7-1990

The Effects of Music on the Recognition of Sight Vocabulary of First Grade Students

Elizabeth R. Findlay

The College at Brockport

Follow this and additional works at: http://digitalcommons.brockport.edu/ehd_theses

Part of the Education Commons

To learn more about our programs visit: http://www.brockport.edu/ehd/

Repository Citation

http://digitalcommons.brockport.edu/ehd_theses/101

This Thesis is brought to you for free and open access by the Education and Human Development at Digital Commons @Brockport. It has been accepted for inclusion in Education and Human Development Master's Theses by an authorized administrator of Digital Commons @Brockport. For more information, please contact kmyers@brockport.edu.
THE EFFECTS OF MUSIC ON THE RECOGNITION OF
SIGHT VOCABULARY OF FIRST GRADE STUDENTS

THESIS

Submitted to the Graduate Committee of the
Department of Education and Human Development
State University of New York
College at Brockport
in Partial Fulfillment of the
Requirements for the Degree of
Master of Science in Education

by
Elizabeth R. Findlay

State University of New York
College at Brockport
Brockport, New York
July, 1990
"No information derived from this thesis may be published without permission of the original author, with whom copyright lies."
Abstract

The purpose of this study was to investigate the effect music had on the recognition of sight vocabulary of first grade students.

The research that had been documented previous to this study indicated that music should be used in an environment that includes an abundance of printed materials as in a language experience or whole language approach. Through this, the lyrics were made visible to the students.

A sample population of forty students was used for this study and it was conducted over an eight week period. The treatment group was instructed through the use of music and charted lyrics. The control group was instructed through the use of a basal reader.

A comparison was made through the use of a two-tailed t test to compare the posttest scores of the group that used the basal and the group that used music.

There was no significant difference found, yet further implications suggest further investigation may prove to be of use.
# Table of Contents

## Chapter I

- Statement of the Problem ................................... 1
- Purpose of the Study ......................................... 1
- Need for the Study ........................................... 1
- Definition of Terms .......................................... 3
- Summary ..................................................... 5

## Chapter II

- Review of the Literature ................................. 6
- Vocabulary Development .................................. 6
- Integrated Language Arts Programs ................. 9
- Music and Reading ........................................ 12
- Summary ..................................................... 15

## Chapter III

- Research Design ........................................... 16
- Hypothesis .................................................. 16
- Methodology ............................................... 16
- Summary ..................................................... 20
Chapter IV

Analysis of Data ........................................... 21
Findings and Interpretations .............. 21
Summary ..................................................... 24

Chapter V

Conclusions and Implications ............ 25
Implications for the Classroom ........ 26
Implications for Research ............... 27
Summary ..................................................... 28

References ................................................... 29

Appendix A .................................................. 32
Appendix B .................................................. 33
Chapter I

Statement of the Problem

Purpose of the Study

The purpose of this study was to investigate the effect music had on the recognition of sight vocabulary of first grade students.

The study sought to answer the following question:

Is there a statistically significant difference between the mean posttest sight vocabulary scores of students who used music and charted lyrics in a sight vocabulary program and the mean test scores of students who did not use charted lyrics?

Need for the Study

In the ongoing process of trying to find techniques that help children meet success in school, music has been one of those techniques that has not been examined completely.

Children enjoy music. They like the rhythm and the sound of the songs being played. However, music has not been used very often in the regular classroom as a tool to help teach reading. Harp (1988) states that reading is a language activity and that anything
we do in the teaching of reading should be consistent with the nature and purpose of language. "Using songs to teach reading is consistent with the nature and purposes of language and puts readers in touch with satisfying meanings." (p. 454)

Music is a natural extension of children's language and experience. Goodman, Goodman (1983) and Graves (1982) assert that children learn to use written language in much the same way that they learn oral language - through constructing their own rules and relationships. "The more that children can hear language, especially 'book' language, the more opportunities they have for constructing their own rules." (Harp, 1988, p. 454)

In a whole language classroom, music and singing fit the approach readily. Harp (1988) maintains that songs chosen can be part of the child's environment or experience or songs that the child constructs or dictates. "The meaning in a song can be quite personal, but no one would ever consider taking a song apart into meaningless segments." (Harp, 1988, p. 455)

Music should be part of the everyday activities in children's lives. Harp (1988) believes that filling
the classroom with favorite songs requires only that the teacher be willing to spend some time selecting the songs, and be willing to employ records, tapes, piano, or guitar in teaching the songs to children. Some activities that could be employed by the teacher would be learning favorite songs, meeting the lyrics in print, reading song charts and booklets, comprehension extension activities and writing activities.

Having taken all of these aspects into consideration, this study was developed and conducted to see if music had an effect on learning, specifically on sight vocabulary in a whole language setting.

**Definition of Terms**

For the purpose of this study it was necessary to define several terms.

1. **Sight Vocabulary** - The words immediately recognized in reading.

2. **Word Recognition** - The process in reading of recognizing a word for which the pronunciation and meaning have been previously identified.

3. **Whole Language** - A child-centered philosophy
designed to meet individual interests and needs. It is a holistic process that integrates all aspects of language arts in an instructional environment that stresses unity of learning.

4. **Language Experience Approach** - An approach to reading in which the "readers learn to bring their own knowledge and experience to bear in constructing meaning from the printed word" (Weaver, 1984, p. 44). "The teacher begins with the language and experiences of the children - individual experiences and experiences they have had together" (p. 44).
Summary

The use of music in the classroom was examined for its influence on sight word recognition of first grade readers. The use of songs to teach reading is consistent with the nature and purposes of language. The songs lend themselves to involve the children in meeting the lyrics in print, reading song charts and booklets, comprehension extension activities and writing activities.
Chapter II

REVIEW OF THE LITERATURE

When children are first learning to read, educators try to find ways that make learning as interesting as possible for them, ways that elicit success of the students. Some of the strategies have been successful; some have been unsuccessful. This chapter will address vocabulary development, integrated language arts programs, and music and reading.

Vocabulary Development

"Knowledge of vocabulary, along with basic comprehension strategies, is the key to understanding both spoken and written language" (Johnson, 1984, p. 1). Johnson (1984) feels that reading instruction will be easier for children to grasp if they are familiar with the words an author uses; learning to read will be difficult if the words encountered in print are confusing or unknown.

When children are first beginning to read they learn what are called "sight words." Johnson (1984) states that knowledge of high frequency sight words are essential to a successful reading experience.
They are not interesting to children but they are "the glue words of language that cement meaningful communication" (Johnson, 1984, p. 3).

Sight words, according to Johnson (1984) should be initiated in the early primary years and continue, essentially, forever. "Continuous, steady vocabulary growth is a key ingredient in developing reading comprehension" (Johnson, 1984, p. 4).

Bridge (1983) conducted a study which consisted of using predictable materials as opposed to preprimers to teach beginning sight words to slow learners. The experimental groups were instructed with six patterned books and dictated language experience stories. The control group used the preprimer, Rockets. Both groups were pretested and posttested on forty-five sight vocabulary words taken from Rockets, plus thirty-two additional words. The experimental group learned significantly more vocabulary words than the students in the control group using the preprimer. The experimental group had to rely on a great deal of context clues, whereas the control group relied solely on grapho-phonic information. The study concluded that the teachers who used the predictable materials as a resource for reading and
writing activities will help beginning readers acquire sight vocabulary, use context clues for decoding unfamiliar words, and develop positive feelings toward reading.

Johnson (1984) also feels that initial reading instruction ought to include many opportunities for children to interact with whole words put into meaningful written sentences.

Freebody and Byrne (1988) argue that the strategy beginning readers will naturally adopt is to begin building a stock of sight words without accompanying grapheme-to-phoneme associations. Decoding skills begin to happen only when the reader has achieved some measure of phonemic awareness. This leads to the point that "there will be a proportion of students in the elementary grades whose reading strategy is characterized by dependence on a sight vocabulary without substantial decoding skills, and that these students will exhibit more general problems in reading such as comprehension" (Freebody and Byrne, 1988, p. 444).
Integrated Language Arts Programs

Hall (1970) stated that while building children's vocabularies, listening, speaking, reading and writing the words must be increased. "If the children are exposed to an integrated language arts program, they will develop a larger and more interesting vocabulary" (Hall, 1970, p. 44).

An approach that supports this idea is the language experience approach or LEA. Weaver (1988) maintains that those who advocate this approach are concerned with helping beginners learn to bring their own knowledge and experience to bear in constructing meaning from the printed word.

Weaver states that:

The language experience approach seems to assume that learning to read means learning to construct meaning from a text, and that in order to construct meaning, we must bring meaning to what we read (Weaver, 1988, p. 44).

There are many advantages to the language experience approach. Miller (1974) stated that this approach allows children the opportunity to conceptualize during the early stages of reading instruction, fosters creative writing, and develops a true interest in reading. They need a balanced
program that provides plenty of experiences and learning opportunities. When this is happening, reading takes place, but only when there is comprehension of what is being read. It focuses on the learner's goals and interests.

Hall (1970) also found that children who are given time for purposeful writing, speaking and listening demonstrate greater understanding of basic reading skills than those who received basal reading instruction. Through language experience, sight words are reinforced by allowing the children to use the words in their own stories, therefore, increasing meaning.

"Like advocates of the language experience approach, those who advocate a whole-language approach emphasize the importance of approaching reading and writing by building upon the language and experiences of the child" (Weaver, 1988, p. 44).

Whole-language is a "philosophy for the development of language and thinking, and is a philosophy for learning through language and thinking" (Goodman, Smith, Meredith, Goodman, 1987, p. 6).

In a whole-language approach Weaver (1988) states that children learn letter/sound relationships and
sight words through repeated exposure to songs and rhymes, stories, and signs and labels for objects in the classroom. Children learn their language by "listening to it spoken and formulating their own unconscious hypotheses about its structure" (Weaver, 1988, p. 45).

Geotz (1983) feels that when dealing with emergent readers, there should be no standard preprimers, common basals, workbooks, flash card exercises, required oral reading, or a required daily reading period. Reading should take place "in the context of language relevant to traditional school activities which allow for physical movement, sociability, and creative use of materials" (Geotz, 1983, p. 8). This supports the whole language philosophy.

Success in teaching whole language will depend on the learner's experiences, vocabulary and needs. Their knowledge will be expanded through the children being read to (modeling), reading with them, encouraging them to read on their own, and by directly teaching the word recognition skills of decoding and use of context.

"Children must be exposed to meaningful print written in natural language" (Weaver, 1988, p. 45).
Music and Reading

Alvin (1975) states that music penetrates into the most secret recesses of the soul, an affect against which man is more or less defenseless.

Whether music is being listened to just for enjoyment or whether it is being used for educational purposes, the character of music and the effects it provokes depends on the various elements of sound and their relationship.

Even in the most simple forms, music is evocative of sensations, moods and emotions. It can reflect the feeling of the moment or change it by its presence. It can also increase the actual mood and bring it to a climax, or dispel it (Alvin, 1975, p. 54).

"As in reading, music is always related to man's own experiences, since it has been born out of his own mind, speaks of his emotions, and lies within his perceptual range" (Alvin, 1975, p. 55).

Bottari and Evans (1982) state that throughout history, man's responses to music have been basically similar and influenced by the same factors, namely man's physical receptivity to sound, his innate or acquired sensitiveness to music, and his state of mind at the time. "Melody alone is not recognized
as well as when it has its wording" (Bottari and Evans, 1982, p. 337).

Geotz (1983) found that children will learn words through the playful approach of learning chants. The chants are printed on large chart paper and read together in large groups. One way to use chants is through the use of music. Bandi (1985) states that children enjoy songs and music far beyond rhythm, companionship, group spirit, or music as an art form.

In a whole language experience, songs can be chosen as part of the child's environment or experience, or the songs can be those that the child constructs or dictates. Harp asserts that:

Music and reading go together because singing is a celebration of language. Children's language naturally has rhythm and melody. Children bring this natural "music" of language with them to the task of learning to read, and so using signing to teach reading draws on this natural understanding (Harp, 1988, p. 454).

Schulberg (1981) states that most musical participation takes place within groups which offer opportunities for accepting responsibility for oneself and others. It also helps to develop self-directed behavior and aids in experiencing cooperation and competition in socially acceptable ways. This enhances verbal and nonverbal communication, social interaction,
learning realistic social skills, and personal behavior patterns, and it enhances the enjoyment of leisure time activities in recreation and entertainment.

Through music, Bandi (1985) states that the children are active participants which can be joyful and rewarding. The children become aware of words and sentences as sounds combined with rhythm. When music accompanies words, it gives an additional dimension to the words. Repetition reinforces memory, especially in song, therefore the children memorize words and sentences, and weave them into all parts of their daily language needs.
Summary

Vocabulary development, integrated language arts program, and music and reading were addressed in this chapter. Sight words were a main focus and were found to be essential to the reading experience. The language experience approach was looked at as well as the whole language approach. Both approaches were found to be beneficial and rewarding. Music was found to be beneficial and rewarding whether it was listened to for enjoyment or whether it was being used for educational purposes.
Chapter III

RESEARCH DESIGN

The purpose of this study was to determine if music had an effect on the recognition of sight vocabulary of first grade students.

Hypothesis

The null hypothesis investigated in this study was:

There is no statistically significant difference between the mean posttest sight vocabulary scores of students who use music and charted lyrics in a sight vocabulary program and the mean test scores of students who did not use charted lyrics.

Methodology

Subjects

A sample population of forty students was drawn from two first grade classes in a middle-income, public elementary school located in Western New York.

The two classes were next door to each other and followed similar daily programs and instructional time periods. One class was extensively involved
in a whole language atmosphere while the other class strictly used the basal approach. Both classes used the same slots of time to teach reading, math, social studies and science. Each class went to their specials at the same time.

**Instruments**

The effect of music on the recognition of sight vocabulary was assessed through the use of a pretest and posttest consisting of the same fifty sight words.

The pre and posttests were developed by the examiner. The same test was given at the two administrations. The fifty words were picked from the first grade Dolch list and were listed randomly.

**Procedure**

The first grade instructors involved in this study were chosen because of their willingness and availability to participate in the study. Both instructors have taught first grade for three years. One of the instructors holds a Masters degree in Elementary Education and the other is working toward her M.S. in Education. The instructor of the treatment group was chosen primarily because of her ability
to play the piano. The researcher administered the pre and posttests. Two different teachers instructed the treatment and control groups.

The pretest was given individually to each of the forty students by the examiner the week prior to the treatment period.

The fifty sight words were hand printed on flashcards and the students read them one at a time. They were given a time allowance of ten seconds to read each word. The examiner recorded on a separate sheet the words read correctly (Appendix A) by marking them with check marks in blue ink.

Using the list of fifty sight words, the examiner chose sixteen songs that had the words written in the lyrics (Appendix A). The songs were then written on large chart paper.

The treatment group, which consisted of twenty students, was exposed to each of the sixteen songs over an eight week period. The songs with the charted lyrics were used four times a week during the time allotted for reading. Each week, the group was exposed to two new songs, so at the end of the eight week testing period all sixteen songs had been used.

While the piano was being played, one of the
students, proficient in reading, pointed to the lyrics on the chart paper. This procedure was used throughout the testing period.

The control group, which consisted of twenty students, was exposed to the same fifty sight words through the use of their basal readers over the same eight week period as the treatment group. The format in the classroom did not change at all. The instructor carried on with the regular routine and used the reading time as was always used. The sight words were presented to the students. They were found in their stories, and a spelling test was given.

At the end of the eight week treatment period the examiner tested the students from both groups using the same procedure as when the pretest was given. Each student was given the flashcards to be read and was given the same ten second allowance time. This time the examiner marked each correct answer in red ink making it easier to distinguish between the pre and posttest scores.

Throughout the pre and posttesting situations, the examiner gave no prompting as to what the words were to insure accurate responses from the students.
Analysis of Data

The data gathered from the pre and posttest scores will be statistically analyzed through the use of a two-tailed t test.

Summary

One hypothesis dealing with music and its effect on the recognition of sight vocabulary of first grade students was tested. A sample population of forty students was used. The study was conducted over an eight week period.

The treatment group was instructed through the use of music and charted lyrics. The control group was instructed through the use of a basal reader. A pre and posttest was given to determine the effects music had on sight vocabulary of first grade readers.
Chapter IV

Analysis of Data

The purpose of this study was to investigate the effect music had on the recognition of sight vocabulary of first grade students.

The hypothesis presented in an earlier section of this paper was tested statistically using a two-tailed $t$ test.

Findings and Interpretations

The null hypothesis investigated in this study stated that there is no statistically significant difference between the mean posttest sight vocabulary scores of the students who used music and charted lyrics in a sight vocabulary program and the posttest scores of the students who did not use music and charted lyrics.

Table 1 presents the mean scores of the pretest groups. This analysis was carried out to establish the comparability of the two groups.
Table 1

Mean Pretest Vocabulary Scores for Charted Lyric Group and Control Group

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Size</th>
<th>Mean</th>
<th>Sample Standard Deviation</th>
<th>Sample Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre B</td>
<td>20</td>
<td>31.95</td>
<td>13.7744</td>
<td>3.08005</td>
</tr>
<tr>
<td>Pre M</td>
<td>20</td>
<td>36.30001</td>
<td>9.10234</td>
<td>2.03535</td>
</tr>
</tbody>
</table>

_t_ value = 1.17

_p_ > .05 = 2.093

Analysis of the data was completed through the use of a two-tailed _t_ test, comparing the pretest of the basal group with the pretest of the music group (_t_ value = 1.17, critical value for _t_ = 2.093, df = 19, _a_ = 0.05). The results of the data indicated that the two groups in this study were comparable.
Table 2 presents the mean scores of the posttest groups.

Table 2

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Size</th>
<th>Mean</th>
<th>Sample Standard Deviation</th>
<th>Sample Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post B</td>
<td>20</td>
<td>39.3</td>
<td>10.49862</td>
<td>2.34756</td>
</tr>
<tr>
<td>Post M</td>
<td>20</td>
<td>41.6</td>
<td>7.78933</td>
<td>1.74175</td>
</tr>
<tr>
<td>Post T</td>
<td>40</td>
<td>40.45001</td>
<td>9.19853</td>
<td>1.45441</td>
</tr>
</tbody>
</table>

\[ t \text{ value} = .787 \]

\[ p > .05 = 2.093 \]

In order to answer the research question, a second comparison regarding the data was carried on to compare the posttest scores of the basal group and the posttest scores of the music group. Again, a two-tailed \( t \) test was used (\( t \) value = .787, critical value for \( t \) = 2.093, \( df = 19 \), \( a = 0.05 \)). This resulted in failure to reject the null hypothesis. There was no statistically significant difference between the posttest scores of the two groups.
Summary

A comparison was made by using a two-tailed t test to compare the pretest scores of the two groups in this study. From the results of the data, it was indicated that the two groups were comparable.

A second comparison was made by using a two-tailed t test to compare the posttest scores of the two groups in this study. The analysis resulted in failure to reject the null hypothesis.
Chapter V

Conclusions and Implications

This study investigated the effect music had on sight word recognition of first grade students. Results of the study failed to reject the null hypothesis which stated that there would be no statistically significant difference between the mean posttest sight vocabulary scores of the students who use music and charted lyrics in a sight vocabulary program and the test scores of the students who did not use charted lyrics.

The finding of the study implies that the treatment used did not solely affect the reading of sight vocabulary by the first grade students in the music group. There was an increase in the recognition of the sight words by both groups. Both methods used to teach the sight words were appropriate.

A longitudinal study of the effects of music on sight vocabulary may prove to have an effect. Over the course of one school year, beginning in September and ending in June, a significant difference may be seen.
Implications for the Classroom

Although no significant difference was found when music was used as a tool to teach sight vocabulary, there was no indication that it was a hindrance, either.

Educators must continue to search for the best means to develop recognition of sight vocabulary. The use of music in the classroom can be of value to teachers engaged in the improvement of this instruction. Children enjoy music and will respond to this when learning.

During the course of this study, the children enjoyed singing the songs and expressed their feelings about how they liked being able to read the words while they sang.

Over the eight week period, the teacher reported to the researcher that the children sang the songs throughout the day, sometimes humming the tunes to themselves as they worked. This indicated to the researcher that the children enjoyed the songs and were thinking about them periodically in a positive way.

It is felt by the researcher that music has a positive influence on students within the learning
process. An abundance of records with the songs charted on paper for the children to read is an excellent motivational tool for a teacher to use.

Having some background in music could be very useful to the classroom teacher. Playing the piano, especially in the primary grades, gives the classroom a cheerful and inviting atmosphere, one that is conducive to learning. Playing a guitar at all grade levels could be beneficial for the same reasons mentioned.

**Implications for Research**

From the findings of this study it is evident that a need exists for more research on the effects of music being used in the classroom as a means to teaching sight vocabulary.

Future research for the classroom should place emphasis on an understanding by teachers of the use of music and its implication for reading instruction.

Although no significant difference was found in the treatment tested in the present study, factors for further research were revealed.

In attempting further research using music as a tool in the classroom, the researcher suggests
replication of the present study at the second and third grade levels. A small sample of a first grade population was used. This fact should be taken into consideration when generalizations are made concerning this present study. The long term effects of the study have not been determined. Therefore, in depth, longitudinal studies dealing with music in the classroom may prove beneficial.

**Summary**

Although the study of the effect of music on sight vocabulary did not show any significant difference, there was no indication that it was a hindrance, either.

Music is a positive influence on children. They enjoy it, therefore it can be used as a useful tool in the classroom.

Further investigation, such as a longitudinal study may show a different outcome to this type of study.
References


Appendix A

Songs

Aiken Drum - Raffi
America - Smith, Samuel Francis
Baby Beluga - Raffi
Down by the Bay - Raffi
Five Little Ducks - Raffi
Grand Old Flag - Cohan, George M.
I Know an Old Lady - Bonne, Rose & Mills, Alan
The More We Get Together - Raffi
Mr. Sun - Raffi
Shake My Sillies Out - Raffi
Six Little Ducks - Raffi
Star Spangled Banner - Key, Francis Scott
There Are Many Flags - Howliston, M. H.
This Old Man - unknown
Yankee Doodle - unknown
Yankee Doodle Boy - Cohan, George M.
<table>
<thead>
<tr>
<th>Student No.</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. eight</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>2. that</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>3. at</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>4. please</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>5. don't</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>6. where</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>7. my</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>8. our</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>9. your</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>10. once</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>11. made</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>12. far</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>13. seven</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>14. play</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>15. call</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>16. always</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>17. from</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>18. this</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>19. went</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>20. never</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>21. own</td>
<td>______</td>
<td>______</td>
</tr>
</tbody>
</table>
Appendix B Cont'd.

43. only
44. just
45. know
46. good
47. down
48. little
49. keep
50. came