

A COMPARISON OF THE ACADEMIC ACHIEVEMENT OF STUDENTS ENROLLED  
IN REMEDIAL READING WITH A SIMILAR GROUP WHICH WAS NOT  
ENROLLED IN REMEDIAL READING IN THE SPRING  
OF 1960 AT BURBANK JUNIOR HIGH SCHOOL  
HOUSTON, TEXAS

A Thesis  
Presented to  
the Faculty of the College of Education  
University of Houston

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

by  
Dorothea Bachemin Dishough  
August 1961

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## ABSTRACT

A comparison of the academic achievement of students enrolled in remedial reading with a similar group which was not enrolled in remedial reading in the spring of 1960 at Burbank Junior High School, Houston, Texas

This study consisted of a comparison of the reading achievement of students enrolled in remedial reading with a similar group which was not enrolled in remedial reading in the spring of 1960 at Burbank Junior High School, Houston, Texas. Specifically this study was designed to answer the question: Was there a significant difference in the achievement of these students?

The constant factors present in this study were:

1. All students were registered in the high seventh grade.
2. The students were of average intelligence as tested by the Otis Intelligence Tests.
3. There were no students in either group who were chronic failures or who had repeated the seventh grade.
4. Each of the students was deficient at least one grade level in one or more of the reading areas.
5. The students from both groups had the same teachers for the same course for the rest of the school day.

The variable was the reading class for the experimental group which the control group did not receive.

The materials used in this program were primarily;

1. Science Research Associates Reading Laboratories;
2. Basic Reading Skills--A Workbook for Junior High School;

3. Tachistoscope with the Society for Visual Education films ranging in difficulty from primary to junior high;

4. Controlled Reader with Educational Developmental Laboratories films for intermediate and junior high grades;

5. McCall Crabb Standard Reading Lessons;

6. Reading accelerators; and

7. Reader's Direct Skill Builders.

The experimental group made more progress in word meaning. The control group made more progress in paragraph meaning. The experimental group made more progress in total reading scores.

Our present system of reading should be examined to determine how better means of evaluating the intelligence of these students could be utilized, how better motivation could be obtained, and whether or not four and one-half months is too short a time for such a program to be effective.

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## CHAPTER I

### INTRODUCTION

#### I. STATEMENT OF THE PROBLEM

This study consisted of a comparison of the reading achievement of students enrolled in remedial reading with a similar group which was not enrolled in remedial reading in the spring of 1960 at Burbank Junior High School, Houston, Texas. Specifically this study was designed to answer the question: Was there a significant difference in the reading achievement of these students?

#### II. NEED

Educators view with increasing alarm the number of students who have attained the chronological age and scholastic status of junior high school and yet have the reading efficiency of an elementary age child. "W. S. Gray has estimated that a reading ability of seventh-grade level is necessary to achieve passing grades and complete the average secondary school curriculum."<sup>1</sup> Educators have attempted to meet the problem by establishing remedial reading classes.

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<sup>1</sup>Carrillo, Lawrence W., "Helping the Retarded Reader," Unit Five of "One-Year Schoolwide Project for Grades 7-12" (Chicago: Science Research Associates, Inc., 1961), p. 1. (Mimeographed)

It is with the evaluation of the materials and methods used in the teaching of remedial reading classes at Burbank Junior High School in the spring of 1960 that this paper shall be concerned.

### III. SURVEY OF THE LITERATURE

For the purpose of this study the literature in the field of remedial reading can be classified into three major divisions. The first classification of literature presents ideas which uphold the need for a remedial program, develops a philosophy for the teaching of remedial reading, and suggests plans for such programs. A second classification consists of handbooks which suggest methods and procedures to be used in these classes. The third classification includes the textbooks, workbooks, and other instructional aids employed in the daily classroom procedure and suggestions for supplementary reading.

### IV. LIMITATIONS

This study involves twenty-four seventh-grade students at Burbank Junior High School, Houston, Texas, in the spring of 1960. Scores on the Otis Intelligence Tests indicated a range from 90 to 110 in the I.Q.'s of the students. Since this Otis test requires reading ability, the results may not be a true estimate of the pupils'

intelligence. Since in this case it was administered to both groups, the instructor assumed that the score would be as accurate for one group as for the other. This test, however, must be considered one of the limitations of this study. These students were deficient at least one grade level in reading. One group was given an additional course in remedial reading while the other group did not receive remedial instruction.

The materials used primarily were:

1. Science Research Associates Reading Laboratories;
2. Basic Reading Skills--A Workbook for Junior High School;
3. Tachistoscope with the Society for Visual Education films ranging in difficulty from primary to junior high;
4. Controlled Reader with Educational Developmental Laboratories films for intermediate and junior high grades;
5. McCall Crabb Standard Reading Lessons;
6. Reading Accelerators; and
7. Reader's Digest Skill Builders.

#### V. PROCEDURE

The students for this study were selected by examining their test record cards from elementary school. In the sixth

grade these students were given the Stanford Achievement Test and the Otis Quick-Scoring Mental Ability Test. If the students had a score of 90 or above on the Otis test and a score of fifth grade or lower on their paragraph meaning or word meaning section of the Stanford Achievement test, they were recommended for consideration in this program.

In January these students were given another Otis test and the Durrell-Sullivan Reading Achievement Test. Twenty-four students were selected to participate in this study. These students were divided into two groups, one of which was given remedial reading instruction. The following constants were present in both groups:

1. All students were in the high seventh grade.
2. All of the students were of average intelligence as scored by the Otis Quick-Scoring Mental Ability Test.
3. All were deficient one grade level or more in reading.
4. All of the students were under the same teachers the rest of the day with the experimental group taking reading while the control group received instruction in music and art.

After four and one-half months these students were again tested to determine the effect of the instructional program on their reading level.

## CHAPTER II

### THE REMEDIAL READING PROGRAM FOR THE EXPERIMENTAL GROUP

#### I. PHILOSOPHY FOR TEACHING REMEDIAL READING

A remedial reading program must be designed for specific situations. In the instructor's opinion the following factors had to be considered in this study: the locale of the school, size of the classes, the students' needs and previous educational experiences, and the personality and educational philosophy of the instructor. Because of the specific problems present within each different group of students, general educational procedures can be established and specific suggestions can be made, but no iron-clad curriculum can be planned because what applies and works well with one class under one teacher may not be of value in a different situation. In planning a good program for the experimental group, therefore, the following teaching principles were considered: individual instruction, emphasis on major reading skills, and an atmosphere of student accomplishment.

Instruction in reading was carried out as much as possible on an individual basis with only a small portion of the time spent in class instruction. The investigator felt that each pupil must be held responsible for a minimum



of work as he had been allowed to get by with less and less during his school years. Each pupil was allowed to move at his own pace and was not hampered by the general progress of the others in his class. Very little outside work was required other than reading library materials. This reading was planned so that much of it would be applicable to other subjects.

One of the major skills emphasized was reading to follow directions. Many of these students were using a minimum of reading in the subject areas, acquiring most of their information through teacher instruction and class discussion. No student was given instructions or help from the teacher until he had read the directions and was ready to ask questions.

The students were taught to demand meaning from their reading. Some of them had called words without getting meaning and seemed unconcerned that the words made little sense when placed together in a sentence.

Because the students had continuously met defeat and showed this through their apathetic attitude, the instructor encouraged an atmosphere of student accomplishment. Short-term goals were set up and attained before other goals were established. A weekly student evaluation helped the student realize the accomplishment of short-term goals. Often it was necessary for the instructor to assist in these evaluations.

## II. PRELIMINARY TESTING AND DIAGNOSIS

A week before the new semester began the experimental group was given Form B of the Durrell-Sullivan Reading Achievement Test.

Table I shows that on the word meaning section the grade status scores ranged from 4.8 to 7.6, with both the mean score and the median score 6.2.

TABLE I

INITIAL TESTING OF THE EXPERIMENTAL GROUP, JANUARY 1960  
DURRELL-SULLIVAN READING ACHIEVEMENT, FORM B  
SHOWING RANGE, FREQUENCY, MEDIAN, AND  
MEAN SCORE ON WORD MEANING

	Reading Grade Level									
	4.8	5.0	5.7	5.9	6.0	6.2	6.4	6.6	6.9	7.6
Number of Students	1	1	2	1	1	2	1	1	2	1

Table II shows the paragraph meaning section of the test with grade scores ranging from 4.4 to 7.0, mean score 6.0, median score 6.3.

Table III shows the total reading score ranging from 4.8 to 6.9, with the mean score 6.1 and the median 6.3.

TABLE II

INITIAL TESTING OF THE EXPERIMENTAL GROUP, JANUARY 1960  
 DURRELL-SULLIVAN READING ACHIEVEMENT, FORM B  
 SHOWING RANGE, FREQUENCY, MEDIAN, AND  
 MEAN SCORE ON PARAGRAPH MEANING

	Reading Grade Level							
	4.4	4.7	5.5	6.1	6.2	6.3	6.5	7.0
Number of Students	1	1	1	1	1	3	4	1

TABLE III

INITIAL TESTING OF THE EXPERIMENTAL GROUP, JANUARY 1960  
 DURRELL-SULLIVAN READING ACHIEVEMENT, FORM B  
 SHOWING RANGE, FREQUENCY, MEDIAN, AND  
 MEAN SCORE ON TOTAL READING

	Reading Grade Level								
	4.8	5.2	6.1	6.2	6.3	6.5	6.6	6.7	6.9
Number of Students	1	2	2	1	1	3	1	1	1

This testing program was used for comparison purposes for the study. Other tests were used for diagnosis of the students' needs, explanation of which follows.

The students were given the SRA beginning level test during the first week of the semester. On these tests the students ranged from third to sixth grade. Figure 1 shows

that seventy per cent of the students scored third-grade level while fifteen per cent scored fifth grade and fifteen per cent sixth grade. This test was used as an indication of the working level of the students. From this test they were assigned a beginning level in the reading laboratory. This test was also used to determine the level of Reader's Digest Skill Builders to use with the students.

There is a series of diagnostic tests in the Basic Reading Skills--A Workbook for Junior High School. These tests are not standardized, but were used as an aid to diagnosis of the individual needs of the students. From the results of these tests students were assigned work in this workbook and given additional drill from teacher-made assignments requiring the use of needed skills. The skills tested by these were vocabulary development, sentence meaning, word analysis skills, use of the dictionary, and paragraph meaning.

Early in the first week of instruction the class read a selection in the Reader's Digest Skill Builders as a timed test to be used as an informal indication of rate of reading. Easy material was used in testing the speed reading. Nine of the students used the third-grade level Skill Builders, two used the fourth-grade level, and two the fifth-grade level. Table IV, page 11, indicates the scores made on this test.

FIGURE 1

GRADE PLACEMENT OF THE EXPERIMENTAL GROUP  
ON THE SCIENCE RESEARCH ASSOCIATES  
LABORATORY BEGINNING LEVEL TEST  
FEBRUARY 1960

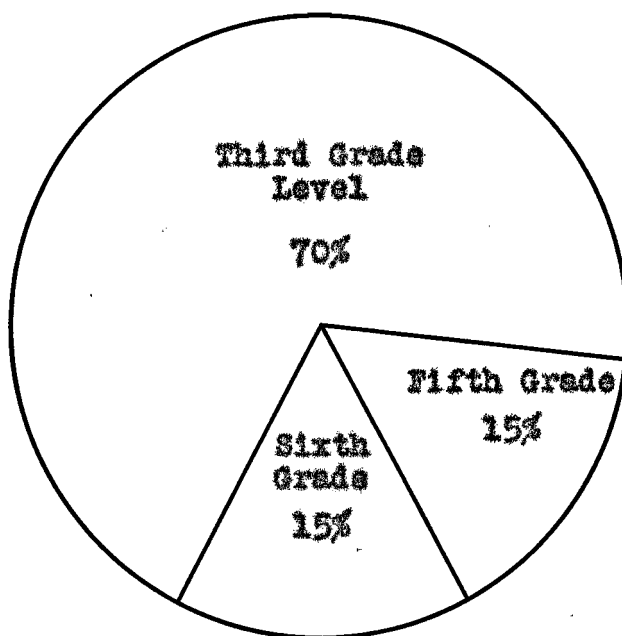


TABLE IV  
 READING RATE USING READER'S DIGEST SKILL BUILDERS  
 FEBRUARY 1960

Pupil	Grade Level Skill Builder	Words Per Minute	Comprehension
1	Third	212	90
2	Fourth	136	90
3	Fifth	141	75
4	Third	127	100
5	Third	122	100
6	Third	163	100
7	Fifth	235	90
8	Third	122	100
9	Fourth	272	100
10	Third	127	100
11	Third	148	90
12	Third	187	90
13	Third	227	100
Median Score	Third	148	90
Mean Score	3.5	171	93

### III. ANALYSIS OF THE EDUCATIONAL AND PERSONAL NEEDS OF THE EXPERIMENTAL GROUP

The students in the experimental group showed a general deficiency in reading grade ranging from 4.8 for student ten to 6.9 for student seven. Tables I through III, pages 7 and 8, indicate the range of scores, frequency, median and mean scores on the Durrell-Sullivan Reading Achievement Test given at the beginning of the semester to the experimental group.

On Survey Test II given in the Basic Reading Skills --A Workbook for Junior High School, the students' scores were very low on Part 1, Word Analysis. With the exception of student seven, these students made scores of fifty per cent or below. (See Appendix B.) The test indicated that the students had little knowledge of the sounds of letters and had trouble dividing words into syllables.

Nine of these students had difficulty on Part 2, Dictionary Use. They were unable to put words into alphabetical order or to recognize and choose the correct definition for words in given context where several definitions were given.

Four of the students scored below sixty per cent on Survey Test III, General Interpretative Power. One of them scored on the third-grade level on Survey Test I, Vocabulary Recognition.

Only one of these students presented a behavior problem. His attitude was indifferent from the beginning of the semester, and he continued to have little concern for improving his reading. While he did not cause any particular disturbance, he habitually came to class late and without material or assignments.

A complete report on each student can be found in Appendix B of this paper.

#### IV. METHODS AND MATERIALS

Three days a week a tachistoscope was used. Films from the Society for Visual Education ranging in difficulty from primary sight vocabulary to the fourth- or fifth-grade level were used with the tachistoscope. At the beginning of the semester the exercises consisted of words from the Dolch list. (See Appendix A.) As the semester progressed the more difficult and longer words were used, followed by phrases. The words were flashed at speeds from 1 second to 100th of a second and the students were asked to write the words. Usually five words were given at each speed--1 second, 1/2 second, 1/5 second, 1/10 second, 1/25 second, 1/50 second and 1/100 second. The students were then asked to read what they had written; they checked their papers, noting a comparison of each day's score with previous scores. Most of the work done with the tachistoscope was done with



fourth- and fifth-grade material and was used primarily to establish better word recognition skills. Words that gave particular trouble during these exercises were isolated for phonetic analysis, and flash cards were made of these so that the individual student could review the words that gave him particular trouble.

Twice a week the Controlled Reader was used. Fourth- and fifth-grade level stories from the Educational Developmental Laboratories were used. All material designed for increasing speed was intentionally given at below actual reading level so that the speed would not be hampered by poor comprehension or stumbling for word recognition. Any exercise for increasing speed was followed by a comprehension test to insure maintenance of comprehension in spite of increase in speed.

During the last thirty or forty-five minutes of each period the students worked on individually assigned material. This was called "free time" in which the students were allowed to work at their own rate without interference from the teacher or other students. The assignments were based on the needs of the individual students as indicated by test results and the previous class work. Each individual's work was carefully planned. Each week a student evaluation was made of what had been accomplished during that week and

the student, with the aid of the teacher, planned what would be done during the "free time" the following week.

The Power Builders from the Science Research Associates Reading Laboratory were used for individual instruction. The Power Builders are a series of paragraphs with comprehension and word study exercises. They are designed to increase skill in comprehension and to aid in word attack skills. They range in difficulty from third to twelfth grade. Students are allowed to progress to the next grade level when they can satisfactorily perform in a given grade. The students were asked to do two or three of these Power Builders a week during their "free time."

The Basic Reading Skills--A Workbook for Junior High School was also used for individual work. This is a workbook designed for remedial students at this level. The series of diagnostic tests in the book were given to the students, and assignments were based on the scores made on these tests. The particular skills developed in this book were comprehension, word study, dictionary and reference skills. Each student checked his work with the teacher, discussing his errors, after which he corrected them. When several students made the same mistakes on a particular exercise, the class or the students who seemed to be having difficulty with a skill were grouped for instruction, and drill was given with the students at the blackboard.

The students approached the McCall Crabb Standard Reading Lessons with enthusiasm. These three-minute tests were taken at convenient times during the periods. Since the scores on these lessons are standardized, the students were able to chart their own progress.

The Reader's Digest Skill Builders were used in two ways. During the free time students were allowed to use a copy with the reading accelerators. They worked the exercises at the end of each article and then charted their speed and their comprehension. They were not allowed to increase speed unless their comprehension on the story was ninety per cent or better. The students kept a chart of their progress in both speed and comprehension. Once a week the class took a timed reading lesson in the Skill Builders. A record was kept of the words read per minute and the comprehension score on these lessons as an indication of their progress in rate of reading.

Once a week the students were given a series of three Rate Builders from the SRA Reading Laboratory. This material consists of a series of paragraphs designed to be read with a comprehension checklist which must be completed in three minutes. Like the Power Builders, these selections range in difficulty from third to twelfth grade. Students were allowed to progress to the next grade level when they could satisfactorily perform at a given level.

While students worked individually, the teacher went from student to student checking on progress and helping each student plan the next work to be accomplished. A folder was kept on each student so that the teacher had a complete record of his progress. Individual conferences were often necessary. Reading problems in other subjects were discussed, and often materials were suggested to aid these students with their work in other areas as well as counseling on various problems.

Oral reading as such was not emphasized. In general, oral reading was done only when necessary to prove a particular point or to contribute some specific information to the class; however, improvement in oral reading was noted after the following experience. The class had been having difficulty in determining the main idea of paragraphs. The students were asked to bring newspaper clippings, two to four inches in length, to class. The headlines were cut from the clippings which the students read aloud. The students in the class then attempted to determine which headline fit the article that had been read. The first time this exercise was used the oral reading of the group was very poor. The class was unable to hear or to understand the articles well enough to select the correct title. At student insistence the exercise was repeated the next day, and

improvement in oral reading was noted. The need to communicate to the class seemed to provide the necessary motivation for improvement.

To encourage use of the library and to stimulate reading these students were relieved of the usual pressures of required reading. Once each six weeks the students were taken to the library for a full period. Books of high interest value and easy reading level were kept on a special shelf for the reading class. No formal book reports were required, the only responsibility of the student being to fill out a card each time a book was read. These books were classified as to the grade level the students were reading at the time they read the book. These were filed and used by the class to find out other students' opinions on particular books. A contest was held between the reading classes, and a party was given to the class that read the most books during the year.

#### V. FINAL TESTING PROGRAM

In June, after four and one-half months of instruction, the group was again tested. Form A of the Durrell-Sullivan Reading Achievement Test was used.

On the word meaning section of the test the grade status ranged from 5.4 to 7.9, with the mean score of 6.8. The median score was 6.6.

TABLE V

FINAL TESTING OF THE EXPERIMENTAL GROUP, JUNE 1960  
 DURRELL-SULLIVAN READING ACHIEVEMENT, FORM A  
 SHOWING RANGE, FREQUENCY, MEDIAN, AND  
 MEAN SCORE ON WORD MEANING

	Reading Grade Level								
	5.4	5.8	6.1	6.3	6.6	7.1	7.6	7.8	7.9
Number of Students	1	1	1	1	3	3	1	1	1

On the paragraph meaning section of the test the scores ranged from 5.5 to 8.2, with the mean score of 6.9. The median score was 7.0.

TABLE VI

FINAL TESTING OF THE EXPERIMENTAL GROUP, JUNE 1960  
 DURRELL-SULLIVAN READING ACHIEVEMENT, FORM A  
 SHOWING RANGE, FREQUENCY, MEDIAN, AND  
 MEAN SCORE ON PARAGRAPH MEANING

	Reading Grade Level										
	5.5	5.8	5.9	6.6	6.8	7.0	7.1	7.2	7.7	8.0	8.2
Number of Students	1	1	1	2	1	1	1	2	1	1	1

The total reading score ranged from 5.7 to 8.1. The mean score was 6.9, and the median score was 7.0. See Table VII for this information.

TABLE VII

FINAL TESTING OF THE EXPERIMENTAL GROUP, JUNE 1960  
 DURRELL-SULLIVAN READING ACHIEVEMENT, FORM A  
 SHOWING RANGE, FREQUENCY, MEDIAN, AND  
 MEAN SCORE ON TOTAL READING

Reading Grade Level											
	5.7	5.8	6.3	6.6	6.7	6.9	7.0	7.1	7.3	7.5	8.1
Number of Students	1	1	1	1	1	1	1	2	1	2	1

Table VIII, a composite table on the experimental group showing the complete testing program for this group with the differences, is shown on page 21. These differences will be discussed in Chapter IV.

TABLE VIII

## A COMPOSITE REPORT OF THE EXPERIMENTAL GROUP

Pupil	I.Q.	Chron. Age	Initial Testing			Final Testing			Diff. in Form BM and AM		
			Word Mean.	Para. Mean.	Total Read.	Word Mean.	Para. Mean.	Total Read.	Word Gain	Para. Gain	Total Read. Gain
1	95	13-1	6.0	6.5	6.2	7.9	8.2	8.1	1.9	1.7	1.9
2	91	12-11	6.4	6.5	6.5	6.6	7.2	7.0	.2	.7	.5
3	101	12-6	6.9	6.1	6.5	7.8	6.6	7.3	.9	.5	.8
4	98	13-3	5.9	6.3	6.1	6.3	6.6	6.6	.4	.3	.5
5	100	13-0	6.2	6.5	6.3	7.1	7.1	7.1	.9	.6	.8
6	106	13-3	6.9	6.3	6.7	6.6	6.8	6.7	-.3	.5	.0
7	105	14-1	7.6	6.2	6.9	7.6	7.2	7.5	.0	1.0	.6
8	104	13-0	6.6	6.3	6.5	7.1	7.0	7.1	.5	.7	.6
9	96	13-5	5.7	6.5	6.1	6.1	7.7	6.9	.4	1.2	.8
10	91	14-7	4.8	4.7	4.8	5.4	5.9	5.7	.6	1.2	.9
11	94	12-11	5.0	5.5	5.2	5.8	5.5	5.8	.8	.0	.6
12	91	13-5	5.7	4.4	5.2	6.6	5.8	6.3	.9	1.4	1.1
13	109	13-4	6.2	7.0	6.6	7.1	8.0	7.5	.9	1.0	.9



## CHAPTER III

### THE CONTROL GROUP

This group consisted of eleven high seventh-grade students at Burbank Junior High School. The I.Q. of these students ranged from 90 to 110.

#### I. PRELIMINARY TESTING

A week before the new semester began in February these students were given, along with the experimental group, Form B of the Durrell-Sullivan Reading Achievement Test.

On the word meaning section of the test the grade status scores ranged from 4.4 to 7.3. The mean score was 6.4 and the median score was 6.6.

TABLE IX

INITIAL TESTING OF CONTROL GROUP, JANUARY 1960  
DURRELL-SULLIVAN READING ACHIEVEMENT, FORM B  
SHOWING FREQUENCY, RANGE, MEDIAN, AND  
MEAN SCORE ON WORD MEANING

	Reading Grade Level							
	4.4	5.8	6.2	6.5	6.6	6.9	7.0	7.3
Number of Students	1	1	1	2	2	1	2	1

On the paragraph meaning section of the test, the grade scores ranged from 4.3 to 7.8, with a mean score of 6.1 and a median of 6.5

TABLE X

INITIAL TESTING OF CONTROL GROUP, JANUARY 1960  
DURRELL-SULLIVAN READING ACHIEVEMENT, FORM B  
SHOWING FREQUENCY, RANGE, MEDIAN, AND  
MEAN SCORE ON PARAGRAPH MEANING

	Reading Grade Level								
	4.3	4.4	4.6	6.2	6.3	6.5	6.7	6.8	7.8
Number of Students	1	1	1	1	1	2	2	1	1

On the total reading, scores ranged from 4.4 to 7.6, with a mean score of 6.3 and a median of 6.5.

TABLE XI

INITIAL TESTING OF CONTROL GROUP, JANUARY 1960  
DURRELL-SULLIVAN READING ACHIEVEMENT, FORM B  
SHOWING FREQUENCY, RANGE, MEDIAN, AND  
MEAN SCORE ON TOTAL READING

	Reading Grade Level							
	4.4	5.9	6.1	6.4	6.5	6.8	6.9	7.6
Number of Students	1	1	2	1	3	1	1	1

## II. THE CONTROL GROUP PROGRAM

During the spring semester the control group had the same teachers for their subjects as the experimental group, in many instances in the same classes. These students received a course in art or music while the experimental group had a course in remedial reading.

## III. FINAL TESTING

During the last week of school in June these students were given the Durrell-Sullivan Reading Achievement Test, Form A.

On the word meaning section the grade status scores ranged from 4.7 to 7.4, with a mean score of 6.7 and a median of 6.8.

TABLE XII

FINAL TESTING OF CONTROL GROUP, JUNE 1960  
DURRELL-SULLIVAN READING ACHIEVEMENT,  
FORM A, SHOWING FREQUENCY, RANGE,  
MEDIAN, AND MEAN SCORE ON  
WORD MEANING

	Reading Grade Level							
	4.7	6.3	6.6	6.7	6.8	6.9	7.1	7.4
Number of Students	1	1	2	1	2	1	1	2

On the paragraph meaning section the range was from 5.4 to 8.4, with a median of 7.7 and a mean of 7.2

TABLE XIII

FINAL TESTING OF CONTROL GROUP, JUNE 1960  
DURRELL-SULLIVAN READING ACHIEVEMENT,  
FORM A, SHOWING FREQUENCY, RANGE,  
MEDIAN, AND MEAN SCORE ON  
PARAGRAPH MEANING

	Reading Grade Level								
	5.4	5.5	6.1	7.5	7.7	7.8	8.0	8.2	8.4
Number of Students	1	1	2	1	1	1	1	2	1

The total reading scores ranged from 5.0 to 7.6, with a 6.9 mean and a 7.4 median.

TABLE XIV

FINAL TESTING OF CONTROL GROUP, JUNE 1960  
DURRELL-SULLIVAN READING ACHIEVEMENT,  
FORM A, SHOWING FREQUENCY, RANGE,  
MEDIAN, AND MEAN SCORE ON  
TOTAL READING

	Reading Grade Level							
	5.0	6.2	6.3	6.8	7.2	7.4	7.5	7.6
Number of Students	1	1	1	1	1	2	2	2

Table XV gives a composite picture of the students in the control group.

TABLE XV

## A COMPOSITE REPORT OF THE CONTROL GROUP

Pupil	I.Q.	Chron. Age	Initial Testing			Final Testing			Diff. in Form BM and AM		
			Word Mean.	Para. Mean.	Total Read.	Word Mean.	Para. Mean.	Total Read.	Word Gain	Para. Gain	Total Read. Gain
1	100	13-10	6.5	4.6	5.9	6.3	6.1	6.3	-.2	1.5	.4
2	92	13-4	7.0	6.8	6.9	7.1	7.7	7.4	.1	.9	.5
3	95	13-7	5.8	6.5	6.1	6.7	8.2	7.5	.9	1.7	1.4
4	100	12-7	6.6	6.3	6.5	7.4	6.1	6.8	.8	-.2	.3
5	100	13-4	7.0	4.4	6.1	6.6	5.5	6.2	-.4	1.1	.1
6	106	12-4	6.6	6.2	6.5	6.8	8.0	7.4	.2	1.8	.9
7	100	13-4	6.9	6.7	6.8	6.8	8.4	7.6	-.1	1.7	.8
8	105	12-6	6.5	6.5	6.5	6.6	7.8	7.2	.1	1.3	.7
9	106	12-7	7.3	7.8	7.6	7.4	7.5	7.5	-.1	-.3	-.1
10	93	14-1	4.4	4.3	4.4	4.7	5.4	5.0	.3	1.1	.6
11	97	13-0	6.2	6.7	6.4	6.9	8.2	7.6	.7	1.5	1.2

## CHAPTER IV

### A COMPARISON OF THE EXPERIMENTAL GROUP AND THE CONTROL GROUP

#### I. THE CONSTANT FACTORS

Grade status of the groups. All students used in this study were registered in the high seventh grade at Burbank Junior High School, Houston, Texas, in the spring semester of 1960.

Otis Intelligence Test scores. Table XVI indicates the similarity of I.Q. of these groups as scored on the Otis Intelligence Tests given in January of 1960. The students in the control group ranged from 92 to 106, with a mean score of 99 and a median of 100. The scores of the students in the experimental group ranged from 91 to 109. The mean score was 99 and the median was 98.

Chronological age of the students at the beginning of the experiment. Table XVII, page 29, shows the chronological ages of the students in both groups at the beginning of the study in January. The control group ages ranged from 148 months to 169 months, with a median age of 160 months. The mean age was 167 months. The age range in the experimental group was from 150 to 172 months. The median

TABLE XVI  
A COMPARISON OF OTIS INTELLIGENCE SCORES OF  
THE EXPERIMENTAL AND CONTROL GROUPS

Otis Intelligence Score	Frequency	
	Experimental Group	Control Group
109	1	
108		
107		
106	1	2
105	1	1
104	1	
103		
102		
101	1	
100	1	4
99		
98	1	
97		1
96	1	
95	1	1
94	1	
93		1
92		1
91	3	

TABLE XVII  
A COMPARISON OF THE CHRONOLOGICAL AGES  
OF THE EXPERIMENTAL AND CONTROL  
GROUPS, JANUARY 1960

Chronological Age	Experimental Group Frequency	Control Group
14-3	1	
14-2		
14-1		
14-0	1	1
13-11		
13-10		1
13-9		
13-8		
13-7		1
13-6		
13-5	1	
13-4	1	3
13-3	3	
13-2		
13-1	1	
13-0	2	1
12-11	2	
12-10		
12-9		
12-8		
12-7		2
12-6	1	1
12-5		
12-4		1

Note: This table reads as follows: In the experimental group one pupil has an age of 14 years 3 months. In the experimental group one pupil has an age of 14 years 0 months, and one pupil in the control group has an age of 14 years 0 months.



age was 159 months and the mean age was 159 months. There were no students in either group who were chronic failures or who had repeated the seventh grade.

Reading deficiencies of the groups. Tables I through III, pages 7 and 8, indicate the grade status of the experimental group at the beginning of the semester. These tables show that the mean score on word meaning was 6.2, on paragraph meaning 6.0, and on total reading 6.1. The control group at the beginning of the semester as indicated on Tables IX, X, and XI, pages 22 and 23, had a mean score of 6.4 on word meaning, 6.1 on paragraph meaning, and 6.3 on total reading. Tables VIII and XV, pages 21 and 26, show the scores of each of the individuals used in the study, and it will be noted that each of them was deficient at least one grade level in one or more of the reading areas.

The school program for both groups. The students from both groups had the same teachers for the same courses during the rest of the school day. In many instances students from both groups were in the same classes together. The experimental group received instruction in remedial reading during one period each day while the control group received a course in art or music.

## II. THE VARIABLE

The experimental group was given instruction in remedial reading as described in Chapter II of this thesis. The control group received a course in art or music instead of this instruction.

## III. A COMPARISON OF THE RESULTS

The gains made by the pupils in the experimental and control groups are shown in Tables XVIII and XIX, pages 32 and 33, with a comparison of the two groups made in Figure 2, page 34. In word meaning the experimental group shows a median gain of six months in comparison to the gain of two months by the control group. On paragraph meaning the experimental group had an average over-all gain of eight months and the control group had a median gain of one year, two months. On total reading the experimental group had a median gain of eight months, and the control group had a median gain of six months.

TABLE XVIII  
DIFFERENCE IN GRADE STATUS SCORES  
OF THE EXPERIMENTAL GROUP  
ON FORM EM AND FORM AM

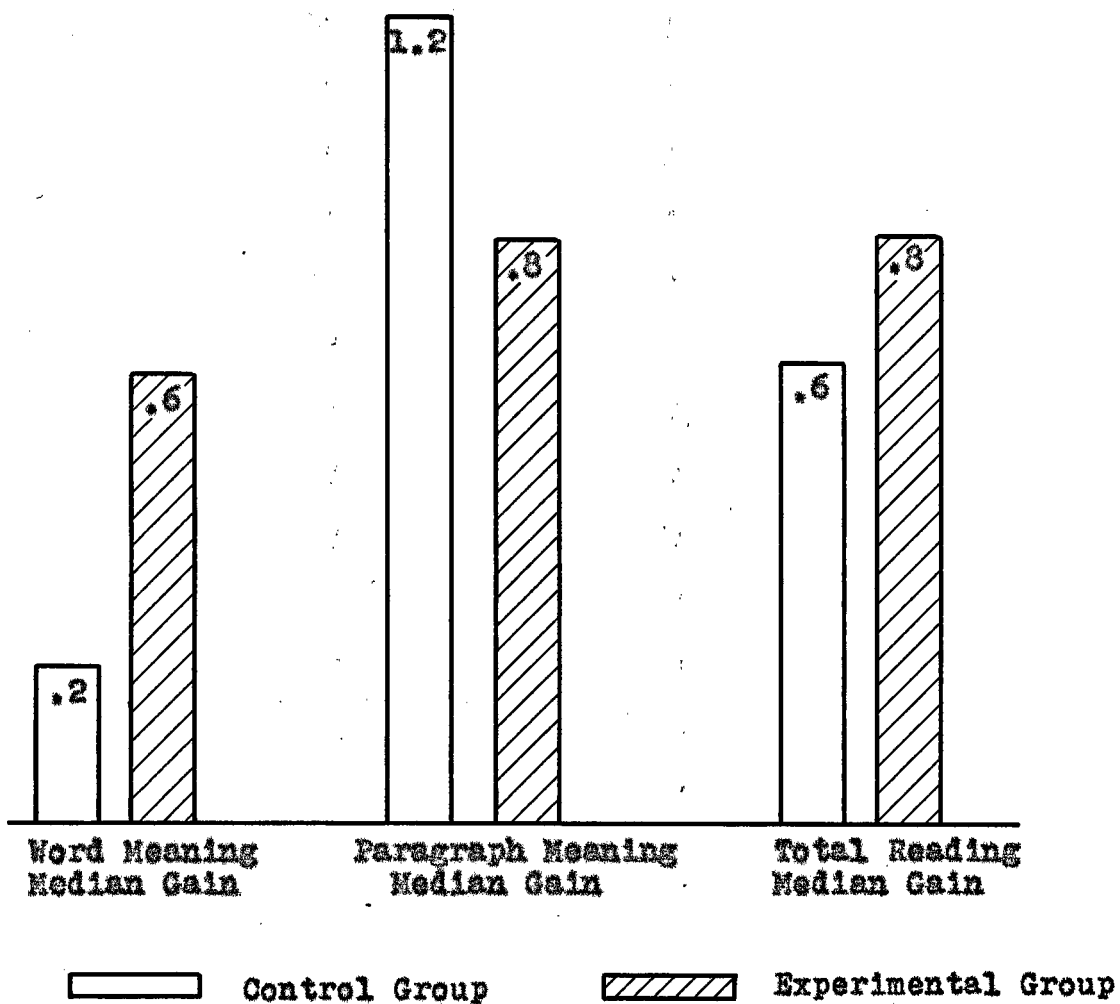
Pupil	Word Meaning Gain	Paragraph Meaning Gain	Total Reading Gain
1	1.9	1.7	1.9
2	.2	.7	.5
3	.9	.5	.8
4	.4	.3	.5
5	.9	.6	.8
6	-.3	.5	.0
7	.0	1.0	.6
8	.5	.7	.6
9	.4	1.2	.8
10	.6	1.2	.9
11	.8	.0	.6
12	.9	1.4	1.1
13	.9	1.0	.9
Median Gain	.6	.8	.8
Mean Gain	.6	.7	.8

TABLE XIX  
 DIFFERENCE IN GRADE STATUS SCORES  
 OF THE CONTROL GROUP ON  
 FORM BM AND FORM AM

Pupil	Word Meaning Gain	Paragraph Meaning Gain	Total Reading Gain
1	-.2	1.5	.4
2	.1	.9	.5
3	.9	1.7	1.4
4	.8	-.2	.3
5	-.4	1.1	.1
6	.2	1.8	.9
7	-.1	1.7	.8
8	.1	1.3	.7
9	-.1	-.3	-.1
10	.3	1.1	.6
11	.7	1.5	1.2
Median Gain	.1	1.3	.6
Mean Gain	.2	1.2	.6

FIGURE 2

A COMPARISON OF THE MEDIAN GAIN OF THE  
EXPERIMENTAL AND CONTROL GROUPS



## CHAPTER V

### FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

#### I. FINDINGS

The findings of this study were that the gains of neither group were significant:

1. The experimental group made greater gains in word study than the control group.
2. The control group showed greater progress in paragraph meaning than the experimental group.
3. The experimental group progressed more in total reading than the control group.

#### II. CONCLUSIONS

Despite the limited number of cases and the limitations of the study, the results suggest certain questions and lead the investigator to draw some conclusions:

1. Why was the greatest gain in both groups made by students whose I.Q.'s were 95? Are our present means of evaluating intelligence adequate, especially in the case of students deficient in reading?
2. Why would significant gains in paragraph meaning be made by seven of the thirteen students of the experimental group while the others were so low that they held the

average down? It would seem that interest and willingness of the student are as important in the final result as the materials and methods.

3. Will further study show that the word meaning progress made by the experimental group enables them to surpass further the control group in total reading? Would they also make significant progress in paragraph meaning? Perhaps more than four and one-half months is necessary for this group to develop essential word meaning skills that will make better paragraph meaning possible.

### III. RECOMMENDATIONS

As a result of this study the investigator would recommend that;

1. A better and more practical means of evaluating student intelligence in the case of the student with reading deficiencies be developed and used;

2. The program be examined to determine why the control group made greater progress in paragraph meaning than the experimental group; and

3. Further study of a larger sampling of reading students be made over a longer period of time.

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## BIBLIOGRAPHY

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The Controlled Reader. Educational Developmental Laboratories, Huntington, New York. A modified Film-strip projector. Exposes a continuous story through a moving slot which travels across the screen at up to 900 words per minute.

SVE Speed-I-O-Scope. Society for Visual Education, Chicago, Illinois. Metal and glass attachment for slide and filmstrip projectors. Exposures "open" to 1/100th second.

SRA Reading Accelerator. Science Research Associates, Inc., Chicago, Illinois. An opaque shutter moves down the page at a pre-set speed.

## APPENDIX

## APPENDIX A

This section contains the words used in tachistoscope exercises with the experimental group.

The words and phrases used in this series are the Basic Sight Vocabulary List, the list of Commonest Nouns, and the phrase list as compiled by Dr. E. W. Dolch, Professor of Education, University of Illinois.<sup>1</sup>

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<sup>1</sup>Barnhart, Rebecca, Reading Speed-I-O-Strip Series (Chicago: Society for Visual Education), Film A110-1.

a	old	this	live	right	door	ground
I	one	your	made	seven	duck	letter
as	red	soon	must	small	farm	mother
at	six	then	open	shall	feet	rabbit
by	ten	when	pick	start	fire	school
he	the	long	pull	thank	fish	sister
it	two	some	read	think	game	street
me	run	jump	show	would	girl	window
my	saw	like	sing	write	hand	brother
no	see	look	take	myself	head	chicken
an	was	play	tell	around	hill	good-bye
be	our	ride	want	before	home	morning
do	for	said	wash	little	milk	picture
go	how	stop	went	pretty	name	birthday
is	now	walk	were	yellow	nest	children
if	any	will	wish	always	pain	squirrel
or	hot	over	after	better	rain	
in	ate	fast	black	please	ring	
of	buy	much	brown	because	seed	
to	out	best	funny	together	shoe	
on	got	both	green	bed	snow	
we	has	five	going	box	song	
so	let	full	under	boy	time	
up	off	been	today	car	tree	
am	why	came	round	cat	wind	
us	new	does	three	cow	wood	
and	own	done	white	day	apple	
for	may	draw	sleep	dog	bread	
her	put	fall	about	egg	chair	
him	ran	find	their	eye	floor	
its	sit	gave	these	leg	grass	
not	try	give	again	man	horse	
out	use	goes	first	men	house	
all	down	grow	never	pig	kitty	
big	from	have	clean	sun	money	
are	here	hold	eight	top	night	
ask	just	hurt	every	toy	paper	
can	blue	keep	bring	way	party	
did	cold	know	carry	baby	robin	
eat	four	upon	could	back	sheep	
fly	good	with	don't	ball	stock	
get	call	what	drink	bear	table	
had	come	once	found	bell	thing	
but	help	only	laugh	bird	watch	
she	away	very	those	boat	water	
who	into	well	which	cake	farmer	
you	that	kind	there	coat	father	
too	them	many	where	corn	flower	
yes	they	warm	light	doll	garden	

## APPENDIX B

In this section will be found a short case study on each of the students in the experimental group giving the following information:

1. Chronological Age
2. Grade Status
3. Otis Intelligence Score
4. Physical defects, if any
5. Vision
6. Hearing
7. Silent Reading Score at Initial Testing
8. A brief educational background
9. A diagnosis of the student's reading problems at the beginning of the semester
10. The student's response to instruction
11. The final testing results
12. Conclusions drawn from the testing results
13. Recommendations for the particular student.

Student 1  
 Chronological Age 13-1 to 13-6  
 Grade Status 7.5 to 7.9  
 Otis Intelligence Score 95

Physical--no apparent physical problem; a member of the football team.

Vision--no visual defects noted by school nurse.

Hearing--student's hearing found to be normal on Audiometer test.

Silent Reading--Durrell-Sullivan Reading Achievement, Form B  
 January, 1960

Test	Grade Status
Word Meaning	6.0
Paragraph Meaning	6.5
Total Reading	6.2

Background--In the second grade Student 1 scored low in reading and continued to show a deficiency in reading with scores one and two years below grade level throughout elementary school. His main interest was in sports. He expressed a desire to read, but admitted that he read very seldom for entertainment.

Diagnosis--On preliminary test given for the SRA lab, this student scored on the third-grade performance level. He moved quickly into the fourth-grade work in the first few weeks, but was never able to completely master the word study section of these. His scores were not consistently good or bad, but varied a good deal from day to day on the same type exercises. On the diagnostic reading skill tests from the Basic Reading Skills workbook, he showed difficulty on word analysis skills, primarily with the sounds of the letters and dividing words into syllables. He had some difficulty with the section on dictionary skills and on the paragraph meaning section.

Response to Instruction--In the SRA lab, this student was never able to progress further than the fourth-grade level on the Power Builders. He was able on the Rate Builders to do seventh-grade work. In using the McCall Crabb Standard Reading Lessons, he averaged 4.8 the first six weeks, 5.8 the second six weeks, and 5.4 the third six weeks. He used the reading accelerator with the third-grade level Reader's Digest Skill Builders, and was able to maintain 90 to 100 per cent comprehension at 250 wpm. He was able to read comfortably at 200 wpm using the controlled reader. In an uncontrolled reading



situation, reading from the Reader's Digest Skill Builders level 3, he averaged 247 wpm with a comprehension of 92% the first six weeks, 236 wpm with an average of 91% the second six weeks and in the fourth-grade level, 366 wpm with 97% the third six weeks. During the semester he reported on 6 outside reading books.

Final Testing--Durrell-Sullivan Reading Achievement, Form A  
May, 1960

Test	Grade Status
Word Meaning	7.9
Paragraph Meaning	8.2
Total Reading	8.1

Conclusions--Student 1 progressed 1 year 9 months in word meaning, 1 year 7 months in paragraph meaning, 1 year 9 months in total reading. He shows an increased interest in reading and is now on grade level in reading.

Recommendations--Student 1 has asked to continue in the reading program. Despite the fact that tests show him on grade level, he can still use additional help in his reading, especially on the word analysis skills. He will be allowed to continue.

Student 2  
 Chronological Age 12-11 to 13-4  
 Grade Status 7.5 to 7.9  
 Otis Intelligence Score 91

Physical--no apparent physical problem.

Vision--no visual defects noted by school nurse.

Hearing--student's hearing found to be normal on Audiometer test.

Silent Reading--Durrell-Sullivan Reading Achievement, Form B  
 January, 1960

Test	Grade Status
Word Meaning	6.4
Paragraph Meaning	6.5
Total Reading	6.5

Background--In the first grade Student 2 was considered average in reading readiness. Beginning in the second grade, his reading scores were low and remained on the second-grade level until he was in the fourth grade. He continued to be one or two grades below level throughout elementary school. His main interest at the beginning of the semester was TV. He had read several books about space travel and showed interest in reading further on this subject.

Diagnosis--On preliminary test given for the SRA lab, this student scored on the sixth-grade level. On the diagnostic reading skill tests from the Basic Reading Skills workbook, he had difficulty with word analysis skills, dictionary use and paragraph meaning.

Response to Instruction--In the SRA lab, this student was successful on the sixth-grade level, but was never able to progress to the seventh-grade level on the Power Builders. On the Rate Builders, he was able to achieve some success on the seventh-grade level. On the McCall Crabb Standard Reading Lessons, he averaged 4.9 the first six weeks, 5.2 the second six weeks, and 5.4 the third six weeks. He used the fifth grade Reader's Digest Skill Builders with the accelerator and was able to score from 60 to 95% comprehension at 165 wpm. On the controlled reader he averaged 90% at speeds of 150 to 175 wpm. In an uncontrolled reading situation, using the fourth-grade level Reader's Digest Skill Builders, he averaged 171 wpm with 68% comprehension the first six weeks, 161 wpm with 83% the second six weeks, and 257 wpm with 91% the third six weeks. During the semester

he reported on 10 outside reading books, most of them dealing with the armed forces.

Final Testing--Durrell-Sullivan Reading Achievement, Form A  
May, 1960

Test	Grade Status
Word Meaning	6.6
Paragraph Meaning	7.2
Total Reading	7.0

Conclusions--Student 2 progressed 2 months in word meaning, 7 months in paragraph meaning, and 5 months in total reading. He shows definite interest in trying to improve his reading.

Recommendations--Student 2 should continue in the reading program.

Student 3  
 Chronological Age 12-6 to 12-11  
 Grade Status 7.5 to 7.9  
 Otis Intelligence Score 101

Physical--no apparent physical problem. Has been overweight for most of life, but not so much as to cause physical incapacity. There could have been an emotional factor connected with this weight problem, but there is no definite evidence to support this.

Vision--no visual defects noted by school nurse.

Hearing--student's hearing found to be normal on Audiometer test.

Silent Reading--Durrell-Sullivan Reading Achievement, Form B  
 January, 1960

Test	Grade Status
Word Meaning	6.9
Paragraph Meaning	6.1
Total Reading	6.5

Background--Student 3 scored low on his readiness test given in the first grade. By the time he was in third grade, he scored on the fourth-grade level and then stayed on the fourth-grade level until the sixth grade. In the sixth grade he scored low sixth grade, but has had a score on paragraph meaning consistently 7 or 8 months lower than that on word meaning. Student 3 said he liked to read, but preferred TV and scout work. He could remember no books he had read recently.

Diagnosis--On preliminary test given for the SRA lab, this student scored fifth-grade level. On the diagnostic reading skill tests his scores were low on the word analysis sections. His main difficulty was more one of attitude than of reading from the very beginning. This student was the biggest behavior problem in the group. He consistently came to class without his materials and refused to work unless carefully supervised.

Response to Instruction--In the SRA lab this student was never able to progress out of the fifth grade material. His interest span was short and most of the time his attitude was poor. In using the McCall Crabb Standard Reading Lessons he averaged 4.8 for the semester. He used the fourth grade Reader's Digest Skill Builders on the accelerator at speeds ranging from 110 to 125. As in his other work, his scores here were not consistent and ranged from 55

to 100. His scores were erratic on the controlled reader, but he was able to achieve 90 to 100% comprehension at 200 wpm. In an uncontrolled reading situation, using the Reader's Digest Skill Builders, level 5, he averaged 143 wpm with 88% comprehension the first six weeks, 178 wpm with 63% the second six weeks, and 228 wpm with 49% the third six weeks. During the semester he reported on 4 outside reading books.

Final Testing--Durrell-Sullivan Reading Achievement, Form A		
May, 1960	Test	Grade Status
	Word Meaning	7.8
	Paragraph Meaning	6.6
	Total Reading	7.3

Conclusions--Student 3 progressed 9 months in word meaning, 5 months in paragraph meaning, and 8 months in total reading.

Recommendations--Until guidance programs could change his attitude, it would be inadvisable for him to continue in the reading program.

Student 4  
 Chronological Age 13-3 to 13-7  
 Grade Status 7.5 to 7.9  
 Otis Intelligence Score 98

Physical--no apparent physical problem.  
 Vision--no visual defects noted by school nurse.  
 Hearing--student's hearing found to be normal on Audiometer test.

Silent Reading--Durrell-Sullivan Reading Achievement, Form B  
 January, 1960

Test	Grade Status
Word Meaning	5.9
Paragraph	6.3
Total Reading	6.1

Background--Test records on Student 4 go back only to the third grade when he entered the Houston Public Schools. At that time he scored on the third-grade level and stayed on that level until the sixth grade. On the test given at the end of the sixth grade he scored sixth-grade level. His main interest in books was in adventure stories.

Diagnosis--On preliminary test given for the SRA lab this student scored third-grade level. He had difficulty with word analysis skills and dictionary skills on the Basic Reading Skills diagnostic test.

Response to Instruction--In the SRA lab this student progressed two grade levels to the fifth grade on the Power Builders. On the Rate Builders he was able to do good work on the sixth-grade level. In using the McCall Crabb Standard Reading Lessons he averaged 4.8 the first six weeks, 5.4 the second six weeks, and 5.8 the third six weeks. He used the reading accelerator with the third grade Reader's Digest Skill Builders and maintained 90 to 100% comprehension up to 215 wpm. In an uncontrolled reading situation he averaged 177 wpm with 93% comprehension the first six weeks, 150 wpm with 92% the second six weeks and 151 wpm with 97% the third six weeks. This was on third-grade level material from the Reader's Digest Skill Builders. During the semester he reported on 6 outside reading books.

Final Testing--Durrell-Sullivan Reading Achievement, Form A  
 May, 1960

Test	Grade Status
Word Meaning	6.3
Paragraph Meaning	6.6
Total Reading	6.6

Conclusions--Student 4 progressed 4 months in word meaning, 3 months in paragraph, and 5 months in total reading.

Recommendations--Student 4 has shown some progress and should be allowed to continue in the reading program.

Student 5  
 Chronological Age 13-0 to 13-5  
 Grade Status 7.5 to 7.9  
 Otis Intelligence Score 100

Physical--no apparent physical problem.

Vision--has glasses for reading purposes. At teacher's request the glasses were tested early in the first month by an eye doctor and adjustments were made.

Hearing--student's hearing found to be normal on Audiometer test.

Silent Reading--Durrell-Sullivan Reading Achievement, Form B  
 January, 1960

Test	Grade Status
Word Meaning	6.2
Paragraph Meaning	6.5
Total Reading	6.3

Background--Test records for Student 5 go back only to the third grade level at which time he entered Houston Public Schools. At that time he scored on the second-grade level. He remained on the second- and third-grade level until the sixth grade when he scored fifth grade at the end of the sixth grade. He felt a definite need for reading improvement at the beginning of the semester.

Diagnosis--On preliminary test given for the SRA lab this student scored on the third-grade level. He had difficulties with word meaning, word analysis and use of the dictionary on the Basic Reading Skills diagnostic tests.

Response to Instruction--In the SRA lab student 5 was able to progress to the fourth-grade level on the Power Builders and to the fifth grade on the Rate Builders. In using the McCall Crabb Standard Reading Lessons he averaged 6.1 the first six weeks, 5.2 the second six weeks, and 5.8 the third six weeks. He used the third grade level Reader's Digest Skill Builders on the reading accelerator and maintained 90 to 100% comprehension at speeds up to 260 wpm. He had difficulty with the controlled reader and was able to average 70% at 175 wpm. In an uncontrolled reading situation he averaged 138 wpm with 81% comprehension the first six weeks, 135 wpm with 93% the second six weeks, and 152 wpm with 89% the third six weeks on the third grade Reader's Digest Skill Builders. During the semester he reported on 3 outside reading books.



Final Testing--Durrell-Sullivan Reading Achievement, Form A  
May, 1960

Test	Grade Status
Word Meaning	7.1
Paragraph Meaning	7.1
Total Reading	7.1

Conclusions--Student 5 progressed 9 months in word meaning,  
6 months in paragraph meaning, and 8 months in  
total reading.

Recommendations--Student 5 should continue in the reading  
program.

Student 6  
 Chronological Age 13-3 to 13-8  
 Grade Status 7.5 to 7.9  
 Otis Intelligence Score 106

Physical--no apparent physical problem.

Vision--no visual defects noted by school nurse.

Hearing--normal on Audiometer test.

Silent Reading--Durrell-Sullivan Reading Achievement, Form B  
 January, 1960

Test	Grade Status
Word Meaning	6.9
Paragraph Meaning	6.3
Total Reading	6.7

Background--Records on Student 6 date from fifth grade when he scored on the fourth-grade level. He scored fifth grade on the test given at the end of the sixth grade. At the beginning of the semester he stated that he liked to read.

Diagnosis--On preliminary test given for the SRA lab this student scored on the third-grade level. He had difficulty on word analysis and dictionary use on the Basic Reading Skills diagnostic test.

Response to Instruction--In the SRA lab this student progressed to the fourth-grade level on the Power Builders and fifth on the Rate Builders. On the McCall Crabb Standard Reading Lessons he averaged 5.0 the first six weeks, 5.6 the second six weeks, and 5.5 the third six weeks. He used the third grade Reader's Digest Skill Builders with the accelerator and scored 90 to 100% comprehension at speeds of 255 wpm. He was able to maintain 90% comprehension at 225 wpm on the controlled reader. In an uncontrolled reading situation, reading from the Reader's Digest Skill Builders level 3, he averaged 173 wpm with a 92% comprehension the first six weeks, 180 wpm with 87% of comprehension the second six weeks, and 192 wpm with 82% the third six weeks. He reported on one outside reading book during the semester.

Final Testing--Durrell-Sullivan Reading Achievement, Form A  
 May, 1960

Test	Grade Status
Word Meaning	6.6
Paragraph Meaning	6.8
Total Reading	6.7

Conclusions--Student 6 scored 3 months lower on word meaning on the final testing and progressed 5 months in paragraph meaning, for a total reading score to remain constant.

Recommendations--Student 6 needs additional help in reading. He should continue in the reading program for another semester to improve his study skills.

Student 7  
 Chronological Age 14-1 to 14-6  
 Grade Status 7.5 to 7.9  
 Otis Intelligence Score 105

Physical--no apparent physical problem.

Vision--student wears glasses, which were checked regularly by eye doctor.

Hearing--normal on Audiometer test.

Silent Reading--Durrell-Sullivan Reading Achievement, Form B  
 January, 1960

Test	Grade Status
Word Meaning	7.6
Paragraph Meaning	6.2
Total Reading	6.9

Background--On the reading readiness test given in the first grade Student 7 scored average. Through elementary school her scores were one and two years below level until the sixth grade when she scored 9.0 on word meaning and 6.1 on paragraph meaning. She liked to read and stated that she often read for recreation.

Diagnosis--On preliminary test given for the SRA lab, this student scored on the fifth-grade level. She had difficulty with the use of the dictionary on the diagnostic test from Basic Reading Skills.

Response to Instruction--In the SRA lab this student was able to do satisfactory work on the fifth-grade level on the Power Builders and sixth-grade work on the Rate Builders. In using the McCall Crabb Standard Reading Lessons she averaged 4.6 the first six weeks, 5.9 the second six weeks, and 5.6 the third six weeks. She used the reading accelerator with the Reader's Digest Skill Builders level 4 with 80% comprehension and 270 wpm. In an uncontrolled reading situation Student 7 averaged 222 wpm with 79% comprehension the first six weeks, 203 wpm with 79% the second six weeks, and 224 wpm with 67% the third six weeks, using the fifth grade Reader's Digest Skill Builders. She reported on 11 outside reading books during the semester.

Final Testing--Durrell-Sullivan Reading Achievement, Form A  
 May, 1960

Test	Grade Status
Word Meaning	7.6
Paragraph Meaning	7.2
Total Reading	7.5

Conclusions--Student 7 progressed 1 year in paragraph meaning, but made no progress in word meaning during the semester. Her total reading progress was 6 months.

Recommendations--Student 7 should continue in reading.

Student 8  
 Chronological Age 13-0 to 13-5  
 Grade Status 7.5 to 7.9  
 Otis Intelligence Score 104

Physical--no apparent physical problem.

Vision--glasses for reading purposes. These were not checked during the semester by a doctor although school exams showed that the glasses needed checking. This report was sent to the parents, but they did not follow through.

Hearing--student's hearing normal on Audiometer.

Silent Reading--Durrell-Sullivan Reading Achievement, Form B  
 January, 1960

Test	Grade Status
Word Meaning	6.6
Paragraph Meaning	6.3
Total Reading	5.5

Background--Test records on Student 8 go back to the fourth-grade level. At that time he scored second-grade level and he continued to stay two or three grades below level until the sixth when he scored 9.0 in word meaning and 6.2 in paragraph meaning.

Diagnosis--On preliminary test given for the SRA lab this student scored third-grade level. On the Basic Reading Skills he showed trouble on word analysis and dictionary usage. His main interest at the beginning of the semester was TV, and he admitted that he seldom read.

Response to Instruction--In the SRA lab this student progressed from the third-grade level on the Power Builders to the fifth-grade level. On the Rate Builders he was able to progress to the seventh-grade level. In using the McCall Crabb Standard Reading Lessons he averaged 4.9 the first six weeks, 4.8 the second six weeks, and 5.2 the third six weeks. He used the reading accelerator with both the third and fourth-grade Reader's Digest Skill Builders and was able to maintain 90 to 100% comprehension on speeds of 220 wpm. In an uncontrolled reading situation he averaged 132 wpm with 96% the first six weeks, 131 wpm with 97% the second six weeks, and 138 wpm with 87% the third six weeks using fourth-grade Reader's Digest Skill Builders. During the semester he reported on five outside reading books.

Final Testing--Durrell-Sullivan Reading Achievement, Form A  
May, 1960

Test	Grade Status
Word Meaning	7.1
Paragraph Meaning	7.0
Total Reading	7.1

Conclusions--Student 8 progressed 5 months in word meaning and 7 months in paragraph meaning, with a total reading improvement of 6 months.

Recommendations--Student 8 should continue in the reading program.

Student 9  
 Chronological Age 13-5 to 13-9  
 Grade Status 7.5 to 7.9  
 Otis Intelligence Score 96

Physical--no apparent physical problem.

Vision--very poor. Despite attempts by the school nurse to get glasses for this student, it was very late in the semester before these were obtained.

Hearing--student's hearing found to be normal.

Silent Reading--Durrell-Sullivan Reading Achievement, Form B  
 January, 1960

Test	Grade Status
Word Meaning	5.7
Paragraph Meaning	6.5
Total Reading	6.1

Background--Test records on Student 9 date back to the third grade when she entered the Houston Public Schools. At that time she scored second-grade level and continued to stay a grade below level through elementary school and two grades at the end of the sixth grade. She stated that she liked to read but often tired quickly when reading.

Diagnosis--On preliminary test given for the SRA lab this student scored on the third-grade level. It was apparent from the beginning of the semester that this child needed attention from an eye specialist. Any work from the board or from visual aid materials were almost incomprehensible to her. Any material used was held very close to the eyes. She made very low scores on the word analysis and paragraph meaning sections of the Basic Reading Skills diagnostic test.

Response to Instruction--Student 9 was a most willing student but was severely handicapped by her vision. Once glasses were obtained she began to show some progress and moved into the fourth grade Power Builders. She did fifth grade Rate Builders. On the controlled reader she was never able to read beyond 150 wpm. In using the McCall Crabb Standard Reading Lessons she averaged 5.1 the first six weeks, 6.5 the second six weeks, and 4.7 the third six weeks. She used the fourth-grade level Reader's Digest Skill Builders on the reading accelerator and maintained 90 to 100% comprehension at speeds up to 330 wpm. In an uncontrolled reading situation, using the fourth-grade level Reader's Digest Skill Builders, she averaged 263 wpm with an 85% comprehension the first six weeks, 241 wpm with 92% the second six



weeks, and 277 wpm with 93% the third six weeks. During the semester she reported on 12 outside reading books.

Final Testing--Durrell-Sullivan Reading Achievement, Form A May, 1960	Test	Grade Status
	Word Meaning	6.1
	Paragraph Meaning	7.7
	Total Reading	6.9

Conclusions--Student 9 progressed 4 months in word meaning, 1 year 2 months in paragraph meaning, and 8 months total reading improvement.

Recommendations--Student 9 should continue in the reading program now that her vision has been improved.

Student 10  
 Chronological Age 14-4 to 14-9  
 Grade Status 7.5 to 7.9  
 Otis Intelligence Score 91

Physical--no apparent physical problem.

Vision--no visual defects noted by school nurse.

Hearing--student's hearing found to be normal on Audiometer test.

Silent Reading--Durrell-Sullivan Reading Achievement, Form B  
 January, 1960

Test	Grade Status
Word Meaning	4.8
Paragraph Meaning	4.7
Total Reading	4.8

Background--Student 10 was two or three reading levels below grade status throughout elementary school. He did not like to read. He preferred sports to school and could remember few books, if any, that he had read.

Diagnosis--On preliminary test given for the SRA lab this student scored on the third-grade level. He had great difficulty with word analysis, dictionary usage and paragraph meaning on the Basic Reading Skills diagnostic test.

Response to Instruction--In the SRA lab Student 10 was never able to progress further than the third-grade level on the Power Builders, but did fourth-grade work in the Rate Builders. In using the McCall Crabb Standard Reading Lessons he averaged 4.1 the first six weeks, 4.6 the second six weeks, and 5.8 the third six weeks. He used the third-grade level Reader's Digest Skill Builders with the reading accelerator and maintained a 90 to 100% comprehension at speeds up to 235 wpm. He was never able to do satisfactory work beyond 175 wpm on the controlled reader. Using the third-grade level Reader's Digest Skill Builders in an uncontrolled speed situation he scored 143 wpm with 98% comprehension the first six weeks, 214 wpm with 98% the second six weeks, and 201 wpm with 90% the third six weeks. During the semester he reported on 7 outside reading books.

Final Testing--Durrell-Sullivan Reading Achievement, Form A  
 May, 1960

Test	Grade Status
Word Meaning	5.4
Paragraph Meaning	5.9
Total Reading	5.7

Conclusions--Student 10 progressed 6 months in word meaning, 1 year 2 months in paragraph meaning, and 9 months in total reading.

Recommendations--Student 10 should continue in the reading program.

Student 11  
 Chronological Age 12-11 to 13-3  
 Grade Status 7.5 to 7.9  
 Otis Intelligence Score 94

Physical--no apparent physical problem.

Vision--no visual defects noted by school nurse.

Hearing--normal on Audiometer test.

Silent Reading--Durrell-Sullivan Reading Achievement, Form B  
 January, 1960

Test	Grade Status
Word Meaning	5.0
Paragraph Meaning	5.5
Total Reading	5.2

Background--This student has been a poor reader throughout elementary school. On the first-grade readiness test she was considered a poor risk and has continued to be one and two grades deficient at each grade level. She expressed a strong dislike for reading at the beginning of the semester and could remember no books that had been read recently. Her major interests at the beginning of the semester were TV and comic books.

Diagnosis--On preliminary test given for the SRA lab this child scored on the third-grade level. Her main problem in the SRA lab was the inability to read and follow directions. On the diagnostic reading skill tests she showed difficulties with word analysis skills and though when isolated for drill she could achieve a limited amount of success, there seemed to be little carry-over in a reading situation.

Response to Instruction--In the SRA lab this student was never able to progress further than the third-grade level on the Power Builders or fourth grade on the Rate Builders. In using the McCall Crabb Standard Reading Lessons she averaged 4.2 the first six weeks, 5.5 the second six weeks, and 5.9 the third six weeks. She used the reading accelerator with the third-grade level of the Reader's Digest Skill Builders with 100% comprehension at 195 wpm. She had little success with the controlled reader beyond 150 wpm. In an uncontrolled reading situation, reading from the Reader's Digest Skill Builders level 3, she averaged 182 wpm with 70% comprehension the first six weeks, 340 wpm with 78% the second six weeks, and 287 wpm with 68% the third six weeks. During the semester she reported on 2 outside reading books.

Final Testing--Durrell-Sullivan Reading Achievement, Form A  
May, 1960

Test	Grade Status
Word Meaning	5.8
Paragraph Meaning	5.5
Total Reading	5.8

Conclusions--Student 11 progressed 8 months in word meaning and 4 months in paragraph meaning, with a total reading improvement of 6 months. She has shown a greater interest in reading and has a better attitude toward school.

Recommendations--Student 11 should continue in reading.

Student 12  
 Chronological Age 13-5 to 13-9  
 Grade Status 7.5 to 7.9  
 Otis Intelligence Score 91

Physical--no apparent physical defects.

Vision--no visual defects noted by school nurse.

Hearing--normal on Audiometer test.

Silent Reading--Durrell-Sullivan Reading Achievement, Form B  
 January, 1960

Test	Grade Status
Word Meaning	5.7
Paragraph Meaning	4.4
Total Reading	5.2

Background--Student 12 was one or two years below level in reading during elementary school. He stated that he liked to read at the beginning of the semester, but much preferred sports activities.

Diagnosis--On preliminary test given for the SRA lab this student scored on the third-grade level. He made low scores on word analysis and dictionary usage on the Basic Reading Skills diagnostic test.

Response to Instruction--Student 12 progressed to the fourth-grade level on both the Power Builders and the Rate Builder in the SRA lab. In using the McCall Crabb Standard Reading Lessons he averaged 4.3 the first six weeks, 4.8 the second six weeks, and 5.3 the third six weeks. He used the third-grade Reader's Digest Skill Builders on the reading accelerator and maintained a score ranging from 80 to 100% at speeds up to 330 wpm. On the controlled reader he was able to do satisfactory work at speed up to 200 wpm. In an uncontrolled speed situation he averaged 278 wpm with 72% comprehension the first six weeks, 332 wpm with 69% the second six weeks, and 418 wpm with 87% the third six weeks. He was using the third-grade Reader's Digest Skill Builders for this reading. During the semester he reported on one outside reading book.

Final Testing--Durrell-Sullivan Reading Achievement, Form A  
 May, 1960

Test	Grade Status
Word Meaning	6.6
Paragraph Meaning	5.8
Total Reading	6.3

Conclusions--Student 12 progressed 9 months in word meaning, 1 year 4 months in paragraph meaning, with a total reading improvement of 1 year and 1 month.

Recommendations--Since Student 12 is still not on grade level, he should continue in the reading program.

Student 13  
 Chronological Age 13-4 to 13-8  
 Grade Status 7.5 to 7.9  
 Otis Intelligence Score 109

Physical--no apparent physical problem.  
 Vision--no visual defects noted by school nurse.  
 Hearing--normal on Audiometer test.  
 Silent Reading--Durrell-Sullivan Reading Achievement, Form B  
 January, 1960

Test	Grade Status
Word Meaning	6.2
Paragraph Meaning	7.0
Total Reading	6.6

Background--Student 13 has been one and two grade levels below grade level throughout elementary school. He stated at the beginning of the semester that he did not like to read.

Diagnosis--On preliminary test given for the SRA lab this student scored sixth-grade level. He had difficulty with the word analysis section of the diagnostic test in the Basic Reading Skills workbook.

Response to Instruction--On both the Power Builders and the Rate Builders in the SRA lab Student 13 was unable to progress further than the sixth-grade level. He had difficulties with the word study section of the Power Builders. In using the McCall Crabb Standard Reading Lessons he averaged 5.0 the first six weeks, 5.5 the second six weeks, and 6.6 at the end of the third six weeks. He used the fifth-grade Reader's Digest Skill Builders on the reading accelerator with scores of 90% comprehension and speed up to 280 wpm. On the fourth-grade level Reader's Digest Skill Builders he averaged 253 wpm with 93% comprehension the first six weeks, 292 wpm with 94% the second six weeks, and 672 wpm with 90% the third six weeks in an uncontrolled reading situation. During the semester he reported on 8 outside reading books.

Final Testing--Durrell-Sullivan Reading Achievement, Form A  
 May, 1960

Test	Grade Status
Word Meaning	7.1
Paragraph Meaning	8.0
Total Reading	7.5



Conclusions--Student 13 has progressed 9 months in word meaning, 1 year in paragraph meaning, and 9 months in total reading.

Recommendations--He should continue in the reading program.