ostinato (1 student)

- LITTLE RED CABOOSE

- After they know this, speed up last
A. **ECHO GAME**

- **AUTOHARP CHORDS** - minor patterns
- **Style:** Teacher sing, group sing
- Use syllables and/or phrases

B. **RECORD**

- **S-B Record II, Side 2, Band 6**
- OVER THE RIVER AND THROUGH THE WOODS
- Display poster of Horn
- First instrument you hear is horn, listen for it later in record
A. SPEECH RHYTHM

WITH A SPADE, A RAKE AND HOE
TO MY GARDEN I WILL GO
IT IS TIME FOR ME TO SOW
WHATSOEVER I LIKE BEST

- Let one child play beat on drum
- Let another play duple meter on sticks

B. DICTATION

- Have children write 1 2, n.e., then
  have them write 1 n.e. 2 (Use line notation = \( \text{\textbullet} \ \text{\textbullet} \) & \( \text{\textbullet} \ \text{\textbullet} \)).

C. RECORD

- S-B Record II, Side 2, Band 1
- GOING ROUND THE MOUNTAIN
- Play the game as before
A. ECHO GAME
   - Songflute to group (syllables)
   - Any minor pattern from i-d-r-m
B. PITCH ACCURACY
   - LIONS, LIONS
   - Stress tuning sounds, in-tune
   - LITTLE RED CABOODSE
   - Review for memory
A. SPEECH

THE PINE TREE'S SONG
SO SWEETLY SANG
UPON THE BREEZY HILL
HAS HUSHED IT'S MUSIC
STRANGE AND WILD
FOR ALL THE WINDS ARE STILL

---Eleanor Smith, Congdon Music Primer

B. DICTATION

- Have children write 1 2 ne & 1 ne 2
- Now introduce third flashcard 1 ne 2 ne
- Let them copy it

C. USE NEW RHYTHM (1 ne 2 ne)

- Half children play on rhythm sticks
- Other half sing song (1 play beat, triangle)
- LITTLE RED CABOOSE
M = 60.

A. ECHO GAME
   - Autoharp, teacher sing to group sing
   - Any major pattern but especially m - r - d and d - r - m

B. REVIEW MINOR SONG
   - BAKER MAN
   - Use minor tuning sounds
   - Find resting tone and stress in-tune

C. REVIEW MINOR SONG #2
   - LOTS OF WORMS
   - Sing all verses
   - Use Tambourine for beat
A. SPEECH
- THE PINE TREE'S SONG
  SO SWEETLY SANG
  UPON THE BREEZY HILL
  HAS HUSHED IT'S MUSIC
  STRANGE AND WILD
  FOR ALL THE WINDS ARE STILL

B. DICTATION
- "All the winds are still"
- SAY THE RHYTHM SYLLABLES (ECHO)
  (1 ne, 2 ne, 1 = )
- CHILDREN WRITE W/LINE NOTATION
  ( " )

C. FLASHCARD REVIEW
- Set up all three in a row (chant)
- Change the order (chant)....etc.
A. ECHO GAME
   - With autoharp; teacher to group
   - Echo major patterns using syllables
   - Include d-r-m and m-r-d in set

B. REVIEW MINOR SONG
   - LOTS OF WORMS
   - Clap on 'ne' part of meter; use tambourine on beat.
   - Identify the minor sound

C. REVIEW MAJOR SONG
   - LITTLE RED CABOOSE
   - Put rhythm ostinato with it (1 ne, 2 ne)
A. ECHO GAME
   - Use hand drum for beat
   - Any duple or triple patterns

B. FLASHCARD REVIEW
   - Set up all three and read w/syllables
   - PLAY ON Rhythm Sticks
   - Let one child write one from memory

   - PAW PAW PATCH
     Use one or two as background
A. REVIEW MAJOR SONG
   - LITTLE WHITE DUCK
     - All verses
     - Add tambourine for beat

B. LISTENING PERIOD
   - 1st portion of loan record
A. ECHO & FLASHCARD REVIEW
   - Echo any duple pattern
   - When one is done that is on the card, set up the card and read
   - Put cards away and echo more
   - Write all three patterns

B. PLAYING FROM CARDS
   - "I SEE A GIRL"
   - Try different combinations of cards as background to this song
   - Ask children which they like best
A. REVIEW MINOR SONGS

- FUNNY PUPPY
- BAKER MAN

Review for memory
Identify minor sounds

B. LISTENING PERIOD

2nd portion of loan record
A. SPEECH
- BIG CLOCKS TICKING SLOWLY
  \begin{align*}
  \text{\textit{Tick tock}} \quad \text{\textit{tick tock}} \quad \text{\textit{tick tock}}
  \end{align*}
- SMALL CLOCKS TICKING FASTER
  \begin{align*}
  \text{\textit{Tick-a tock-a tick-a tock-a}}
  \end{align*}
- WATCHES FASTER FASTER
  \begin{align*}
  \text{\textit{Tick-a tick-a tick-a tick-a tick-a tock}}
  \end{align*}
- Accompany this speech with woodblock

B. RHYTHM ECHO GAME
- Any two beat duplet pattern
- Variety of \textit{clap}, \textit{pat-chen}, \textit{stamp}, \textit{snap}

C. BEAT REVIEW
- \textbf{FOO FOO RABBIT}
  - Sing for review
  - Sing "silently" clap on 'bash'

- 226 -
A. RECORD

- S-B Record II Side 2, Band 8
- AMERICA THE BEAUTIFUL
  First, display flute picture
  Ask if they remember sound
  Play record 9, ask them to
  raise hand when they first
  hear it (It is after 1st complete
  verse on the instrumental part)

B. ECHO GAME

- Songflute on any major or minor
- Children echo back with syllables

C. REVIEW MINOR

- LOTS OF WORMS
- LIONS, LIONS
- W/autoharp
A. SPEECH

- BIG CLOCKS TICKING SLOWLY
  TICK TOCK TICK TOCK
SMALL CLOCKS TICKING FASTER
  TICK-A TOCK-A TICK-A TOCK-A
WATCH ES FASTER FASTER
  TICK-A TICK-A TICK-A TICK-A TICK-A TOCK

- Let one child accompany on woodblock

B. TRIPLE/METER

COME ON AND JOIN IN THE GAME

= Review for memory

- Sing second time w/instruments
  (triple ostinato)

- 228 -
A. ECHO GAME
   - Song flute to group (syllables)
   - Any minor pattern from l-d-r-m

B. ACCURATE SINGING
   - LITTLE RED CABOOSE
   - Use rhythm instrument accompaniment
   - Teacher play autoharp

C. RECORD
   - S-B Record II, Side 1, Band 7
   - GOGO
   - Movement as per words of song
A. SPEECH REVIEW

- TWO LITTLE Dickey BIRDS SITTING ON A WALL
ONE NAMED PETER, ONE NAMED PAUL
FLY AWAY PETER, FLY AWAY PAUL
COME BACK PETER, COME BACK PAUL
- Accompany with tambourine on beat
- Second time, play rhythm of words on rhythm sticks.
- Play first line again, say it w/syllables
- Let one child write it (is he right?)

B. TRIPLE METER

- COME ON & JOIN IN THE GAME
- Pick children to play triple meter on instruments, rest sing
A. ECHO GAME
- Autoharp chords/use syllables
- Teacher to group
- Major patterns

B. REVIEW ACTION SONG
- ELEPHANT SONG
- Review for memory
- Dō with actions

C. MOVEMENT
- Record V, Side 2, Band 6
- MARCHING TO PRETORIA
- Display picture of Clarinet
- Listen for it (esp. during chorus)
- March to recording
A. SPEECH REVIEW

- OLD JACK SPRATT ONCE HAD A PIG
  IT WASN'T VERY LITTLE AND IT WASN'T VERY BIG
  IT WASN'T VERY SKINNY AND IT WASN'T VERY FAT
  "IT'S A GOOD PIG TO GRUNT" said OLD JACK SPRATT
- Accompany with beat of hand drum
- Repeat line 1 (Old Jack Spratt once had a pig" Say it with syllables and hand clapping
- Write it (either all or pick one child)

B. Duple Rhythm

- MUFFIN MAN
- Teach song first
- Add rhythm ostinato (pick one of the cards and have a child play it as background — don't tell him how it should sound)
A. ECHO GAME
- Autoharp & syllables (voices)
- Teacher to group
- Any minor pattern (l-d-i-m)

B. REVIEW MAJOR
- LITTLE WHITE DUCK
- All verses
- Encourage solo singing on some verses

C. RECORD
- S-B Record II, Side 1, Band 7
- GOGO
- Display picture of drum
- Play record, listen for drum
- Do actions second time
A. SPEECH REVIEW

- FIVE LITTLE SQUIRRELS SAT IN A TREE
  THE FIRST ONE SAID "WHAT DO WE SEE?"
  THE SECOND ONE SAID, "A MAN WITH A GUN."
  THE THIRD ONE SAID, "WE'LL BETTER RUN"
  THE FOURTH ONE SAID, "LET'S HIDE IN THE SHADE"
  THE FIFTH ONE SAID, "I'M NOT AFRAID"
  THEN BANG, BANG, WENT THE GUN,
  AND THE FIVE LITTLE SQUIRRELS, AWAY THEY DID RUN
- Accompany with rhythm instr on beat
- Repeat "Five little squirrels"
- Say with syllables and clapping
- Let group write that pattern

B. RHYTHM, READING

- MUFFIN MAN
- Lay out flashcards, one student picks one
- He then picks instrument and plays pattern
  while class sings this song (autoharp)
A. ECHO GAME
- Songflute to group (syllables)
- Any minor pattern
- Start with group echo then do a few with individual students

B. MINOR REVIEW
- LIONS, LIONS
- Use both verses
- Stress in-tune and minor sound

C. RECORD
- S-B Record V, Side 2, Band 5
- ON A MONDAY MORNING
  - Listen for story (Monday=sowed our seed; Tuesday=mowed our hay; Wednesday=dried our hay; Thursday=raked our hay; Friday=hauled our hay; Saturday=sold our hay; Sunday bowed our heads)
  - Note: Tatoosh is Polish for Father

- 235 -
A. SPEECH RHYTHM

(tongue clicks):

\[\text{Time marches on, Time marches on}\]

\[\text{Don't waste time, Don't waste time}\]

\[\text{(snap) X (snap) X (snap) X (snap)}\]

You may delay but time will not tick tock tock tock

- Use woodblock on beat
- Do once for review
- Stress that this is triple

B. RHYTHM READING

- BAKER MAN

Select someone to play one of flashcard patterns as a background for this song
A. ECHO GAME
- Song flute/group syllables
- Any major or minor pattern

B. IN-TUNE SINGING
- COME ON & JOIN IN THE GAME
- Stress in-tune, triple feeling

C. RECORD
- S-B Record V, Side 2, Band 5
- ON A MONDAY MORNING
- Review story before playing
- Act out verses (sow, rake, etc)
- Might also recognize triple meter,
A. SPEECH RHYTHM
(tongue clicks)

\[
\text{\textbf{Time marches on, Time marches on}}
\]

\[
\text{Don't waste time, Don't waste time -}
\]

\[
\text{(snap) X (snap) X (snap)}
\]

\[
\text{You may delay but time will not tick tock tick tock}
\]

- One child play with click beat
- Teacher play triangle on all X beats

B. LISTENING PERIOD

- 1st portion of Loa\ñ record
M = 70

A. ECHO GAME
   - Song flutes/individuals (syllables)
   - Any major pattern

B. IN-TUNE SINGING
   LIONS, LIONS (BEARS, BEARS)
   - Stress correct pitch
   - Work briefly with individuals
   - Identify minor

C. RECORD
   - S-B Record II, Side 2, Band 4
   - TRAIN IS A-COMIN'
     - Review play once, sing 'o yes'
     - 2nd playing clap beat, sing all

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A. SPEECH RHYTHM
   - BAKED POTATO BURNS THE FINGERS
   CAREFUL BECAUSE IT'S HOT!
   A BAKED POTATO BURNS THE FINGERS
   WATCH OUT! YOU'LL LET IT DROP!
   LOOK OUT, IT'S IN THE FIRE!
   LOOK OUT, IT'S ON THE FLOOR!
   BETTER GO SLOW WITH BAKED POTATOES
   TROUBLE IF YOU DO NOT
   - Enhance with instruments

B. LISTENING PERIOD
   - 2nd portion of loan record
A. ECHO GAME
- Pick good student to be leader.
- Let him/her sing patterns to group

B. MINOR SOUND
- LOTS OF WORMS
- Stress in-tune
- minor sounds

C. RECORD
- S-B Record V, Side 1, Band 6
- BINGO
- Review for memory (1st playing)
- Sing along with record (2nd playing)
A. SPEECH RHYTHM

- BAKED POTATO BURNS THE FINGERS
- CAREFUL BECAUSE IT'S HOT!
- A BAKED POTATO BURNS THE FINGERS
- WATCH OUT! YOU'LL LET IT DROP!
- LOOK OUT, IT'S IN THE FIRE!
- LOOK OUT, IT'S ON THE FLOOR
- BETTER GO SLOW WITH BAKED POTATOES
- TROUBLE IF YOU DO NOT
- Enhance with instruments

B. PLAYING RHYTHMS

- LITTLE RED CABOOSE
- Select three to play (they pick instruments they want)
- Sing song 3 times, each plays in turn
- They pick pattern, or you can
A. ECHO GAME
- Any major pattern, unaccompanied
- Teacher to group
- Also select student to be leader
- (Student to group)

B. INTRODUCE MI RE DO
- HOT CROSS BUNS
- Stress m-r-d sound at beginning
- Show m-r-d flashcard
- Have them copy it

C. RECORD
- S-B Record II, Side 2, Band 1
- GOING ROUND THE MOUNTAIN
  - Play game as verses indicate.
A. SPEECH
- A BAKED POTATO BURNS THE FINGERS
CAREFUL BECAUSE IT'S HOT!
A BAKED POTATO BURNS THE FINGERS
WATCH OUT! YOU'LL LET IT DROP!
LOOK OUT, IT'S IN THE FIRE!
LOOK OUT! IT'S ON THE FLOOR!
BETTER GO SLOW WITH BAKED POTATOES
TROUBLE IF YOU DO NOT
- Say as a group with rhythm, stick beat

B. ECHO GAME
- Echo duple patterns
- Teacher (hand drum) group (Paschen)

C. DICTATION
- Dictate one of three known for writing
A. ECHO GAME
   - Teacher (songflute) to group (syllables)
   - Any major or minor pattern

B. MI RE DO
   - HOT CROSS BUNS
   - Sing for review
   - Start part of group on m-r-d ostinato
   - After they get going, rest sing song

C. ACTION SONG
   - ITSY BITSY SPIDER
   - Teach song & actions together
   - Review once or twice for memory
A. SPEECH

- BELL HORSES, BELL HORSES

WHAT TIME OF DAY?

ONE O'CLOCK, TWO O'CLOCK

THREE AND AWAY

ONE TO GET READY –

ONE TO PREPARE

GOOD LUCK TO THE RIDER

AND AWAY GOES THE MARE

- Identify as triple

- Say once or twice for review

- Use drum for beat

B. BEAT

- RAINING AGAIN TODAY

- Drum on beat

- Rhythm sticks on meter (1 na ni)

- 246 -
A. ECHO GAME
- Teacher (songflute) to individual students (they answer with 'loo').
- Group then "guesses" whether pattern was major or minor.

B. MI RE DO
- HOT CROSS BUN
- 1st show m-r-d card (they sing)
- Then do song

C. RECORD
- S. Be Record V, Side 2; Band 2
- RACE YOU DOWN THE MOUNTAIN
- (This song has words indicating hop, run, jump).
- Verse one = march; verse two = run, jump; verse three
  hop; verse four = rest.
A. SPEECH

- BELL HORSES, BELL HORSES
- WHAT TIME OF DAY?
- ONE O’CLOCK, TWO O’CLOCK
- THREE AND AWAY
- ONE TO GET READY
- ONE TO PREPARE
- GOOD LUCK TO THE RIDER
- AND AWAY GOES THE MARE

- Enhance with instruments

B. TRIPLE METER

- RAINING AGAIN TODAY
- use woodblock on beat, tambourine
- on meter
A. LISTENING GAME

- Blindfold one student, others sit on floor.
- Play autoharp chord; if major go left one step
  and one ahead, if minor go right one step
  and one ahead. If student does it right,
  he can be guided through group, if wrong
  he will run into one and the game is ended

B. MI RE DO

- Review m-r-d card once more
- Start an ostinato on m-r-d
- HOT CROSS BUNS
  Have a few sing song, most ostinato
A. ECHO GAME
   - Mix clap, paschen, snap, stamp
   - Any triple pattern
   - Teacher to group

B. RECORD
   - S-B Record II, Side 1, Band 7
   - GOGO
   - Movements according to record verses

R = 76
A. ECHO GAME
- Teacher to group
- Both sing syllables
- Be sure to include m-r-d & d-r-m

B. DO RE MI
- Show flashcard with d-r-m
- Review the m-r-d, see difference
- BREAKFAST TIME
  - Review singing part 2-3 times
  - Then add verses of rhythm speech
A. SPEECH

ONE MISTY MOISTY MORNING
WHEN CLOUDY WAS THE WEATHER...
THERE I MET AN OLD MAN
DRESSED ALL IN LEATHER...
DRESSED ALL IN LEATHER...
ON HIS FACE A GRIN ... ( | = Beat )
"HOW DO YOU DO"
"HOW DO YOU DO"
"HOW DO YOU DO AGAIN."

B. RECORD

- S-B Record I, Side 1, Band 7

- IN THE BARNYARD

(This song has chickens, ducks, geese. Let children dramatize the way they think these would walk. A few could play rhythm of the three different birds.

Chickens = ✓ ✓ Ducks = ✓ ✓ Geese = ✓ ✓ ✓
(Woodblock) (Triangle) (Lamourine)
A. ECHO
- Two and three tone echo patterns
- Use colors, children's names, etc
- Teacher to individual students

B. DO RE MI

BREAKFAST TIME
- Review tune for memory
- Do complete piece, if they are ready

C. IN-TUNE SINGING

MÜPPIN MAN
- Tuning sounds, work with individuals
  if needed.
A. SPEECH

ONE MISTY MOISTY MORNING...

WHEN CLOUDY WAS THE WEATHER...

THERE I MET AN OLD MAN

DRESSED ALL IN LEATHER...

DRESSED ALL IN LEATHER...

ON HIS FACE A GRIN...

"HOW DO YOU DO"

"HOW DO YOU DO"

"HOW DO YOU DO AGAIN."

B. RECORD

S-B Record 1, Side 1, Band 7

IN THE BARNYARD

(This song has chickens, ducks, geese. Let children dramatize the way they think these would walk. A few could play rhythm of the three different birds.

Chickens = D D D

Ducks = ♪ ♪ ♪

Geese = ♪ ♪ ♪.

(Woodblock) (Triangle) (tambourine)
A. MELODY GAME

- Play so-mi-or-s-mi-do in rhythm of various children's names. Have class guess whose name you are playing (Songflute)

B. DO-RE-MI

- BREAKFAST TIME
- Show flashcard before singing
- Review mi-re-do also from card

- HOT CROSS BUNS

C. GAME SONG

- ITSY BITSY SPIDER
- Stress singing in-tune
- Do with actions
A. SPEECH RHYTHM

- ONE MISTY MOISTY MORNING
  WHEN CLOUDY WAS THE WEATHER
  THERE I MET AN OLD MAN
  DRESSED ALL IN LEATHER
  DRESSED ALL IN LEATHER
  ON HIS FACE A GRIN
  "HOW DO YOU DO"
  "HOW DO YOU DO"
  "HOW DO YOU DO AGAIN"

B. ORCHESTRATION

- HOT CROSS BUNS
  Use woodblock and sticks—Group 1
  Use triangle and tambourine—Grp 2
  Group 1 plays rhythm of words for
  "Hot cross buns", Grp 2 plays for
  "one a penny... etc.`
A. ECHO GAMES
   - Teacher to individual student
   - Major or minor tone groups
   - Both use syllables

B. LISTENING PERIOD
   - Play portion of loan recording
A. ECHO GAME
   - Duple patterns (hand drum)
   - Students echo with stamping.

B. BEAT
   - Each child uses rhythm sticks.
   - OVER IN THE MEADOW
     - Teach song first
     - Use sticks only if they know 1 verse

C. RHYTHM GAME
   - JIM A-LONG JOSIE
   - Progressive, start w/one
   - March, tiptoe, walk, slide.
M - 80

A. IN-TUNE SINGING
   - LITTLE RED CABOOSE
   - Enhance with rhythm instr.
   - Stress in-tune
   - LITTLE WHITE DUCK
   - Again, stress correct tune

B. LISTENING PERIOD
   - Play second portion of loan record
A. ECHO GAMES

- Use variety of clap, snap, paschen,
- Any pattern
- Try a simple rondo for 4 beats

B. BEAT

- MISTER RABBIT
- Teach song first
- Let one student strum beat on autoharp while teacher fingers the buttons

C. DRAMATIZATION

- S-B Record V, Side 2, Band 4
- THE GOOSE
- Listen for the story
- Point out loud-soft spots
- Dramatize the words as they listen
M - 81

A. ECHO GAMES
   - Any pattern - Teacher to one student
   - That student to another, (continue)

B. REVIEW
   - OVER IN THE MEADOW
     - If they know verse 1 go to 2
     - Stress singing in-tune w/good voice

C. MINOR SONG
   - BAKER MAN
     - Substitute other occupations
     - Stress in-tune & identify minor sound
A. SPEECH
- WHET UP YOUR KNIFE
- AND WHISTLE UP YOUR DOG
- WE'RE GOING TO THE HOLLOW
- TO CATCH A GROUND HOG

B. BEAT
- MISTER RABBIT
- Review verse learned last time
- Add second verse
- Play sticks 1 ne 2 ne all through
- Let good student play only 'ne'
  part on tambourine
A. ECHO GAME
   - Songflute major patterns
   - Children echo with syllables

B. REVIEW MAJOR
   - LITTLE WHITE DUCK
   - Stress good voice quality
   - Stress in-tune singing

C. RECORD
   - S-B Record 1, Side 2, Band 6
   - CLAP YOUR HANDS
   - Rhythm sticks on verse
   - Rest on fa-la chorus
A. SPEECH

WHET UP YOUR KNIFE
AND WHISTLE UP YOUR DOG
WE'RE GOING TO THE HOLLOW
TO CATCH A GROUND HOG

B. BEAT

MISTER RABBIT

Let one child hold the autoharp
and finger and strum it.
(This song has only one chord)

C. GAME SONG

ITSY BITSY SPIDER

With actions
In-tune singing
A. ECHO GAME
   - Teacher play songflute on 1st line of known songs
   - Students guess which song

B. REVIEW MAJOR
   - OVER IN THE MEADOW.
   - Do 2 or 3 verses

C. GAME SONG
   - HELICOPTER
   - Do with actions
   - Stress in-tune singing
A. SPEECH

WHET UP YOUR KNIFE
AND WHISTLE UP YOUR DOG
WE'RE GOING TO THE HOLLOW
TO CATCH A GROUND HOG
(New Part)
TOO MANY ROCKS AND TOO MANY LOGS
TOO MANY PLACES
TO HIDE A GROUND HOG

B. FINGER PLAY

- LITTLE COTTAGE IN THE WOOD
- Teach actions & tune same time
A. ECHO GAME
   Suggest major-minor patterns
   Children echo back w/syllables

B. LISTENING PERIOD
   Play portion of loan record
A. ECHO GAME
- Teacher play beat on hand drum
- Chant rhythm patterns w/voice
- Children play beat on sticks
- Echo back rhythm patterns

B. FINGER PLAY
- LITTLE CABIN IN THE WOOD
- Review as taught last time

C. SPEECH
WHET UP YOUR KNIFE AND WHISTLE UP YOUR DOG
WE'RE GOING TO THE HOLLOW TO CATCH A GROUND HOG
TOO MANY ROCKS AND TOO MANY LOGS
TOO MANY PLACES TO HIDE A GROUND HOG
(Snap fingers on beat)
M = 85

A. ECHO GAME
- Sing flute/major & minor patterns
- Children echo back with syllables

B. LISTENING PERIOD
- Play portion of loan record
A. ECHO GAME
   - Stamp, paschen, snap, clap
   - Teacher to group; any pattern

B. BEAT
   - SHOOK FLY
   - Children sing chorus, teacher sing
     "I feel, I feel, ..." part
   - All keep beat (step beat)

C. RECORD
   - 8-3 Record II, Side 2, Band 1
   - GOING ROUND THE MOUNTAIN
   - Play game as the words say on record
A. ECHO GAME
   - Teacher sing major-minor patterns
   - Use autoharp chords for pitch
   - Children echo syllables

B. REVIEW MINOR SONGS
   - FUNNY PUPPY
   - BAKER MAN
   - Be sure they know the tunes
A. ECHO GAME
- Keep beat on hand drum
- Teacher to group with syllables
- Line up flashcards and review

B. BEAT
- SHOO FLY
- Review for memory
- Let them sing all of it
- Select one child to play autoharp
  (Song has two chords)
  (Lay autoharp on bench for the child)
A. ECHO GAME
   - Songflute/major or minor
   - Children use syllables

B. PARTNER SONGS
   - Do these two songs together
   - Review separately
   - Pick one or two or three good singers
     let them sing FUNNY PUPPY while rest
     sing BAKER MAN
   - If they understand, teacher play autoharp
     accompaniment while two songs are sung
A. READING GAME
   - Let one child arrange three flashcards in a row
   - All rest keep beat with paschen & read
   - Repeat process with different child

B. BEAT
   - Let one child hold & strum autoarp
   - MISTE R RABBIT (one chord song)

C. SILENT SINGING
   - FO O FO O RABBIT
   - Review for memory
   - Sing "silently" hit paschen on "bash"
   - Repeat with POP GOES THE WEASEL.
A. ECHO GAME
   - Teacher sing major patterns with "loo"
   - Children echo back with syllables

B. PARTNER SONGS
   - Review partner songs separately then together
     - FUNNY PUPPY
     - BAKER MAN
A. ECHO GAME
   - Clap echo teacher to group
   - Any triple pattern

B. TRIPLE SONG
   - RAINING AGAIN TODAY
   - Review song for memory
   - Tambourine on beat
   - Rhythm sticks on triple meter

C. GAME SONG
   - COME ON AND JOIN IN THE GAME
   - Clap on the rest, in this song
   - Identify as a triple song
A. ECHO GAME
- Sing phrases, names, objects
- Children identify whether major or minor
- They echo phrase

B. REVIEW SONG
- LOOK AROUND THE ROOM
- Stress good voice, posture, in-tune

C. MINOR SOUNDS
- LIONS, LIONS
- Use tuning sounds
A. SPEECH RHYTHM

(lingue clicks)

Time marches on, time marches on

Don't waste time, Don't waste time

(snap) X (snap) X (snap) (snap)

You may delay but time will not tick tock tick tock

- Review this speech
- Identify as triple

B. RECORD

- S-B Record II, Side 1, Band 2
- ELEPHANT SONG
- play once for review
- Sing with motions with record
- Try once without record for pitch control
A. ECHO GAME
   - Song flute on any pattern from d-r-m-s
   - Student use syllables

B. ECHO SONG
   - I'M A PERSON
   - HEY BETTY MARTIN
   - Sing for review
   - Good quality and in-tune
APPENDIX THREE – Criterion Test

Part I – Melodic Perception (Pitch Imitation)

Part II – Rhythm Perception (Rhythm Imitation)

Part III – Musicianship (Familiar song Repitition)

Part IV – Vocal Singing Range
PART ONE: PITCH IMITATION

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

PART TWO: RHYTHM IMITATION

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

(Use a different time to measure for teacher and student.)
PART THREE: MUSICIANSHIP

Ask the child to sing a song of their own choosing. Allow about 60 seconds for this part. If he selects a long song, try to gently interrupt him and proceed to the next part.

PART FOUR: VOCAL SINGING RANGE