1952

The effectiveness of music dictation as an aid to music reading in grades seven and eight.

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Boston University
THE EFFECTIVENESS OF MUSIC DICTATION AS AN AID TO MUSIC READING IN GRADES SEVEN AND EIGHT

A Thesis
Presented to
the Faculty of the College of Music
Boston University

In Partial Fulfillment
of the Requirements for the Degree
Master of Music Education

by
Jesse Foss Davis, Ed. B
August, 1952
Approved by:

[Signature] First Reader
Professor of Music Education

[Signature] Second Reader
Professor of Music Education
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CHAPTER I

INTRODUCTION

A. Nature and Scope of the Problem

Statement of the problem. It is the purpose of this study to organize, conduct and interpret a project in music dictation, using original material, in grades seven and eight, to determine:

1) the effectiveness of music dictation in the development of music reading skills in grades seven and eight, and

2) the concomitant effects, if any, of music dictation on the music program generally.

Scope. This study is concerned with grades seven and eight in the public schools of Naugatuck, Connecticut, under the supervision of the writer, and covers a period of twenty school weeks during the school year 1950-1951. Teachers who assisted in making the study were classroom teachers who customarily taught the music in their own classroom under the direction of the music supervisor.

B. Definition of Terms

Music reading. Music reading is understood to be a skill, involving the ability to reproduce accurately from the score the two main properties of musical sound, pitch and duration, with a reasonable amount of expressiveness and in-
interpretation. Dykema and Cundiff define music reading as "interpreting the printed page of music ('reading music') with some ease and musical feeling."¹ Mursell defines music reading as "the performance of music directly and independently from the score . . . ."²

**Score.** Essentially the score is a system of symbols that has been evolved to represent musical ideas, and its mastery, which involves its use both in reading and in expressing original musical thought, consists in the ability to grasp these ideas symbolically represented.

**Effectiveness.** Effectiveness can be defined as the degree to which the pupil's power and accuracy in music reading skills increase.

C. Justification of the Study

Considerable argument has been offered from time to time to the effect that music education has been handicapped and allowed to deteriorate as a result of excessive formal drill in note-reading and in technical skill. Methods of teaching music reading have been a bone of contention, and many conflicting theories have been advanced for developing musical "awareness," understanding, and sufficiency in pupils. The ability to read the musical score is essential to com-


plete understanding of the written page. We must not detract from the importance of reading skill. But in the past, over-zealous music educators have admittedly emphasized note-reading to excess, resulting in a growing resentment on the part of the pupil toward music in general. We must therefore formulate some other teaching device which may supplement, but not substitute for, the actual usage of the score in learning to read music. An experiment in music dictation may be one means of determining the usefulness of dictation as a device toward more accurate understanding of the score, without the pressure of extended and repeated formal drill in singing basic note patterns.

Music dictation can become an instrument for learning, through actual usage, the staff, the G and F clefs, the signatures of time and key, and the various note values which make up our system of notation. Moreover, the ear-training which would result through a project in music dictation should aid materially in forming a better concept of the written score, i.e., the resulting performance should be a more accurate interpretation of the music symbols.

Mursell and Glenn state:

It is clear that a competent mastery of the score is of great importance for participation in a diversified range of musical activities and experiences. While one may be a valuable member of a vocal ensemble without being able to follow the score, yet even here the ability to read is highly desirable. . . . Sometimes students of curriculum have contended that the teaching of the notation should be given a very minor place in music education, and that it should be confined to those pupils who manifest special music ability. The reason given is that most persons in adult life very
rarely read music. Yet manifestly, if one of our chief purposes is to promote a widespread and vital musical amateurism, this objection will not carry weight. The power to read music with some facility and pleasure is a most important part of the equipment of the amateur. We should seek to establish the ability to "read music" in the ordinary sense of the phrase. Here the following standard is suggested: from the sixth grade onward the pupil should be able to read music that presents to him no serious technical difficulties, and to read it with facility sufficient to derive pleasure from the activity and to produce a musically intelligent result.3

Gehrkens states:

The pupil ought to learn to read or he will be a musical illiterate, not being able by himself to "get at" the actual sound of a vocal or instrumental composition, and missing many things in all music that are forever hidden from those who have not achieved the power of compelling the staff to divulge its secrets.4

Dykema and Cundiff state:

Since power to interpret the printed page is the only means of independence in selection of music and in its performance, our schools must provide for independent reading.5

The Music Educators' Source Book states that:

Despite the growing tendency to give less time and attention to acquiring skill in reading music, we reaffirm our belief in the importance of an ability to perform music easily and accurately from the printed page.6

It is granted that an ultimate goal of the music education program is appreciation, experience with the power and beauty of music. Appreciation has many facets, including


5 Dykema and Cundiff, op. cit., p. 3.

listening, performance, and creating. It is not intended that music reading, per se, will supplant this, or any other, ultimate objectives of the program. Music reading is a tool skill, and as such must be effectively learned, and learned to the point of facility, if it is to help the pupil toward the full appreciation which he ultimately seeks.

D. Design of the Study

The selection of groups for the experiment is described in detail in Chapter III. The plan outlined below will be followed in reporting the various phases of this study:

1) Determination of music reading experience and skill of students in grades seven and eight.
2) Necessary technical preparation for pupils to participate in the experiment.
3) Instruction to the classroom teacher.
4) Uniformity in the preliminary drill.
5) Administration of test material.
6) Tabulation and analysis of resulting data.
CHAPTER II
PREVIOUS MUSIC READING EXPERIENCE
OF SEVENTH AND EIGHTH GRADE PUPILS
INVOLVED IN THE EXPERIMENT
CONDUCTED IN THE NAUGATUCK ELEMENTARY SCHOOLS

Students in the first six grades have had many rete songs and reading songs involving all the problems in simple rhythm, chromatics, and finding "do." The following notes and combinations of notes have been taught during the first six grades with a constant review as the student progresses:

\[ \begin{align*}
&\text{J} \quad \text{d} \quad \text{J} \quad \text{c} \quad \text{J} \\
&\text{F} \quad \text{f} \quad \text{i} \quad \text{r} \quad \text{f} \\
&\text{J} \quad \text{d} \quad \text{d} \quad \text{d} \quad \text{d} \\
&\text{J} \quad \text{d} \quad \text{d} \quad \text{d} \quad \text{d} \\
\end{align*} \]

How to find "do" by calling the last flat "fa" or the last sharp "ti" has been taught during the second half of the second grade, or when there was class readiness. Sometimes it occurred in the third grade. Chromatics were first taught in the fourth grade, with a constant review in later grades. Compound time was first taught in the fifth grade. In the sixth grade, it was reviewed in songs as it occurred.

Two-part singing was started in the fourth and continued in the fifth and sixth grades, with three-part singing being introduced in the sixth grade and continued in the seventh and eighth grades. Four-part singing was begun in the seventh grade if there were basses.

The students also have had listening opportunities, and every pupil has participated in a rhythm band or a melody orchestra. On an elective basis, beginning in the fourth grade,
students have been given the opportunity to take class instrumental lessons, and play or sing in ensemble groups, including quartets, sextets, and octets. Small choirs were developed in the fifth and sixth grades.

While, as a result of this background, no determination of actual music reading ability can be given, the skill development is felt to be generally reasonable, and its application in other musical experiences generally effective.
CHAPTER III

DESCRIPTION OF THE PROCEDURE OF THE EXPERIMENT

A. Justification of the Technique

Because the experimental method is a most useful and important way to obtain evidence, the following steps have been considered as essential in this study:

1) The problem was carefully isolated by confining the use of music dictation to grades seven and eight.
2) The experimental factors were clearly defined.
3) The groups chosen for the experiment were kept as nearly equal as possible.
4) All factors were controlled by having a single variable at each step of the experiment.
5) A test was given before the experiment and at its conclusion.
6) The results were tabulated and analyzed.

B. Technical Preparation

An experiment in the dictation of music was given to selected classes in grades seven and eight, to determine whether groups approximately equal in music reading ability would, or would not, be aided to greater score reading ability by the inclusion of ear training through the medium of music dictation.

For purposes of valid comparison, these groups were selected and paired off, on the basis of their music reading skills, as equally as is possible in a practical school situation. Grades seven and eight were divided into four sections each, two sections participating in music dictation through
the prescribed problems, while the remaining two followed the
music program to which they had been accustomed and which did
not involve music dictation.

In order to select those sections of each grade which
would be equitably paired with each other, the procedure
taken was as follows:

1) Each group was tested individually for sight-reading
   ability, using easy music reading material.
2) A record was made of the good, average, and poor
   readers in each grade.
3) Those two sections of each grade which compared as
   nearly equally as possible were selected and paired.

In order to validate the significance of differences in
improvement in score reading ability, the writer felt it justi-
fiable to select the weaker group for the experimental dictation
procedure.

Evaluation of note-reading ability was based on the fol-
lowing criteria:

1) Good readers made no more than one mistake in rhythm,
   pitch, or syllables.
2) Average readers were allowed a total of two or three
   mistakes on these points.
3) Poor readers needed constant help in all phases of
   score reading to enable them to continue.

This same standard of evaluation was used in a final re-
check at the close of the dictation experiment, to determine
the improvement, if any, in score reading ability. The in-
Individual scores may be found on pages 33-36, inclusive.

The experiment, in all its phases, was carried out in the writer's own schools, with the full cooperation of participating teachers and the administration.

When the two experimental groups of each grade had been selected, as described above, the following procedure was followed:

1) The two remaining groups of each grade not selected for laboratory purposes (hereafter to be termed the "control group") were allowed to continue their normal course in music activity.

2) The experimental groups were prepared for the testing period as follows:

a) A two-week period of preliminary instruction and drill in music dictation was allowed, both on staff-lined paper to be used at the pupils' desks, and by voluntary demonstration going on simultaneously at the blackboard.

b) The teacher was provided in each experimental classroom with definite instructions for the recommended procedure, and also was given sufficient drill material to cover a period of twenty weeks.

c) Staff-lined paper was provided for pupil use in the regular drill of music dictation.
C. Instructions to the Classroom Teacher

(The following instructions were given to classroom teachers and are here outlined:)

The daily drill material is intended to cover a period of twenty school weeks, and is set up to provide two exercises for each school week. If you do not complete both exercises during any particular week, please go on to the next two, as test problems, given by the supervisor, will be constructed on a progressive basis, one test problem for each of the weekly drill units.

PROCEDURE

1) Preparation.
   a) Provide all pupils with staff-lined paper.
   b) Assign two or three pupils to work simultaneously at the blackboard. (Pupils who work at the board must make their own staff with the staff-liner.)

2) Teacher to instruct pupils:
   a) To make a G clef.
   b) To properly locate each sharp or flat in the key signature.
   c) To give proper time signature for each problem.
   d) To determine the location of "do."
   e) To put their pencils down and listen.

3) Teacher will indicate:
   a) Tempo (slow reading speed).
   b) The sound of "do."

4) Writing of the exercise.
   a) The teacher will play on the piano the complete melody. If the problem is long, the teacher will play the first half a second time.
   b) Pupils think the syllable names, and rhythm of the first half of the melody, and write it.
c) Teacher plays the second half of the melody.

d) Pupils think syllable names and rhythm of second half and then write it down.

e) Teacher repeats entire melody; pupils check their work.

f) Teacher should not play the problem more than five times.

5) Corrections and time limit.

a) Pupils correct their own daily exercises, either from an approved version at the blackboard, or from information given by the teacher. (The teacher is not expected to make daily formal corrections.)

b) Teacher tries to keep the time for daily dictation drill to a maximum of five minutes for one daily exercise, in order not to handicap the regular music program.

D. Procedure of the Regular Drill

Approximately one month following the opening of the school year 1950-1951, or after sufficient time had elapsed in which to determine the comparative reading abilities of each of the chosen grades, preliminary instruction was given to those two sections which had been selected for testing in grades seven and eight, in order to orient the pupils in the technique of music dictation. The purpose of the orientation period was to acquaint the pupils with the problems of correct representation of note values, measure lines, signatures of time and key, formation of G and F clefs, and any other information pertinent to the experiment.

When it was determined that the techniques of music writing were clearly understood, a series of progressively
difficult dictation problems, suitable to each grade, was presented to each of the two experimental groups. These problems were in two forms:

1) Drill material, illustrated on pages 18-26 inclusive, administered by the classroom music teacher at each scheduled music period.

2) Bi-weekly test material, found on pages 28-30 inclusive, administered by the writer of this thesis.

All these dictation exercises, for drill and for bi-weekly testing, were prepared and made available by the writer and were not taken from any published source.

E. Administration of the Test Material

When the selected groups had had sufficient orientation in the procedures for taking dictation in music, and had had at least two weeks' drill in the actual process of writing such dictation, the testing program began. Ten test problems (see pages 28-30 inclusive) were provided for each of the experimental sections, these problems being similar in nature to those found in the regular drill material. The ten test problems provided for an exercise to be given at each fourth meeting of the class, since the class meets twice each week.

Administration of the test material was similar to that followed by the classroom teacher in her regular drill. However, unused staff-lined paper was provided, since the effort of the pupils was to be formally corrected and graded. It was essential also that the test administrator comply exactly with
the method in presenting the dictation as requested of the classroom teacher, since the results in the test were to reflect the accumulation of skill resulting from the regular drill. These procedures have been enumerated in the section under "Instructions to the Classroom Teacher" (see pages 11-12).

Following the administration of each bi-weekly test, the papers were collected, corrected, graded, and the score recorded as found on pages 33-36 inclusive. The papers were then returned to the classroom for review, both by the teacher and the pupils. Pupils were thus informed as to where their mistakes had been made, and the teacher was able to discover weaknesses in certain areas, of the class and of individuals. The teacher could then take remedial steps toward the strengthening of the weak areas.
CHAPTER IV

ORIGINAL DRILL MATERIAL

The drill material, left with the classroom music teacher, provided for approximately one exercise to be given in each music period over a space of twenty school weeks.

The construction of the drill problems was as follows:

Grade VII

(40 problems)

1) Five with no melodic skips, starting on "do," using ___.

2) Five with no melodic skips, adding ___.

3) Five with tonic chord skip, starting on "do," "mi" or "sol," using ___.

4) Five with tonic chord skips, adding ___.

5) Five with no melodic skips starting on "do," using ___.

6) Five with tonic chord skips starting on "do," "mi" or "sol," using ___.

7) Two with skips of the dominant chord, using ___.

8) Three with skips of the dominant chord, using all previous rhythms.

9) Two with tonic chord, using chromatic "fi."

10) Three with tonic and dominant chord skips, using chromatic "fi."

Grade VIII

(40 problems)

1) Five with no melodic skips, using ___.
2) Five with no melodic skips, adding \( \text{\textbullet} \) \( \text{\textbullet} \) \( \text{\textbullet} \) \( \text{\textbullet} \) \( \text{\textbullet} \).

3) Five in F clef with no melodic skips, using \( \text{\textbullet}, \text{\textbullet}, \text{\textbullet}, \text{\textbullet}, \text{\textbullet} \).

4) Five with tonic chord skips, using \( \text{\textbullet} \), \( \text{\textbullet} \), \( \text{\textbullet} \), \( \text{\textbullet} \), \( \text{\textbullet} \), starting on "do," "mi" or "sol."

5) Five with no tonic skips, using \( \text{\textbullet} \), \( \text{\textbullet} \), \( \text{\textbullet} \), \( \text{\textbullet} \).

6) Five in F clef with tonic chord skips, using \( \text{\textbullet} \), \( \text{\textbullet} \), \( \text{\textbullet} \).

7) Five with dominant chord skips, using rhythms \( \text{\textbullet} \), \( \text{\textbullet} \), \( \text{\textbullet} \), \( \text{\textbullet} \).

8) Two with no melodic skips, using \# chromatic "fi" and "si."

9) One with tonic skip, using \# chromatic "fi" and "si."

10) Two with no melodic skips, in two clefs, two parts, using \( \text{\textbullet} \), \( \text{\textbullet} \), \( \text{\textbullet} \).
ORIGINAL

DRILL MATERIAL
GRADE EIGHT DRILL MATERIAL

31.

32.

33.

34.

35.

36.

37.

38.

(No. 39 and 40 on next page.)
CHAPTER V

ORIGINAL

TEST MATERIAL
CHAPTER VI

TABULATION OF THE RESULTING DATA
A. Tabulation of Individual Scores

After the individual papers of each class had been corrected and graded, the scores were recorded on tabulation charts (see pages 33-36, inclusive). A perfect score was on the basis of 100%; five points were deducted for each error in key signature, pitch, and rhythm. The horizontal line of the chart shows the progress of each individual from week to week. The vertical scores were used to compute the bi-weekly class median, and the corresponding class mean. When the corrected test papers were returned to the classroom teacher, the class median and the class mean for that particular test were included in the individual score charts. In this way, the teacher was able to keep a record of class progress.
INDIVIDUAL SCORES

Experimental Group A, Grade 7

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Median Score of Class

|          | 95 | 95 | 90 | 95 | 90 | 95 | 90 | 90 | 95 | 100 |

Mean Score of Class

|          | 88.9| 90 | 87.9| 80.6| 86.1| 83.8| 86.7| 82.9| 88.1| 90.5 |
## INDIVIDUAL SCORES

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| Mean Score of Class   | 80  | 81.1 | 73.8 | 87.5 | 91.9 | 89.8 | 89.8 | 92.1 | 90.3 | 85.8 |
## INDIVIDUAL SCORES

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| Median Score of Class | 95 | 95 | 95 | 90 | 90 | 100| 90 | 85 | 90 | 90 |
| Mean Score of Class   | 93.2| 91.5| 92.7| 88 | 87.4| 90.9| 81.9| 79.6| 89.2| 87.4 |
## INDIVIDUAL SCORES

**Experimental Group B, Grade 8**

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</table>

| Median Score of Class | 100 | 90 | 75 | 90 | 95 | 85 | 75 | 85 | 90 | 95 |

| Mean Score of Class | 80.6 | 82.5 | 73.7 | 82 | 87.7 | 81 | 74.5 | 83.2 | 84.6 | 87.2 |
B. Results of the Music-Reading Improvement Tests

When the experiment was completed, both the control and the experimental groups were re-tested individually for music reading improvement. The same standard of measurement was used to evaluate reading ability as was indicated in the preliminary music reading test, namely:

1) Good readers made no more than one mistake in rhythm, pitch, or syllables.
2) Average readers made not more than two or three mistakes on these points.
3) Poor readers needed constant help to enable them to continue.

The data found on pages 39-42, inclusive, will indicate the reading levels into which the students were classified. In order to compute the number of pupils who showed improvement in reading ability, the following procedure was used:

1) A reduction in the number of poor readers indicated reading improvement.
2) An increase in the number of good readers indicated reading improvement.
3) It was not considered necessary to account for the numbers in the "average" group, since that classification served as a medium for receiving improved readers from the lower group, and served also as a source of supply for the higher group. For that reason, only the changes in number of the "good" and "poor" were considered.
When it was determined how many pupils had made improvement in music reading ability, in both the experimental and control groups, a proportionate percentage of the class who had improved was computed by dividing the number of improvements by the total number in each grade. (See pages 39-42.)

The percentage of total improvement of an experimental group or a control group was computed by adding the number of improvements and dividing the result by the total number of enrollments. (See pages 40 and 42.)
# Results of the Music-Reading Improvement Tests

## Grade Seven

### Experimental Group A

<table>
<thead>
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<th>Reading Ability</th>
<th>Preliminary Reading Test</th>
<th>Final Test</th>
<th>Showing Improvement</th>
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Improvement: 47%.

### Control Group A

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<th>Showing Improvement</th>
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Improvement: 30%.
RESULTS OF THE MUSIC-READING IMPROVEMENT TESTS

GRADE SEVEN

Experimental Group B

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<th>Showing Improvement</th>
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<td>Total</td>
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Improvement: 66%.

Control Group B

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Improvement: 24%.

PERCENTAGE OF TOTAL IMPROVEMENT IN GRADE SEVEN

- Experimental Group: 54%
- Control Group: 27%
RESULTS OF THE MUSIC-READING IMPROVEMENT TESTS

GRADE EIGHT

**Experimental Group A**

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Improvement: 58%.

**Control Group A**

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<tr>
<td>Average</td>
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<tr>
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Improvement: 29%.
RESULTS OF THE MUSIC-READING IMPROVEMENT TESTS

GRADE EIGHT

Experimental Group B

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Improvement: 34%.

Control Group B

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Improvement: 48%.

PERCENTAGE OF TOTAL IMPROVEMENT IN GRADE EIGHT

Experimental Group: 44%.
Control Group: 37%.
CHAPTER VII

ANALYSIS OF THE RESULTING DATA

A study of the charts found on pages 39-42, inclusive, which tabulate the results of the pre-test and the results of the re-test, will show many interesting factors.

First, all groups, control and experimental, show improvement in reading. The control groups all made an improvement of at least 24%, one going as high as 48%. The experimental groups made an improvement of at least 34%, and one group reached 66%. However, the improvement of the experimental groups over the control groups could not be called particularly significant.

As emphasized, the control group carried on the normal music reading program while the experimental group relinquished time from the regular music program to provide for the experiment in music dictation. The charts indicate considerable improvement in music reading for the experimental group. However, exceptions will be found in several of the individual student records on pages 33-36, inclusive.

It is quite significant that the grade seven experimental groups made an improvement of 54%, or 10% greater total improvement than the experimental groups of grade eight, as shown in the above-mentioned charts. This indicates that the experiment in music dictation was more successful in the lower of the two grades, and that it might be even more successful in grade
five or six. Therefore, we may assume that the higher the grade, the less effective music dictation becomes as a score reading aid for the unselected student in music.

Each experimental group in grade seven also improved at least 17% over a control group, and in one instance as much as 42%, as indicated by the charts on pages 39 and 40.

In one grade eight control group, the proportionate improvement was 14% more than that of the experimental group. The average proportionate improvement for the experimental groups was 8% more than that of the control groups. (See charts on pages 41 and 42.)

It should be noted that improvement was not maintained at a constant rate. (See mean score of the class, pages 33-36, inclusive.) In the beginning, the novelty of the experiment as a new idea created considerable interest, and the students actually competed with each other to obtain as high scores as possible. However, as the experiment progressed, enthusiasm waned, and careless errors appeared increasingly in the tests. Therefore, to ensure a high degree of interest in the activity, music dictation probably would be best used intermittently rather than continuously over a period of time.

In view of these factors in the analysis of the data, it is therefore logical to conclude that as a result of this study:

1) Music dictation in grades seven and eight is an aid to music reading, but is more effective in grade seven than in grade eight.

2) Music dictation might be most effective at the fifth
and sixth grade levels.

3) Music dictation is most successful when taught intermittently, rather than continuously, especially in the higher grades.

CONSENSUS OF THE CLASSROOM TEACHERS

1) Students and teachers alike participated in a worthwhile activity.

2) Execution of the experiment proved to be somewhat time-consuming, and in some cases took more time than seemed desirable.

3) Students enjoyed participating in the project, thereby experiencing a sense of personal accomplishment.

4) Students found a desirable stimulation toward further educational growth. Some succeeded in scoring simple melodies of their own creation.

5) Students showed a higher degree of achievement in other areas of study as a result of the music dictation program. Specifically, they improved in their ability to follow directions, and their listening habits improved where classroom activities were concerned.
CHAPTER VIII

SUGGESTIONS FOR IMPROVEMENT OF THE READING PROGRAM

AS A RESULT OF THE FINDINGS OF THE STUDY

As a result of this study, the writer suggests that the music reading program might be improved as follows:

1) Increased motivation and interest in music reading could be provided for the students by wider use of music dictation.

2) "In-service" training might be initiated for the classroom teachers who feel limited or unqualified in their ability to teach music.

3) In grades seven and eight, music dictation would be more effective if taught intermittently rather than continuously.

4) Music dictation would be more effectively taught in grade seven than in grade eight, and probably would be still more effective at the fifth or sixth grade levels.

5) Music dictation as a method of improving music reading skills would be best applied if and when there were class readiness, according to the judgment of the music teacher.
CHAPTER IX

SUGGESTIONS FOR FURTHER RESEARCH

1) A similar project on the ninth-grade level.
2) An opportunity for talented students in grades seven and eight to develop beyond the confines of an experiment.
3) A follow-up study in the high school, comparing those who had had music dictation in grades seven and eight with those who followed the normal music reading program.


