THE EFFECTS OF CURRICULUM IN MUSIC EDUCATION

AMONG HEADSTART STUDENTS

An Honors Thesis (ID 499)

by

Christine A. Horn

Thesis Director

Mr. Harold Caldwell

Ball State University

Muncie, Indiana

May, 1974
ACKNOWLEDGEMENTS

The author would like to thank Mrs. Jessica Scott, Mrs. Jane Osborne, the Headstart children, Mr. Harold Caldwell, and Dr. Larry Henriksen of the Research Computer Center for their advice and cooperation they gave to make this project possible.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.--Introduction</td>
<td>1</td>
</tr>
<tr>
<td>II.--Related Literature and Research</td>
<td>3</td>
</tr>
<tr>
<td>III.--Pretest Design</td>
<td>5</td>
</tr>
<tr>
<td>IV.--Curriculum Sequence</td>
<td>9</td>
</tr>
<tr>
<td>V.--Posttest Design</td>
<td>16</td>
</tr>
<tr>
<td>VI.--Results, Conclusions, and Summary</td>
<td>17</td>
</tr>
<tr>
<td>APPENDIX A.--Sample Pretest and Posttest</td>
<td>23</td>
</tr>
<tr>
<td>APPENDIX B.--Directions Used in the Administration of the Tests</td>
<td>25</td>
</tr>
<tr>
<td>APPENDIX C.--Raw Data</td>
<td>26</td>
</tr>
<tr>
<td>APPENDIX D.--Sources for the Songs Used in the Study</td>
<td>44</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>45</td>
</tr>
</tbody>
</table>
CHAPTER I.

INTRODUCTION

The Headstart program is federally funded and is designed to benefit lower-socioeconomic families by preparing four year-old children from such families for a successful Kindergarten. It gives these children basic experiences lacking in their own environment, and elevates them to a more equal level with fellow Kindergarten students. In a recent conversation it was mentioned to an acquaintance that the author was working with Headstart children. The reaction received from the acquaintance was, "Oh, so you're teaching mentally-retarded children—you know, slow." The person who made this comment received a firm "no", and the statement that Headstart children have basically the same capabilities as other children, but their environment has deprived them of experiences that most four year-olds have had. One must continually keep in mind the fact that these children do have experiences in their environment that many lack, and that in essence, both the teacher and the students are helping each other to expand as human beings. This is the purpose of Headstart, and of this project; an expansion of all involved as human beings.

Statement of the problem. In a session with the Headstart children preceding the beginning of the project, it was found that there were very basic musical concepts which they lacked, and which are extremely important as a foundation to further learning experiences. These were such concepts as maintaining a steady beat while singing, distinguishing higher and lower pitches, distinguishing louder and softer sounds, moving accurately to the constant tempo of the drum beat,
matching note for note in the same key a so-mi interval given vocally, and responding independently to given musical tasks.

**Hypothesis.** Through a curriculum oriented toward the basic musical concepts stated previously, the Headstart students will have improved their scores from the pretest to the posttest.
CHAPTER II.
RELATED LITERATURE AND RESEARCH

Zoltan Kodaly felt that music should begin for the child very early in life. Nursery school age was thought to be the best time. Then in 1957, Kodaly stated that a child's musical experience should begin 9 months before his mother's birth.\footnote{Kemper, Marjorie, "The Preschool Child--How Young Is Early Enough? \emph{Music Educators Journal}, 1971, 57, 27-41.}

C. Clark Bell remarked that the fundamentals of musical understanding are the same for all ages, but that the only differences lie in the level of refinement.\footnote{Bell, C. Clark, "Bringing Together Children and Music...Sound Principles for Teaching the Elementary School Child. \emph{Music Educators Journal}, 1971, 57, 27-41.}

He also added that Jerome Bruner, author of \emph{The Process of Education}, stated the same idea, suggesting that teachers first teach the basic fundamentals of music, then refine them as the students experience growth in musical understanding.\footnote{Bell, C. Clark, "Bringing Together Children and Music...Sound Principles for Teaching the Elementary School Child. \emph{Music Educators Journal}, 1971, 57, 27-41.}

A physical example of the idea deals with muscular coordination. Coordination of the muscles begins with the large muscles, with the smaller muscles developing gradually. Teachers should be aware of this factor in planning physical activities. One should begin with the general, and work toward the specific. These were the reasons behind the basic concepts used with the Headstart children in the study, in order to lay a foundation for further and more specific musical experiences.

\footnotesize{\begin{itemize}
\end{itemize}}
Similar studies done in recent years have shown that there was musical progress as a result of curriculum presented in the classroom. Dawkins, and Snyder's study found that the culturally deprived music students scored higher than the culturally deprived nonmusic students\(^1\) by comparing the scores of disadvantaged junior high school students with the norms of the Seashore Measures.\(^2\) Since the Seashore Measures of Musical Talent measures an individual's capacity to gain by education in music, the study would seem to indicate that a music curriculum of some sort would increase a student's aptitude in music.

Using a control group, experimental group, and the Self-Esteem Inventory with the Behavior Rating Form as the pretest and posttest, Michel and Martin Adopted music activities as the curriculum sequence to promote self-esteem.\(^3\) Their conclusion of the study was that the development of musical skill would increase self-esteem and increase self-esteem in other tasks. If self-esteem is increased through musical activities, one would assume that the musical experiences were successful. Successful experiences would involve a movement from the fundamental to the specific, which would imply a development of musical skills in order for that movement to take place.

The project presented in the following chapters also used a curriculum sequence to develop musical skills, with the objective of improved posttest scores over pretest scores.

---


\(^2\) The Seashore Measures of Musical Talent measures aptitude not achievement, does not assume training, but measures an individual's capacity to profit by instruction in that field.

CHAPTER III.

PRETEST DESIGN

Subjects. Nine students, six females, and three males were selected from the population in the Headstart classroom at the Fairlawn church of Christ. All were between the ages of four and five, with the exception of one female who was three and a half. Eight Ss were eliminated from the project due to their absence from one or more of the tests.

Apparatus. In stating the problem in Chapter I, it was mentioned that there were certain musical concepts lacking among the Headstart students. To see if there would be any improvement in these areas over a six-week period, the study was designed in terms of a pretest, presentation of a curriculum sequence over a six-week period, and a posttest. The musical concepts were used both as the pretest at the beginning of the study, and as a posttest at the end of the six-week period. Lessons used between the pretest and the posttest were geared toward a better understanding of those musical concepts. Concepts used as the pretest and the posttest for the study were as follows:

1) The child is able to maintain a steady beat while singing a familiar song and employing pa_adschen.

2) The child is able to clap the rhythm of a familiar song while singing it.

3) The child is able to pronounce his own name, then clap the rhythm of his own name while simultaneously pronouncing his name again.

4) The child is able to distinguish higher and lower pitches after hearing a criterion from which to judge. (The criterion being a pitch which the child will use to judge the next pitch)

5) The child is able to distinguish louder and softer after hearing a criterion from which to judge.
6) The child is able to distinguish faster and slower after hearing a criterion from which to judge.

7) The child is able to move accurately with the constant tempo of a drum beat. Tempo: $\text{d} = 75$.

8) The child is able to adjust his movement accurately to a change of the drum beat tempo.

9) The child is able to read one measure of $3/4$ with no rests.

10) The child is able to read one measure of $3/4$ with one rest on the third beat.

11) The child is able to match, note for note, in the same key, a so-mi interval given vocally.

12) The child is able to respond independently to given musical tasks.

13) The child is able to move accurately upon hearing the following terms:
    A. Walk
    B. Run
    C. Hop
    D. March
    E. Sway
    F. Jump
    G. Tiptoe
    H. Skip

These concepts were used as the basis for the pretest that consisted of rating various behavioral activities. The terms "always, frequently, occasionally, and never", were used in ratings with the understanding that:

- **Always** means "at all times"
- **Frequently** means "at frequent or short intervals"
- **Occasionally** means "occurring at irregular or rare intervals"
- **Never** means "not ever, at no time".

Most of the behavioral activities are self-explanatory with the possible exceptions of Activities 11 and 12. Eleven was rated on a somewhat different basis than were other activities in the testing. Although a child could match a so-mi interval successfully, he or she could possibly be matching note for note in the same key, or note for note, but in another key. Therefore Activity 11 was rated as follows:

11.1 Matches note for note in the same key
11.2 Matches note for note in another key
11.3 Does not match notes at all

Activity 12 was included in the study with the hopes of promoting the student to develop a greater capacity to think independently of the teacher and of fellow students, rather than leaving the student with only the knowledge of obeying directions from sources outside himself.

A copy of the pretest may be found in Appendix A.

Procedure. Ss were seated directly across from the experimenter in a small room separated from the rest of the classroom. During the pretest there were three trials for each activity, and the students were rated according to the number of trials successfully completed. Below is an example of how the rating was conducted:

9. The child is able to read one measure of 3/4 with no rests.

9.1 Always (3 out of 3 trials successfully completed)
9.2 Frequently (2 out of 3 trials successfully completed)
9.3 Occasionally (1 out of 3 trials successfully completed)
9.4 Never (no trials successfully completed)
The number of trials for each behavioral activity was set at three since more than one trial would eliminate chance to the results obtained, but more than three trials would consume considerably more time than was available. Students were administered the pretest in both individual and group situations, in order to investigate the possible differences and results that might occur under such conditions.

In order to eliminate as much bias during the testing as possible, directions and statements were standardized and used by the experimenter for all individual and group work. A copy of the directions used can be found in Appendix B.
CHAPTER IV.

CURRICULUM SEQUENCE

The curriculum between the pretest and the posttest was designed to develop within the students a better understanding of basic musical concepts. The comprehension of these concepts was achieved through various musical experiences that included songs, games, and pictures. The lessons employed during the six-week period between the pretest and the posttest were organized into journal form, with the concepts emphasized stated below the appropriate situation.

March 6.

The first lesson used elephant and mice nametags with half the class as elephants, and the other half as mice. Students sang to "Who's name is _______?"* to receive their nametag.

ACTIVITY #11---The child is able to match, note for note, a so-mi interval given vocally.

There was a discussion about the appearance of elephants and mice, and some students demonstrated to the rest how these animals move (elephants sway, mice run). Then through the examples, and the teacher's use of the drum, it was decided which animal was louder, and which was softer.

ACTIVITY #5---The child is able to distinguish louder and softer after hearing a criterion from which to judge.

The class was divided into its two groups, and asked to move upon hearing the proper drum beat associated with their animal.

ACTIVITY #7---The child is able to move accurately with the constant tempo of a drum beat.

* The source of the song is located in Appendix D.
ACTIVITIES #13B and #13E—The child is able to move accurately upon hearing the following terms; run; and sway.

Students then sat in a circle and related mice to the mouse in the review song, "Hickory, Dickory, Dock." A steady beat was kept while singing, and some students played the beat with rhythm sticks.

ACTIVITY #1—The child is able to maintain a steady beat while singing a familiar song and employing patschen.

March 13.

In the second class session, the song "My Little Pony" was used.* The teacher drew a tree and a pony on the blackboard, with the pony drawn lower than the tree to illustrate, physically, the higher and lower pitches heard. While pointing to the pony, the class echo sang "my little pony", which was all on one low note. Then while pointing to the tree, the students echo sang "tie him to the tree", which went up in pitch.

ACTIVITY #4—The child is able to distinguish higher and lower pitches after hearing a criterion from which to judge.

ACTIVITY #11—The child is able to match, note for note, a so-mi interval given vocally.

The entire song was learned, and eventually the wood block was used to designate the beat.

ACTIVITY #1—The child is able to maintain a steady beat while singing a familiar song.

There was a discussion about the kind of shoes a pony would wear, with one of the students drawing three horseshoes on the blackboard. Students clapped for

*The source of the song is located in Appendix D.
each horseshoe they saw. When this was established, the third horseshoe was removed, and it was decided that one could no longer clap there as the shoe was no longer there, so a new signal was devised, called a rest, which is spreading the hands and arms apart.

**ACTIVITIES #9---**The child is able to read one measure of \( \frac{3}{4} \) with no rests.

**ACTIVITY #10---**The child is able to read one measure of \( \frac{3}{4} \) with one rest on the third beat.

The lesson ended with singing "Sing." In this particular lesson, one student showed considerable progress as he picked up almost all ideas well, and enjoyed demonstrating individually what he knew.

**March 20.**

The class reviewed echo singing with the elephant and mice nametags.

**ACTIVITY #11---**The child is able to match, note for note, a so-mi interval given vocally.

The teacher told a story about a race between a rabbit and a turtle, complete with mounted pictures. In telling the story, the voice gave clues as to whether turtles and rabbits move fast or slow. This aspect of the animals was discussed, along with how they moved (rabbits hop fast and turtles walk slow).

**ACTIVITY #6---**The child is able to distinguish faster and slower after hearing a criterion from which to judge.

**ACTIVITIES #13A and #13C---**The child is able to move accurately upon hearing the following terms: walk, and hop.

Students reviewed "My Little Pony", using the wood block for the steady beat, and adding jingle bells as an introduction.
ACTIVITY #1---The child is able to maintain a steady beat while singing a familiar song.

"Clap Your Hands" was sung, and students were encouraged to think of other movements to do with the song.

ACTIVITY #2---The child is able to respond independently to given musical tasks.

The classroom teacher was surprised and pleased with the attention span of the class that day, as it was 35 minutes long.

March 27.

"My Little Pony" was reviewed, gradually adding the wood block and the jingle bells.

ACTIVITY #3---The child is able to maintain a steady beat while singing a familiar song and employing patschen.

ACTIVITY #4---The child is able to match, note for note, a so-mi interval given vocally.

Horseshoes were used to review 3/4 time. It was decided to make a rest sign so that all knew when and where a horseshoe was absent. It looked like the following; \[ \bigcirc \bigcirc \bigcirc \bigcirc \]. Harder versions were used, but the students were very successful that day and did all of the following;

\[ \bigcirc \bigcirc \bigcirc \bigcirc \]
\[ \bigcirc \bigcirc ? \bigcirc \]
\[ \bigcirc ? \bigcirc \]
\[ ? \bigcirc \bigcirc \]
\[ ? ? ? \]

ACTIVITY #5---The child is able to read one measure of 3/4 with no rests.
ACTIVITY #10---The child is able to read one measure of 3/4 with one rest on the third beat.

The lesson ended by listening to the call and response song called, "Did You Feed My Cow?", found on the Ella Jenkins' tape.

ACTIVITY #2---The child is able to clap the rhythm of a familiar song while singing it.

ACTIVITY #11---The child is able to match, note for note, a so-mi interval given vocally.

April 3.

Without saying a word, the teacher drew four apples on the blackboard, and motioned the class to clap for each apple. One apple was then erased, and a rest was put in its place. With the next trials, the children took turns changing the apples and the rests. 4/4 time was a change from what the students had been doing, but the purpose was to promote flexibility with meter change.

ACTIVITY #9---The child is able to read one measure of 3/4 with no rests.

ACTIVITY #10---The child is able to read one measure of 3/4 with one rest on the third beat.

There was a discussion about where to obtain apples, with a grocery store as a source mentioned. It was decided to take a trip to the grocery store to buy some apples. The class stood in a circle, and sang "Rig-a-jig-jig." Students walked down the street counterclockwise, meeting handsome boys and pretty girls on the way. In a hurry to get home from the grocery, the children "rig-a-jig-jigged" (skipped) home clockwise. The song was done twice more to emphasize the contrast, both vocally and physically, between the smoothness of walking, and the bumpiness of skipping.
ACTIVITIES #13A and #13H---The child is able to move accurately upon hearing the following terms: walk, and skip.

The class then sat in a circle and echo clapped. During the first part, the entire class echoed the teacher, then during the second part, volunteering individuals were the teacher's echo.

ACTIVITY #2--The child is able to clap the rhythm of a familiar song while singing it.

ACTIVITY #3---The child is able to pronounce his name, then clap the rhythm of his own name while simultaneously pronouncing his name again.

The students reviewed "Did You Feed My Cow?"

ACTIVITY #2---The child is able to clap the rhythm of a familiar song while singing it.

ACTIVITY #10---The child is able to match, note for note, a so-mi interval given vocally.

April 17.

The last lesson began by reviewing the song and motions of "Rig-a-jig-jig."

ACTIVITIES #13A and #13H---The child is able to move accurately upon hearing the following terms: walk, and skip.

Some products one could buy at a grocery store were discussed. After carrots were mentioned, three were drawn on the blackboard for the class to see and clap. The rest was reviewed through a mischievous and picky rabbit that continually hid, returned, and ate carrots.

ACTIVITIES #9---The child is able to read one measure of 3/4 with no rests.

ACTIVITIES #10---The child is able to read one measure of 3/4 with one rest on the third beat.
The class reviewed "My Little Pony", and echo clapping, both as a group and as individuals.

ACTIVITY #1---The child is able to maintain a steady beat while singing a familiar song and employing patschen.

ACTIVITY #2---The child is able to clap the rhythm of a familiar song while singing it.

ACTIVITY #3---The child is able to pronounce his name, then clap the rhythm of his own name while simultaneously pronouncing his name again.
CHAPTER V.

POSTTEST DESIGN

Subjects. The same Ss used in the Pretest were also employed in the Posttest.

Apparatus. Appendix A contains the posttest, and Chapter I gives a more
detailed description of the test.

Procedure. The posttest was administered in both individual and group
situations after the six weeks of the curriculum sequence had taken place.
Ss were tested in the same room where the pretest had been given. Directions
used during the test were the same as in the pretest, and can be found in
Appendix B.
CHAPTER VI.
RESULTS, CONCLUSIONS AND SUMMARY

At this point of the study, the author would like for the reader to be aware that a very small sample size was used, which did not provide the results that a larger and more statistically adequate sample size would have provided.

Results. A correlated t-test was used for items 1, 2, 5, 6, 7, 8, 9, 10, and 12 from the group test administered, with a level of significance at .05, and the degrees of freedom at 8. The power of the statistical test was .34. The null hypothesis for each item was that there would be no significant difference between the mean of the pretest and the mean of the posttest. The t had to be greater than or equal to 1.86 to be significant. The null hypothesis was rejected for items 6, 7, 10, and 12, meaning that the differences between the means were significant differences. The computed t values were as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>t Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.26261</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1.07872</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0.26261</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>2.13498</td>
<td>Significant (faster &amp; slower)</td>
</tr>
<tr>
<td>7</td>
<td>3.16228</td>
<td>Significant (move-constant drum beat)</td>
</tr>
<tr>
<td>8</td>
<td>1.83533</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>0.45004</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>12.00000</td>
<td>Significant (measure 3/4--west on 3rd beat)</td>
</tr>
<tr>
<td>12</td>
<td>4.43760</td>
<td>Significant (independent response)</td>
</tr>
</tbody>
</table>

Conclusions. Although the probability of obtaining significant results with such a small sample size was low, significant results did occur in four items when group data was tested. Considering that the odds were against any results being significant at all, the items that were significant, proved to be very meaningful. So made considerable improvement between the pretest and posttest
in at least these four items. Looking at the frequency counts in Tables 1 and 2, there was a movement upward from the pretest to the posttest, especially in almost all the items in Table 1.

Individuals graphed in Figures 1 and 2 demonstrated a consistently higher scores on the posttest than on the pretest.

**Summary.** Taking into consideration the sample size and the significant results found in the correlated t-tests, data found in Tables 1 and 2, and in Figures 1 and 2, it is the author's conclusion that through a curriculum oriented toward basic musical concepts, the Headstart students improved their scores from the pretest to the posttest.
### Table 1

**Frequency Count - Individual Tests**

<table>
<thead>
<tr>
<th>Items</th>
<th>Pretest Ratings</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>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>5</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>7</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>5</td>
<td>7</td>
<td>5</td>
<td>5</td>
<td>9</td>
<td>8</td>
<td>6</td>
<td>2</td>
<td>9</td>
<td>9</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>9</td>
<td>8</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
## Table 2

**Frequency Count - Group Tests**

<table>
<thead>
<tr>
<th>Items</th>
<th>Pretest Ratings</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>230000120199000000</td>
<td>520001041200990999</td>
</tr>
<tr>
<td>2</td>
<td>240998737000090000</td>
<td>009000101000000000</td>
</tr>
<tr>
<td>3</td>
<td>210520000411111111</td>
<td>000000000000000000</td>
</tr>
<tr>
<td>4</td>
<td>000000000000000000</td>
<td>000000000000000000</td>
</tr>
</tbody>
</table>

The table above shows the frequency count for each item in both the pretest and posttest ratings. The data is presented in a tabular format with columns for different ratings and rows for items.
Figure 1.
Scores on Individual Pretest and Posttest

J. J. - #5

Ratings

1 2 3 4 5 6 7 8 9 10 11 12 13
A B C D E F G H

Items

- Pretest, Individual
- Posttest, Individual
Figure 2.

Scores on Individual Pretest and Posttest

Junior-#8

Ratings

Items

- Pretest, Individual
- Posttest, Individual
1. The child is able to maintain a steady beat while singing a familiar song and employing a conductor. (Song used: "Music Time").

<table>
<thead>
<tr>
<th></th>
<th>1.1 Always</th>
<th>1.2 Frequently</th>
<th>1.3 Occasionally</th>
<th>1.4 Never</th>
</tr>
</thead>
</table>

2. The child is able to clap the rhythm of a familiar song while singing it. (Song used: "Music Time").

<table>
<thead>
<tr>
<th></th>
<th>2.1 Always</th>
<th>2.2 Frequently</th>
<th>2.3 Occasionally</th>
<th>2.4 Never</th>
</tr>
</thead>
</table>

3. The child is able to pronounce his name, then clap the rhythm of his own name while simultaneously pronouncing his name again.

<table>
<thead>
<tr>
<th></th>
<th>3.1 Always</th>
<th>3.2 Frequently</th>
<th>3.3 Occasionally</th>
<th>3.4 Never</th>
</tr>
</thead>
</table>

4. The child is able to distinguish higher and lower pitches after hearing a criterion from which to judge. (The criterion being a pitch which the child will use to judge the next pitch.)

<table>
<thead>
<tr>
<th></th>
<th>4.1 Always</th>
<th>4.2 Frequently</th>
<th>4.3 Occasionally</th>
<th>4.4 Never</th>
</tr>
</thead>
</table>

5. The child is able to distinguish louder and softer after hearing a criterion from which to judge.

<table>
<thead>
<tr>
<th></th>
<th>5.1 Always</th>
<th>5.2 Frequently</th>
<th>5.3 Occasionally</th>
<th>5.4 Never</th>
</tr>
</thead>
</table>

6. The child is able to distinguish faster and slower after hearing a criterion from which to judge.

<table>
<thead>
<tr>
<th></th>
<th>6.1 Always</th>
<th>6.2 Frequently</th>
<th>6.3 Occasionally</th>
<th>6.4 Never</th>
</tr>
</thead>
</table>

7. The child is able to move accurately with the constant tempo of a drum beat. Tempo: \( \text{dotted} = 75 \).

<table>
<thead>
<tr>
<th></th>
<th>7.1 Always</th>
<th>7.2 Frequently</th>
<th>7.3 Occasionally</th>
<th>7.4 Never</th>
</tr>
</thead>
</table>

8. The child is able to adjust his movement accurately to a change of the drum beat tempo.

<table>
<thead>
<tr>
<th></th>
<th>8.1 Always</th>
<th>8.2 Frequently</th>
<th>8.3 Occasionally</th>
<th>8.4 Never</th>
</tr>
</thead>
</table>
9. The child is able to read one measure of 3/4 with no rests.
   - 9.1 Always
   - 9.2 Frequently
   - 9.3 Occasionally
   - 9.4 Never

10. The child is able to read one measure of 3/4 with one rest on the third beat.
    - 10.1 Always
    - 10.2 Frequently
    - 10.3 Occasionally
    - 10.4 Never

11. The child is able to match, note for note, a so-mi interval given vocally.
    - 11.1 Matches note for note in the same key
    - 11.2 Matches note for note in another key
    - 11.3 Does not match at all

12. The child is able to respond independently to given musical tasks.
    - 12.1 Always
    - 12.2 Frequently
    - 12.3 Occasionally
    - 12.4 Never

13. The child is able to move accurately upon hearing the following terms:

   A. Walk
      - A.1 Always
      - A.2 Frequently
      - A.3 Occasionally
      - A.4 Never

   B. Run
      - B.1 Always
      - B.2 Frequently
      - B.3 Occasionally
      - B.4 Never

   C. Hop
      - C.1 Always
      - C.2 Frequently
      - C.3 Occasionally
      - C.4 Never

   D. March
      - D.1 Always
      - D.2 Frequently
      - D.3 Occasionally
      - D.4 Never

   E. Sway
      - E.1 Always
      - E.2 Frequently
      - E.3 Occasionally
      - E.4 Never

   F. Jump
      - F.1 Always
      - F.2 Frequently
      - F.3 Occasionally
      - F.4 Never

   G. Tiptoe
      - G.1 Always
      - G.2 Frequently
      - G.3 Occasionally
      - G.4 Never

   H. Skip
      - H.1 Always
      - H.2 Frequently
      - H.3 Occasionally
      - H.4 Never
APPENDIX B.

Directions Used In The Administration of The Tests

1. Let's Patschen (motion to show) the beat to "Music Time". Okay, again. Once more.

2. Now clap the words of "Music Time" as we sing. (Given example of first 2 phrases). Again. For the last time.

3. Say your name for me, please. Now slap your name as you say it. Again. Once more.

4., 5., and 6. -- on tape.

7. Move with the drum beat. Stop when the drum stops.

8. Listen to the drum beat and change your movements as the drum beat changes.

9. Clap for each dog in the doghouse.

10. One dog is missing. Show me what to do when there is no dog in the doghouse. Now let's clap and do all the doghouses.

11. Be my echo. When I'm done singing, sing the same thing back to me.

12. What else can we do together in this song besides clap our hands?

13. I'll give a one-word direction. You move to whatever the word tells you to move until I say stop. Here's another one.
APPENDIX C.

RAW DATA
1. The child is able to maintain and employ a pattern. (Song used: "Music Time")
   - 1.1. Always
   - 1.2. Frequently
   - 1.3. Occasionally
   - 1.4. Never

2. The child is able to clap the rhythm of a song. (Song used: "Music Time")
   - 2.1. Always
   - 2.2. Frequently
   - 2.3. Occasionally
   - 2.4. Never

3. The child is able to pronounce his or her own name while simultaneously pronouncing his/her name.
   - 3.1. Always
   - 3.2. Frequently
   - 3.3. Occasionally
   - 3.4. Never

4. The child is able to distinguish high and low notes. The criteria from which to judge.
   - 4.1. Always
   - 4.2. Frequently
   - 4.3. Occasionally
   - 4.4. Never

5. The child is able to distinguish loud and soft notes.
   - 5.1. Always
   - 5.2. Frequently
   - 5.3. Occasionally
   - 5.4. Never

6. The child is able to distinguish fast and slow notes.
   - 6.1. Always
   - 6.2. Frequently
   - 6.3. Occasionally
   - 6.4. Never

7. The child is able to move accurately with the musical theme of the song. Tempo: J = 75.
   - 7.1. Always
   - 7.2. Frequently
   - 7.3. Occasionally
   - 7.4. Never

8. The child is able to adjust his movement accurately to a change of the drum beat tempo.
   - 8.1. Always
   - 8.2. Frequently
   - 8.3. Occasionally
   - 8.4. Never
9. The child is able to read one measure of music:

<table>
<thead>
<tr>
<th></th>
<th>9.1 Always</th>
<th>9.2 Frequently</th>
<th>9.3 Occasionally</th>
<th>9.4 Never</th>
</tr>
</thead>
</table>

10. The child is able to read one measure of music:

<table>
<thead>
<tr>
<th></th>
<th>10.1 Always</th>
<th>10.2 Frequently</th>
<th>10.3 Occasionally</th>
<th>10.4 Never</th>
</tr>
</thead>
</table>

11. The child is able to match, note for note, a melodic pattern:

<table>
<thead>
<tr>
<th></th>
<th>11.1 Matches note for note in the melody</th>
<th>11.2 Matches note for note in another melody</th>
<th>11.3 Does not match at all</th>
</tr>
</thead>
</table>

12. The child is able to respond independently to an auditory cue:

<table>
<thead>
<tr>
<th></th>
<th>12.1 Always</th>
<th>12.2 Frequently</th>
<th>12.3 Occasionally</th>
<th>12.4 Never</th>
</tr>
</thead>
</table>

13. The child is able to move accurately upon hearing the following forms:

A. Walk

<table>
<thead>
<tr>
<th></th>
<th>9A.1 Always</th>
<th>9A.2 Frequently</th>
<th>9A.3 Occasionally</th>
<th>9A.4 Never</th>
</tr>
</thead>
</table>

B. Run

<table>
<thead>
<tr>
<th></th>
<th>9B.1 Always</th>
<th>9B.2 Frequently</th>
<th>9B.3 Occasionally</th>
<th>9B.4 Never</th>
</tr>
</thead>
</table>

C. Hop

<table>
<thead>
<tr>
<th></th>
<th>9C.1 Always</th>
<th>9C.2 Frequently</th>
<th>9C.3 Occasionally</th>
<th>9C.4 Never</th>
</tr>
</thead>
</table>

D. March

<table>
<thead>
<tr>
<th></th>
<th>9D.1 Always</th>
<th>9D.2 Frequently</th>
<th>9D.3 Occasionally</th>
<th>9D.4 Never</th>
</tr>
</thead>
</table>

E. Sway

<table>
<thead>
<tr>
<th></th>
<th>9E.1 Always</th>
<th>9E.2 Frequently</th>
<th>9E.3 Occasionally</th>
<th>9E.4 Never</th>
</tr>
</thead>
</table>
1. The child is able to maintain a steady tempo, and employing patterns. (Song used: "Music Time")
   - Always
   - Frequently
   - Occasionally
   - Never

2. The child is able to clap the rhythm of "Music Time"
   - Always
   - Frequently
   - Occasionally
   - Never

3. The child is able to pronounce his name, alternating rhythm of his name while simultaneously pronouncing his name.
   - Always
   - Frequently
   - Occasionally
   - Never

4. The child is able to distinguish higher and lower pitches after hearing one criterion from which to judge. (The child will use to judge the next pitch.)
   - Always
   - Frequently
   - Occasionally
   - Never

5. The child is able to distinguish loudness from which to judge.
   - Always
   - Frequently
   - Occasionally
   - Never

6. The child is able to distinguish faster and slower pitches from which to judge.
   - Always
   - Frequently
   - Occasionally
   - Never

7. The child is able to move accurately with the constant tempo of a drum beat.
   - Tempo: J = 75
   - Always
   - Frequently
   - Occasionally
   - Never

8. The child is able to adjust his movement accurately to a change of the drum beat tempo.
   - Always
   - Frequently
   - Occasionally
   - Never
3. The child is able to read one measure. 
   - 9.1 Always
   - 9.2 Frequently
   - 9.3 Occasionally
   - 9.4 Never

10. The child is able to read one measure. 
    - 10.1 Always
    - 10.2 Frequently
    - 10.3 Occasionally
    - 10.4 Never

11. The child is able to match, note for note, material given vocally. 
    - 11.1 Matches note for note in the same key
    - 11.2 Matches note for note in another key
    - 11.3 Does not match at all

12. The child is able to respond independently to questions 1-3. 
    - 12.1 Always
    - 12.2 Frequently
    - 12.3 Occasionally
    - 12.4 Never

13. The child is able to move accurately using physical terms: 
   A. Walk
      - A.1 Always
      - A.2 Frequently
      - A.3 Occasionally
      - A.4 Never
   B. Run
      - B.1 Always
      - B.2 Frequently
      - B.3 Occasionally
      - B.4 Never
   C. Hop
      - C.1 Always
      - C.2 Frequently
      - C.3 Occasionally
      - C.4 Never
   D. March
      - D.1 Always
      - D.2 Frequently
      - D.3 Occasionally
      - D.4 Never
   E. Sway
      - E.1 Always
      - E.2 Frequently
      - E.3 Occasionally
      - E.4 Never
1. The child is able to maintain a steady and employing patschen. (Song: use; "Alden"

- 1.1 Always
- 1.2 Frequently
- 1.3 Occasionally
- 1.4 Never

2. The child is able to clap the rhythm of any movement in this way. (Song: use; "Music Time"

- 2.1 Always
- 2.2 Frequently
- 2.3 Occasionally
- 2.4 Never

3. The child is able to pronounce his name, clapping the rhythm of his own name while simultaneously pronouncing his name.

- 3.1 Always
- 3.2 Frequently
- 3.3 Occasionally
- 3.4 Never

4. The child is able to distinguish higher and lower pitches after hearing a criterion from which to judge. (The criterion helps a pitch voice of the child will use to judge the next pitch.)

- 4.1 Always
- 4.2 Frequently
- 4.3 Occasionally
- 4.4 Never

5. The child is able to distinguish louder and softer after hearing a criterion from which to judge.

- 5.1 Always
- 5.2 Frequently
- 5.3 Occasionally
- 5.4 Never

6. The child is able to distinguish faster and slower after hearing a criterion from which to judge.

- 6.1 Always
- 6.2 Frequently
- 6.3 Occasionally
- 6.4 Never

7. The child is able to move accurately with the overbeat tempo of 75 beats.

- 7.1 Always
- 7.2 Frequently
- 7.3 Occasionally
- 7.4 Never

8. The child is able to adjust his movement accurately to a tempo of the drum beat tempo.

- 8.1 Always
- 8.2 Frequently
- 8.3 Occasionally
- 8.4 Never
9. The child is able to read one measure out of fifty with correct rhythm.
   - 9.1 Always
   - 9.2 Frequently
   - 9.3 Occasionally
   - 9.4 Never

10. The child is able to read one measure out of fifty with correct melody.
    - 10.1 Always
    - 10.2 Frequently
    - 10.3 Occasionally
    - 10.4 Never

11. The child is able to match, note for note, a voice intonation given vocally.
    - 11.1 Matches note for note in the same key
    - 11.2 Matches note for note in another key
    - 11.3 Does not match at all

12. The child is able to respond independently to a musical lead.
    - 12.1 Always
    - 12.2 Frequently
    - 12.3 Occasionally
    - 12.4 Never

13. The child is able to move accurately using the following terms:
   A. Walk
      - A.1 Always
      - A.2 Frequently
      - A.3 Occasionally
      - A.4 Never
   B. Run
      - B.1 Always
      - B.2 Frequently
      - B.3 Occasionally
      - B.4 Never
   C. Hop
      - C.1 Always
      - C.2 Frequently
      - C.3 Occasionally
      - C.4 Never
   D. March
      - D.1 Always
      - D.2 Frequently
      - D.3 Occasionally
      - D.4 Never
   E. Sway
      - E.1 Always
      - E.2 Frequently
      - E.3 Occasionally
      - E.4 Never
1. The child is able to maintain a steady beat and keeping time, and employing patachen.  (Song used: "Music Time")

   1.1 Always
   1.2 Frequently
   1.3 Occasionally
   1.4 Never

2. The child is able to clap the rhythm of a steady beat and keeping time.  (Song used: "Music Time")

   2.1 Always
   2.2 Frequently
   2.3 Occasionally
   2.4 Never

3. The child is able to pronounce his name, then clap the rhythm of his own name while simultaneously pronouncing his name again.

   3.1 Always
   3.2 Frequently
   3.3 Occasionally
   3.4 Never

4. The child is able to distinguish higher and lower pitches after hearing a criterion from which to judge.  (The criterion being a pitch which the child will use to judge the next pitch.)

   4.1 Always
   4.2 Frequently
   4.3 Occasionally
   4.4 Never

5. The child is able to distinguish louder and softer after hearing a criterion from which to judge.

   5.1 Always
   5.2 Frequently
   5.3 Occasionally
   5.4 Never

6. The child is able to distinguish faster and slower after hearing a criterion from which to judge.

   6.1 Always
   6.2 Frequently
   6.3 Occasionally
   6.4 Never

7. The child is able to move accurately with the steady beat.

   Tempo;  \( J = 75 \).

   7.1 Always
   7.2 Frequently
   7.3 Occasionally
   7.4 Never

8. The child is able to adjust his movement accurately to a change of the drum beat tempo.

   8.1 Always
   8.2 Frequently
   8.3 Occasionally
   8.4 Never
9. The child is able to read one measure of music aurally.

- 9.1 Always
- 9.2 Frequently
- 9.3 Occasionally
- 9.4 Never

10. The child is able to read one measure of music by notation.

- 10.1 Always
- 10.2 Frequently
- 10.3 Occasionally
- 10.4 Never

11. The child is able to match, note for note, a sound interval given vocally.

- 11.1 Matches note for note in the same key
- 11.2 Matches note for note in another key
- 11.3 Does not match at all

12. The child is able to respond independently to a sound musical task.

- 12.1 Always
- 12.2 Frequently
- 12.3 Occasionally
- 12.4 Never

13. The child is able to move accurately upon hearing the following terms:

A. Walk

- A.1 Always
- A.2 Frequently
- A.3 Occasionally
- A.4 Never

B. Run

- B.1 Always
- B.2 Frequently
- B.3 Occasionally
- B.4 Never

C. Hop

- C.1 Always
- C.2 Frequently
- C.3 Occasionally
- C.4 Never

D. March

- D.1 Always
- D.2 Frequently
- D.3 Occasionally
- D.4 Never

E. Sway

- E.1 Always
- E.2 Frequently
- E.3 Occasionally
- E.4 Never
1. The child is able to maintain a steady beat and uniformly and employing patterns. (Song used: "To Be or Not To Be")
   - 1.1 Always
   - 1.2 Frequently
   - 1.3 Occasionally
   - 1.4 Never

2. The child is able to clap the rhythm of a steady beat. (Song used: "Music Time")
   - 2.1 Always
   - 2.2 Frequently
   - 2.3 Occasionally
   - 2.4 Never

3. The child is able to pronunciate his name, then clap the rhythm of his own name while simultaneously pronouncing his name again.
   - 3.1 Always
   - 3.2 Frequently
   - 3.3 Occasionally
   - 3.4 Never

4. The child is able to distinguish higher and lower pitches after hearing a criterion from which to judge. (The criterion begins with pitch which the child will use to judge the next pitch.)
   - 4.1 Always
   - 4.2 Frequently
   - 4.3 Occasionally
   - 4.4 Never

5. The child is able to distinguish louder and softer after hearing a criterion from which to judge.
   - 5.1 Always
   - 5.2 Frequently
   - 5.3 Occasionally
   - 5.4 Never

6. The child is able to distinguish faster and slower after hearing a criterion from which to judge.
   - 6.1 Always
   - 6.2 Frequently
   - 6.3 Occasionally
   - 6.4 Never

7. The child is able to move accurately with the correct metronome beat. Tempo: \( \text{J} = 75 \). 
   - 7.1 Always
   - 7.2 Frequently
   - 7.3 Occasionally
   - 7.4 Never

8. The child is able to adjust his movement accurately to a change of the metronome beat tempo.
   - 8.1 Always
   - 8.2 Frequently
   - 8.3 Occasionally
   - 8.4 Never
9. The child is able to read one measure at a time on the staff:
   - 9.1 Always
   - 9.2 Frequently
   - 9.3 Occasionally
   - 9.4 Never

10. The child is able to read one measure at a time on the staff:
   - 10.1 Always
   - 10.2 Frequently
   - 10.3 Occasionally
   - 10.4 Never

11. The child is able to match, note for note, a sound interval given vocally:
   - 11.1 Matches note for note in the same key
   - 11.2 Matches note for note in another key
   - 11.3 Does not match at all

12. The child is able to respond independently to the musical task:
   - 12.1 Always
   - 12.2 Frequently
   - 12.3 Occasionally
   - 12.4 Never

13. The child is able to move accurately upon demand:
   A. Walk
      - A.1 Always
      - A.2 Frequently
      - A.3 Occasionally
      - A.4 Never
   B. Run
      - B.1 Always
      - B.2 Frequently
      - B.3 Occasionally
      - B.4 Never
   C. Hop
      - C.1 Always
      - C.2 Frequently
      - C.3 Occasionally
      - C.4 Never
   D. March
      - D.1 Always
      - D.2 Frequently
      - D.3 Occasionally
      - D.4 Never
   E. Swat
      - E.1 Always
      - E.2 Frequently
      - E.3 Occasionally
      - E.4 Never
1. The child is able to maintain a steady beat in time to a metronome cue and employing patschen. (Song used: Music Time)
   - 1.1 Always
   - 1.2 Frequently
   - 1.3 Occasionally
   - 1.4 Never

2. The child is able to clap the rhythm of a familiar tune with confidence. (Song used: Music Time)
   - 2.1 Always
   - 2.2 Frequently
   - 2.3 Occasionally
   - 2.4 Never

3. The child is able to pronounce his name, then change direction of his own name while simultaneously pronouncing his name again.
   - 3.1 Always
   - 3.2 Frequently
   - 3.3 Occasionally
   - 3.4 Never

4. The child is able to distinguish higher and lower pitches after hearing a criterion from which to judge. (The criterion being a pitch which the child will use to judge the next pitch.)
   - 4.1 Always
   - 4.2 Frequently
   - 4.3 Occasionally
   - 4.4 Never

5. The child is able to distinguish louder and softer after hearing a criterion from which to judge.
   - 5.1 Always
   - 5.2 Frequently
   - 5.3 Occasionally
   - 5.4 Never

6. The child is able to distinguish faster and slower after hearing a criterion from which to judge.
   - 6.1 Always
   - 6.2 Frequently
   - 6.3 Occasionally
   - 6.4 Never

7. The child is able to move accurately with the correct timing of a given beat, Tempo: \( \text{Tempo; } J = 75. \)
   - 7.1 Always
   - 7.2 Frequently
   - 7.3 Occasionally
   - 7.4 Never

8. The child is able to adjust his movement accurately to a change of the drum beat tempo.
   - 8.1 Always
   - 8.2 Frequently
   - 8.3 Occasionally
   - 8.4 Never
9. The child is able to read one word.
   - 9.1 Always
   - 9.2 Frequently
   - 9.3 Occasionally
   - 9.4 Never

10. The child is able to read one sentence at a time with one word on the line.
    - 10.1 Always
    - 10.2 Frequently
    - 10.3 Occasionally
    - 10.4 Never

11. The child is able to match, note for note, a sound image.
    - 11.1 Matches note for note in the melody
    - 11.2 Matches note for note in another key
    - 11.3 Does not match at all

12. The child is able to respond independently.
    - 12.1 Always
    - 12.2 Frequently
    - 12.3 Occasionally
    - 12.4 Never

13. The child is able to move accurately upon waking:
    A. Walk
       - A.1 Always
       - A.2 Frequently
       - A.3 Occasionally
       - A.4 Never
    B. Run
       - B.1 Always
       - B.2 Frequently
       - B.3 Occasionally
       - B.4 Never
    C. Hop
       - C.1 Always
       - C.2 Frequently
       - C.3 Occasionally
       - C.4 Never
    D. March
       - D.1 Always
       - D.2 Frequently
       - D.3 Occasionally
       - D.4 Never
    E. Sway
       - E.1 Always
       - E.2 Frequently
       - E.3 Occasionally
       - E.4 Never
1. The child is able to maintain a steady beat and keeping time, and employing patterns. (Song used: "Music Time")
   1.1 Always
   1.2 Frequently
   1.3 Occasionally
   1.4 Never

2. The child is able to clap the rhythm of a familiar nursery rhyme.
   (Song used: "Music Time")
   2.1 Always
   2.2 Frequently
   2.3 Occasionally
   2.4 Never

3. The child is able to pronounce his name. He vocalizes the beginning of his own name while simultaneously pronouncing another text.
   3.1 Always
   3.2 Frequently
   3.3 Occasionally
   3.4 Never

4. The child is able to distinguish higher and lower pitch after hearing a criterion from which to judge. (The criterion being a pitch which the child will use to judge the next pitch.)
   4.1 Always
   4.2 Frequently
   4.3 Occasionally
   4.4 Never

5. The child is able to distinguish loud and soft pitches heard and choose a criterion from which to judge.
   5.1 Always
   5.2 Frequently
   5.3 Occasionally
   5.4 Never

6. The child is able to distinguish faster and slower heartbeats felt from which to judge.
   6.1 Always
   6.2 Frequently
   6.3 Occasionally
   6.4 Never

7. The child is able to move accurately with the constant tempo of a drum beat. Tempo: J=75.
   7.1 Always
   7.2 Frequently
   7.3 Occasionally
   7.4 Never

8. The child is able to adjust his movement accurately to the change of the drum beat tempo.
   8.1 Always
   8.2 Frequently
   8.3 Occasionally
   8.4 Never
9. The child is able to read one measure of music with one pitch on the third line.
   - 9.1 Always
   - 9.2 Frequently
   - 9.3 Occasionally
   - 9.4 Never

10. The child is able to read one measure of music with one pitch on the third line.
    - 10.1 Always
    - 10.2 Frequently
    - 10.3 Occasionally
    - 10.4 Never

11. The child is able to match, note for note, a small interval given verbally.
    - 11.1 Matches note for note in the same key
    - 11.2 Matches note for note in another key
    - 11.3 Does not match at all

12. The child is able to respond independently to given musical task.
    - 12.1 Always
    - 12.2 Frequently
    - 12.3 Occasionally
    - 12.4 Never

13. The child is able to move accurately upon being given the following terms:

A. Walk
   - 13.1 Always
   - 13.2 Frequently
   - 13.3 Occasionally
   - 13.4 Never

B. Run
   - 13.1 Always
   - 13.2 Frequently
   - 13.3 Occasionally
   - 13.4 Never

C. Hop
   - 13.1 Always
   - 13.2 Frequently
   - 13.3 Occasionally
   - 13.4 Never

D. March
   - 13.1 Always
   - 13.2 Frequently
   - 13.3 Occasionally
   - 13.4 Never

E. Sway
   - 13.1 Always
   - 13.2 Frequently
   - 13.3 Occasionally
   - 13.4 Never
1. The child is able to maintain a steady beat in unchanged and unaccented patterns. (Song used: "Music Time")
   - 1.1 Always
   - 1.2 Frequently
   - 1.3 Occasionally
   - 1.4 Never

2. The child is able to clap the rhythm of a melody or tune. (Song used: "Music Time")
   - 2.1 Always
   - 2.2 Frequently
   - 2.3 Occasionally
   - 2.4 Never

3. The child is able to pronounce his name, then clap the rhythm of his own name while simultaneously pronouncing his own name.
   - 3.1 Always
   - 3.2 Frequently
   - 3.3 Occasionally
   - 3.4 Never

4. The child is able to distinguish higher and lower pitches after hearing a criterion from which to judge. (The criterion being a pitch which the child will use to judge the next pitch.)
   - 4.1 Always
   - 4.2 Frequently
   - 4.3 Occasionally
   - 4.4 Never

5. The child is able to distinguish louder and softer pitches after hearing a criterion from which to judge.
   - 5.1 Always
   - 5.2 Frequently
   - 5.3 Occasionally
   - 5.4 Never

6. The child is able to distinguish faster and slower beats after hearing a criterion from which to judge.
   - 6.1 Always
   - 6.2 Frequently
   - 6.3 Occasionally
   - 6.4 Never

7. The child is able to move accurately with the movement of a steady beat tempo; J=75.
   - 7.1 Always
   - 7.2 Frequently
   - 7.3 Occasionally
   - 7.4 Never

8. The child is able to adjust his movement accuracy to a change of the drum beat tempo.
   - 8.1 Always
   - 8.2 Frequently
   - 8.3 Occasionally
   - 8.4 Never
9. The child is able to read one measure of the music as read on the Chimes list.
   - Always
   - Frequently
   - Occasionally
   - Never

10. The child is able to read one measure of the music that is not on the Chimes list.
    - Always
    - Frequently
    - Occasionally
    - Never

11. The child is able to match, note for note, a musical interval on the Chimes.
    - Matches note for note in the melody
    - Matches note for note in another part
    - Does not match at all

12. The child is able to respond independently to a musical cue.
    - Always
    - Frequently
    - Occasionally
    - Never

13. The child is able to move accurately upon hearing the musical cue:
    A. Walk
       - Always
       - Frequently
       - Occasionally
       - Never
    B. Run
       - Always
       - Frequently
       - Occasionally
       - Never
    C. Hop
       - Always
       - Frequently
       - Occasionally
       - Never
    D. March
       - Always
       - Frequently
       - Occasionally
       - Never
    E. Sway
       - Always
       - Frequently
       - Occasionally
       - Never
1. The child is able to maintain a steady and even rhythm while playing pat-schen and employing patschen. (Song used: "Music Time")
   - 1.1 Always
   - 1.2 Frequently
   - 1.3 Occasionally
   - 1.4 Never

2. The child is able to clap the rhythm of "Music Time" on a rattle stick.
   (Song used: "Music Time")
   - 2.1 Always
   - 2.2 Frequently
   - 2.3 Occasionally
   - 2.4 Never

3. The child is able to pronounce his own name while simultaneously pronouncing his own name.
   - 3.1 Always
   - 3.2 Frequently
   - 3.3 Occasionally
   - 3.4 Never

4. The child is able to distinguish high and low pitches. He will use a criterion from which to judge. (The criterion being a pitch pitch which he will use to judge the next pitch.)
   - 4.1 Always
   - 4.2 Frequently
   - 4.3 Occasionally
   - 4.4 Never

5. The child is able to distinguish faster and slower after hearing a criterion from which to judge.
   - 5.1 Always
   - 5.2 Frequently
   - 5.3 Occasionally
   - 5.4 Never

6. The child is able to distinguish faster and slower after hearing a criterion from which to judge.
   - 6.1 Always
   - 6.2 Frequently
   - 6.3 Occasionally
   - 6.4 Never

7. The child is able to move accurately with the tempo of the drum beat.
   Tempo: \( J = 75 \)
   - 7.1 Always
   - 7.2 Frequently
   - 7.3 Occasionally
   - 7.4 Never

8. The child is able to adjust his movement accurately to a change of the drum beat tempo.
   - 8.1 Always
   - 8.2 Frequently
   - 8.3 Occasionally
   - 8.4 Never
9. The child is able to read one measure of music without assistance.
   - 9.1 Always
   - 9.2 Frequently
   - 9.3 Occasionally
   - 9.4 Never

10. The child is able to read one measure of music with assistance.
    - 10.1 Always
    - 10.2 Frequently
    - 10.3 Occasionally
    - 10.4 Never

11. The child is able to match, note for note, the musical task.
    - 11.1 Matches note for note in the measure
    - 11.2 Matches note for note in part
    - 11.3 Does not match at all

12. The child is able to respond independently to given musical tasks.
    - 12.1 Always
    - 12.2 Frequently
    - 12.3 Occasionally
    - 12.4 Never

13. The child is able to move accurately upon given musical tasks.

A. Walk
    - A.1 Always
    - A.2 Frequently
    - A.3 Occasionally
    - A.4 Never

B. Run
    - B.1 Always
    - B.2 Frequently
    - B.3 Occasionally
    - B.4 Never

C. Hop
    - C.1 Always
    - C.2 Frequently
    - C.3 Occasionally
    - C.4 Never

D. March
    - D.1 Always
    - D.2 Frequently
    - D.3 Occasionally
    - D.4 Never

E. Stay
    - E.1 Always
    - E.2 Frequently
    - E.3 Occasionally
    - E.4 Never
APPENDIX D.

Sources For Songs Used In the Study


"WHO'S NAME IS ________?"

Call:  Who's name is (name)?

Answer: My name is (name).
BIBLIOGRAPHY


