

**COMPARISON OF DIRECTED STUDY AND
FREE READING IN THE IMPROVEMENT OF READING COMPREHENSION**

COMPARISON OF DIRECTED STUDY AND
FREE READING IN THE IMPROVEMENT OF READING COMPREHENSION

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COMPARISON OF DIRECTED STUDY AND FREE READING
IN THE IMPROVEMENT OF READING COMPREHENSION

CHAPTER I

INTRODUCTION

The ability to read is generally recognized as one of the most important skills that a person can have. Reading is a tool of the acquisitive mind: it is the vehicle for obtaining ideas that cannot be transmitted orally. The person who reads well has at his command a means for widening his mental horizon and for multiplying his opportunities for experience.

Educators of youth are aware of the fact that good reading ability is central to the school work of a student. They realize that a student must be an able reader to do good work in any subject. This is so since the study of reading will not only improve the ability to do effective reading, but will also contribute to the learning of the other subjects of the curriculum. Educators appreciate that through the means of reading each student can do his work at his own pace and that many of the most efficient teaching practices depend for their successful operations upon the student's ability to read well. They know further that a student will be a more effective participating member of his group if he has adequate reading ability than he will be without this power.¹

Just as educators are sensing the importance of good reading ability for successful school adjustment, so others concerned with the social and personal advancement of youth are aware of the importance of reading in

¹ G. L. Bond and Eva Bond, Developmental Reading in High School, pp. 6-7.

enabling each youth to live a rich and complete life. For reading is a worth-while and highly stimulating recreational experience; it adds many and vivid meanings to the individual's other experiences; it stimulates and fosters interests; and, since through it one can get away from the humdrum of his existence, reading contributes to his mental health. Thus, reading adds to the development of a wholesome personality.¹

Reading as we think of it today is not restricted to learning the printed symbols, but it also possesses great social significance.

Kerfoot² says, "Reading is a form of living."

Results of recent tests show that many pupils are reading on a level below their ability as shown by their I Q's. Although estimates vary as to the extent of reading disability in the schools, Betts³ indicates that eight to fifteen per cent of the school population is retarded in reading. Investigations show that an undue proportion of those who are retarded possess normal and superior mental ability.

Mason A. Stratton⁴, an elementary school principal of Atlantic City, New Jersey, says:

Are we, as administrators and teachers, satisfied with our own program of reading instruction? We ought to be doing a better job in reading than in any other major field of the curriculum for in no other field has so much careful research been carried on. Yet both the amount and quality of the reading done by children and adults in general are disappointingly low. No, we cannot relax in our effort to develop sound reading habits, interests, and tastes in children. The need for these attributes, both in school and out, is greater now than ever before.

¹ Ibid., p. 7.

² J. B. Kerfoot, How to Read, p. 5.

³ Emmett Albert Betts, The Prevention and Correction of Reading Difficulties, p. 2.

⁴ Mason A. Stratton, "A Contribution to Better Reading," The National Elementary Principal, Seventeenth Yearbook, XVII (July, 1938), p. 230.

✓ A recent survey of the reading habits of adults from practically all walks of life reveals the startling fact that only about ten per cent of our adult population read anything of social or cultural value. This finding is a rather serious reflection on the teaching of the past generation, since many persons attribute their reading aversion to the fact that, while they were in school, they were forced to read many things that they neither understood nor enjoyed. If this be true, then something must be done to correct this mistake. Of course not all people can be taught to read effectively, but certainly more than ten per cent of our population can be taught to read with understanding. The problem is one that merits consideration.¹

In overcoming deficiencies in reading, it is essential to deal with basic causes rather than the symptoms alone. While the first step is to consider existing difficulties by means of adequate tests and careful observation, the remedial program itself must often go beyond the mere drilling of children on the phases of reading in which they are weak. The causes of weakness may be found in the child himself, in his school or out-of-school environment, or in both. In any case, every available means should be used to bring about a satisfactory adjustment between the child and his total environment, giving due regard to his physical, social and emotional needs as well as to his specific needs in reading.²

¹ Sara G. Byers, "Reading - Learning's Most Essential Tool," The School Review, LIV (May, 1946), p. 279.

² Editorial Comment in Newer Practices in Reading in the Elementary School. Seventeenth Yearbook, Department of Elementary School Principals, (1938), p. 387.

Summaries of reading investigations have convinced everyone that learning to read cannot be accomplished at the same rate nor with the same amount of ease by all pupils. Differences have been found to exist. The child who is having reading difficulties is not necessarily of inferior mental ability. There are many factors that contribute to reading failures - certain physical or mental characteristics and emotional obstacles.

A corrective reading program is designed to improve reading abilities in which the child has demonstrated a weakness and to remove inefficient or incorrect reading habits. The results of our testing program show a wide range of ability with the groups.

Witty and Kopel¹ have this to say in regard to a corrective program,

An effective program of remedial instruction must aim toward change in the whole child and his adjustment to his environment in and out of school. Proper instruction must seek to orient him for successful and happy living. To improve orientation it is essential to study a child's way of adopting himself to life. Hence, one must explore his behavior as reflected in his activities and in his dominating interests. Through these avenues one may achieve some understanding of a child's needs and difficulties in making social adaptations.

Patterson, Choate and Brunner² say:

The fact that all students are not alike in their ability to learn to read has been proved by scientific study. That it lies within the responsibility of the school to do something about the problem is a comparatively new idea. Society has been slow to recognize that all individuals were not created equal and could not be made to reach or maintain equality of status. Little was done toward formulating more scientific procedures in the solution of the problem until the schools recognized that inability to succeed on higher levels was in a large measure traceable to difficulties originating in the early school experience of the child and that retarded children presented instructional problems which made the efforts of the school less effective with other members of the group.

¹ Paul S. Witty and David Kopel, Reading and the Educative Process, p. 144.

² S. Howard Patterson, Ernest A. Choate, and Edmund Brunner, The School in American Society, p. 216.

Disability cases in reading may be defined as those pupils who have made slower progress in learning than their abilities and opportunities would lead one to anticipate, or those whose learning opportunities have been inadequate.¹ Hildreth concluded that all children who rate below norms on standard tests are not disability cases, but that the grade standards for reading that have been in force, achievement in relation to ability, reading achievement in proportion to achievement in other subjects of the curriculum, qualitative aspects of achievement as well as absolute score, and the length of time the child has spent in learning to read are all factors to be considered.²

Many children who are recommended by teachers for diagnostic and remedial work are either general behavior problems, children of borderline or subnormal mentality, or discipline cases. When the intelligence factor is taken into account, the number of children requiring intensive study rather than simply a totally different program is greatly reduced.

Practices, as listed by Bond³, which encourage the development of reading ability are: (1) freeing students from day-by-day textbook assignments; (2) enabling the students to set up their own goals for reading; (3) encouraging the use of library facilities; (4) giving instruction in use of libraries; (5) developing the ability to read to achieve a goal; (6) making provision for the use of what is read; (7) appraising the use of reading through intrinsic means.

¹ Gertrude Hildreth, Learning the Three R's, p. 542.

² Ibid., pp. 573-4.

³ G. L. Bond and Eva Bond, Developmental Reading in High School, p. 205.

Many elementary teachers are meeting their responsibility to society by giving increased emphasis to the teaching of reading, and since our schools are changing their curricula to meet the needs of the pupils in a changing world, it is necessary to place greater stress on the improvement of reading in junior high school. There should be a close coordination between reading instruction in the elementary and secondary school. The developmental program in the secondary school should begin where the elementary school leaves off, since reading is basic to other school subjects.

Gray¹ has this to say about the reading achievement of pupils at the secondary school level:

The fact was pointed out earlier that a majority of pupils who enter the junior high school are prepared for a broad range of reading activities. But there remains in the minority an unfortunately large percentage of pupils (in the seventh and in subsequent grades) who are surprisingly deficient in ability to read. For example, in a study made in fourteen four-year high schools, reading tests were given to 5,705 freshmen. Approximately four per cent of these pupils made comprehension scores no higher than those attained by average second and third grade pupils; five per cent made scores equivalent to those attained by average fourth grade pupils; six per cent, by fifth grade pupils. In all, 22 per cent, or nearly one-fourth of the total number tested, received comprehension scores below the norm usually attained by pupils at the end of the sixth grade. Previous studies have shown that high school pupils who rank below this norm often encounter serious difficulty in doing the required reading and fail as a result.

¹ William S. Gray, National Society for the Study of Education, The Teaching of Reading, Thirty-Sixth Yearbook, p. 121.

The Problem for Investigation

The purpose of this study is to determine by use of standardized tests whether directed study or free reading will enable students to make a greater improvement in reading comprehension. The data presented in Chapter III show which is superior and to what degree.

The Materials Used

The Kuhlman-Anderson Achievement Test was used to find the intelligence quotients and equate the groups. The subjects or pupils used in this study include 59 pupils in the seventh grade and 74 pupils in the eighth grade.

The Method

The equated group method was used in conducting this experiment. By use of a standardized intelligence test the groups were as nearly balanced as possible mentally and chronologically.

CHAPTER II

PROCEDURE USED

How the Data Were Secured

The data for this study were obtained from an extensive testing program, including intelligence and achievement tests, also from standard tests in comprehension, rate and speed which were administered to the pupils.

Questionnaires were designed and used for the purpose of exploring the reading interests, hobbies, social maturity and leisure time activities. Valuable information was also received by personal interviews with the pupils.

Data were secured by readings which included investigations, reports and summaries by specialists in the field of reading.

Description of the Subjects

The pupils in both the control and experimental groups were selected for this study according to the procedure suggested in the Kuhlman-Anderson Test.¹ The aim was to have a comparatively equal number of mental abilities in the groups. Two equated groups, the control and experimental, from the seventh and two from the eighth grade were included in this study. There were fifty-nine pupils in the seventh grade and seventy-four pupils in the eighth grade.

¹ F. Kuhlman and Rose G. Anderson, The Kuhlman-Anderson Intelligence Test.

Description of Groups Used

The range of I Q's is from 90-110 for the boys and from 100-103 for the girls in the seventh grade control group, while the range for the boys in the experimental group is 90-116, and the range for the girls in this group is 85-110.

The range of I Q's for the boys in the control group of the eighth grade is 80-118, while the range for the girls is 85-118. The range of scores for the boys in the experimental group is 75-118 and the range for the girls in this group is from 80-118.

As to the chronological ages, the boys in the control group of the seventh grade show a greater amount of retardation than the girls. The mean age of the boys was 13 years, while that of the girls was 12 years.

The average age of the seventh grade experimental group was 12 for both boys and girls.

In the eighth grade the chronological mean ages of both boys and girls in the experimental group was 13 years.

Conditions under Which the Study Was Made

Pryor, the county seat of Mayes County, has felt the impact of the war as shown by the growth in population. This increase in population is reflected in the public schools.

The enrollment increased from eight-hundred and fifty in 1941 to two thousand twenty-four in 1946. The enrollment in Junior High School is approximately 350.

Pryor school serves a large area and many pupils are transported from the rural sections. A few of the people own their own business, many work on public work, some are professional people, while others are farmers.

Most of the citizens are progressive people who are interested in higher standards of living and are intensely interested in the welfare of their children. On the other hand, there are a few people who are not so public spirited and cooperative. Then, too, there are many who shift from place to place whose financial status does not permit them to provide the necessities which are conducive to proper child development. In view of the fact that many parents were transferred to new jobs, many children have enrolled in a number of schools this year.

A questionnaire was designed to determine the number of people who own their homes. Results show that in the seventh grade, thirty-five per cent own their homes and sixty-five per cent of the families live in rented homes or apartments, while in grade eight, sixty-two per cent own their homes and thirty-eight per cent live in rented homes or apartments.

Methods and Materials

In developing a program for the improvement of reading comprehension it was necessary to give standardized tests to determine the reading abilities of the pupils. Results of the tests, which were given to control and experimental groups, indicates that there was a definite need for a reading program that would provide for individual differences.

As was previously stated the groups were equated in respect to intelligence rating and chronological age, and since this was a development procedure rather than a remedial program, the retarded readers were not segregated. Materials were provided to challenge reading interests of the superior pupil and to care for the needs of the retarded group.

As a part of the continuous program in reading in the seventh and eighth grades, all pupils were given the Gates Reading Survey and the Shank Test of Reading Comprehension. Each score was assembled to show the level of attainment and to determine the degree of improvement.

The Gates Survey Form I was given at the beginning of the first semester and Form II was given at the close of the semester. The test was chosen because of its value in diagnosing the special difficulties of individual children. The test is designed to measure pupil abilities in four specific aspects of reading.

The four fundamental aspects of reading ability measured by the Gates Reading Survey are as follows: (1) Knowledge of word meaning or vocabulary, (2) Power or level of comprehension, (3) Speed of reading easy material of varied representative types, (4) Accuracy of comprehending easy material. Speed and accuracy are both computed from the score of the same test.

The Shank Test of Reading Comprehension was used as an instrument of measurement in the experiment. Form A was used at the beginning of the first semester and Form B was given at the close of the semester.

The Shank Test of Reading Comprehension is a test designed by Spencer Shank which utilizes six different types of questions: (a) ability to give direct details, (b) ability to give implied details, (c) ability to give content meaning as a whole, (d) ability to determine whether or not a definite idea is stated, (e) ability to recognize references,

¹ Arthur I. Gates, Gates Reading Survey. New York: Bureau of Publications. Columbia University, 1942.

² Spencer Shank, The Shank Tests of Reading Comprehension, Cincinnati: C.A. Gregory Company, 1929.

(f) ability to recognize true or false statements, (g) ability to give words of synonymous meaning. The test consists of units in which each type of reading is required. There is a possible score of 100 in this test. This test also gives a measure of speed in reading since a time limit is required.

Reading Program. The reading program was organized around units of work, since it is evident that instruction in reading should not be limited to one single system. The reading program that is organized around a center of interest provided for individual differences if material of different grade levels are placed in the room. Individuals who work with pupils realize that students are not alike in their ability to learn to read.

Samples of units that were presented as centers of interest are as follows:

Finding Enjoyment¹

- A. Joy in the Out-of-Doors
- B. Beauties of Nature
- C. Sports, Amusements and Games
- D. Happiness, Cheerfulness and Contentment

Conquering Nature²

- A. Contest with Nature
- B. Taming Plants
- C. Domesticated Animals
- D. Using Nature's Gifts

Both the experimental and control groups participated in this work. In addition to the units of work, the control groups were encouraged to do extensive reading according to their own interests and abilities, while the experimental groups were given the work type of reading.

¹ Howard C. Hill and Rollo L. Lyman, Reading and Living. p. 16.

² Ibid. p. 19.

The need for definite provision for attention to reading in the unit activities has been well stated by W. S. Gray¹ as follows:

The broader program of reading activities which has developed does not rely solely upon the reading period, as was true in the past, for the development of appropriate reading interests and habits. It provides for their initial development during an enriched reading period. At an early stage it supplements this training, moreover, with wide opportunity to read and with specific guidance in reading in various school subjects and activities, such as the social studies, geography, natural science, art appreciation, health and arithmetic.

How Reading Period Was Spent. The seventh grade control group had an hour period for reading in the morning and the eighth grade control group spent an hour in the afternoon. Each of the experimental groups spent an hour reading during the morning, the seventh from ten to eleven o'clock, and the eighth from eleven to twelve o'clock. In each instance, both groups spent the first thirty minutes of the period working on the unit being studied. During the last thirty minutes of each period, the control group did free reading and the experimental group did directed study.

Practice Readers² were used with the seventh grade experimental group and The Developmental Reading Series for Improving Reading Habits³ was used with the eighth grade experimental group.

The Practice Reader utilizes six types of responses to include the essential specific aspects of comprehension. They are as follows:

(a) Giving direct details, (b) Giving implied details, (c) Giving content meaning as a whole, (d) Determining whether a definite idea is stated,

¹ W. S. Gray, Teacher's Guidebook for the Elson Basic Readers, p. 6.

² Clarence R. Stone and Charles C. Grover, Practice Readers.

³ Robert G. Simpson and Ellen C. Gilmer, The Developmental Reading Series for Improving Reading Habits.

(e) Giving references by selecting the word referred to by a given word, as they, some, smallest, those, (f) Selecting statements not true according to the reading material.

The Developmental Reading Series is designed as a corrective reading aid for retarded readers of junior-senior high school age. Development of the following abilities is aimed at: Rate, comprehension, noting details, interpretation, finding the central thought, supplying supporting details, following directions, making inferences, locating facts and information, locating dispersed ideas and word study.

The program for free reading not only permits the pupil to pursue his own interests and read on his own reading level, but develops vocabulary skill, increases his speed of reading, and widens his knowledge of various subjects.

Various plans and devices were used to create a desire to read widely, such as, (1) Pupils give brief sketches of books which they have read, (2) Informal discussions of books, (3) Pupils relate important incidents in the book, (4) Choral readings which encourage the pupils of lower ability to participate.

Reading ability is a factor that the teacher must take into consideration in providing materials which children can read with pleasure. The pupil who is seriously retarded must have books that he can read regardless of the grade placement. The superior pupil should be guided into a program which will challenge his reading abilities.

In our changing society, there is a definite need for a more efficient reading program.

In initiating our extensive reading program, it was necessary to know something of the native ability, interests, and needs of the pupils with whom the work was to be done. To develop functional reading programs

and to guide pupils into higher levels of accomplishment and appreciation it is necessary to begin on the level of their learning.

William S. Gray¹ in a summary of the proceedings of the Reading Conference held in Chicago during June, 1941, has this to say,

Of primary importance in any effort to adjust reading programs to individuals is, according to most speakers, an intimate acquaintance with pupils as growing personalities. This acquaintance involves a clear understanding of the characteristics, interests, potentialities and needs of each pupil.

The Thirty-sixth Yearbook Committee² in their report gave five important phases in their definition of reading abilities:

(1) ability to recognize ideas presented, (2) ability to reflect on the significance of these ideas, (3) ability to evaluate correctly, (4) ability to discover relationships, and (5) ability to clarify understandings.

Hildreth³ states that it is not so much the method of instruction used in retraining that is important factor in improvement, but the opportunity the special arrangements make for the individual to read under the supervision of a sympathetic, tolerant friend who is able to find out the specific problems and difficulties of the child of whatever nature they may be. This author indicates that remedial instruction is more difficult than normal initial instruction, because wrong habits must be destroyed and unfavorable attitudes overcome.

¹ William S. Gray, Adjusting Reading Programs to Individuals, (Supplementary Educational Monograph No. 52), p. 332.

² William S. Gray, National Society for the Study of Education, The Teaching of Reading. Thirty-sixth Yearbook, Chapter II, p. 26.

³ Gertrude Hildreth, Learning the Three R's, p. 676.

Reading Interests

In recent years there has been a change in the attitude of teachers in regard to recreational reading. A short time ago a child was supposed to do his recreational reading outside of school hours and many regarded it as an extra curricular activity. It is now considered legitimate to read for fun during school hours.

Our recreational reading program developed in the junior high had as its main objective the development of a habit of reading that will carry over into adult life. Since the range of individual differences within the class is wide, it was necessary to plan a program with sufficient range and variety of material and exercises to make possible adjustment to individual needs in the group.

A survey was made to determine the number and kind of books that were read by all groups and to compare the reading of pupils on different mental levels. The results showed that quality and quantity of reading was closely related to intelligence ratings. The results also showed that pupils read for pleasure.

The problem of developing the habit of reading and a keen interest in desirable types of reading material is an important one and the school and the home in cooperation should be able to develop a wide variety of reading interests.

It is the responsibility of the school to provide interesting, wholesome reading material to further develop the reading interests and to raise the level of the quality of reading. The pupil may be encouraged to select better material by placing it before him rather than criticizing the undesirable selections. The slower pupils should be supplied with reading materials on their reading level, while the brighter group should have materials that present a challenge to their reading powers.

The survey of reading interests of the pupils of junior high revealed that pupils spend a great deal of time reading for fun. A large number have access to books in their homes while others spend considerable time at the public library.

A wide variety of interests was shown in the results of the questionnaire. Both boys and girls were interested in adventure and mystery stories. It was an interesting observation that many girls read boys' books, but few boys read girls' books. Titles of books that were suggestive of girls were shunned by the boys.

Since this was a developmental process and our aim was to create a desire to read for fun, book reports were used sparingly, because they can easily become tiresome to children and can take away much of the joy of reading. Oral reviews were given by the pupils since this is an excellent means of introducing a book to the group.

Paul McKee¹ says,

There should be no questioning or quizzing of the children by the teacher concerning what has been read..... They should be encouraged to make comments on the selection, to tell about things that caught their interests. There must be no forced comments, no probing, no quizzing and no insistence on verbal reactions. Merely give the children a chance to tell what they want to tell. We must get away from the idea that no learning can go on unless teachers are asking questions and children are answering them.

The survey revealed that many students have access to periodicals in their homes, and it was very evident that they were interested in this type of reading material. It was an interesting observation that the boys of the seventh and eighth grade listed comics as first choice, while boys of the experimental group listed "Life" as first choice. The girls of both the control and experimental groups listed comics among the first six choices although no group gave comics first place.

¹ Paul McKee, Reading and Literature in the Elementary School. p. 520.

In recent years our junior high schools have experienced an unusual development in the field of library material and its use since all modern educational trends necessitate the library as an integral part of the school. Junior high people are encouraged to read widely, to observe, experiment, investigate and organize the information they have acquired. The library is the laboratory of the school and provides a natural center for integrating the school program.

Specific objectives for developing better reading habits as listed by Stone¹ are as follows:

1. To lead each child to form the habit of voluntary reading for fun.
2. To help the child develop a more discriminating taste in his voluntary reading.
3. To develop a wide variety of reading interests on the part of each child in so far as this is possible.
4. To develop sufficient fluency in recreative silent reading on the part of each child to make independent reading pleasurable.

Since education today centers attention upon experiences that aid in child development rather than upon mere acquiring of facts or information, it is necessary to develop the habit of free reading.

Stone² mentions the following activities which may be utilized as an incentive for recreational reading:

1. Visit the public library.
2. Exhibits of attractive paper covers of books which at least some of the children can read.
3. Exhibits of collections of books obtained from libraries, homes and stores.

¹ Clarence R. Stone, Better Advanced Reading, p. 58.

² Ibid. pp. 198-199.

4. Character impersonations, dramatizations, and pageants.
5. Audience reading of brief excerpts by the teacher and individual pupils.
6. Brief voluntary oral reports of books read with the objective in mind of helping others in locating interesting books.
7. Audience reading of published reviews of books with the reading ability of some of the children, at least.
8. Returning, selecting and withdrawing books.
9. Browsing, sampling and conferring with other children and the teacher in selecting books.
10. Formulation of standards for distinguishing the desirable from the undesirable book by a committee of pupils under the teacher's guidance.
11. Individual and small group activities in making illustrations of books read.

There are many factors that are related to reading interests. Some pupils come from homes that have developed an interest in good books, and by the time they reach junior high, this cultural environment has contributed significantly to their reading interests and tastes, while other pupils have not been so fortunate and they have not developed that strong and lasting reading interest.

In the case of the pupil who has a more limited background, there is a greater responsibility for the teacher since it is a more difficult task to create an interest in reading.

There are many out-of-school conditions which have a decided influence on the reading interests of pupils. The motion picture, radio and all visual aids have been instrumental in creating an interest in reading for information. The period during the recent war was an incentive to pupils of junior high to read for information about scenes of battle, airplanes, battleships, etc.

As was mentioned before, there are many incentives for pupils to do extensive reading, but we must realize that the students of today have many interests which detract from the development of the habit of reading. The lives of pupils are so filled with activities that there is very little time left for intensive reading. The school should provide for extensive reading and the teacher may encourage pupils to read better literature; however, the individual's specific reading strength and weaknesses must be recognized and material must be provided according to the pupil's varying reading abilities and tastes.

Bond and Bond¹ list the following factors that affect the reading interests and tastes of students:

1. The quantity of books within the home.
2. The quality of reading which is done in the home.
3. The general attitude of the adults in the home toward reading.
4. The use of the radio and motion picture.
5. The firsthand activities and experiences of the student.
6. The accessibility of reading materials.

Wide reading is recognized as an important factor through which the background of the pupil could be enhanced or enlarged. The pupil who has a wide experience will bring to their future reading well developed reading techniques and a broad background of meanings and concepts.

Colburn² lists the following devices which may be used in guiding children in the choice of books:

1. Use of the bulletin board.
 - a. Posters bearing classified lists.
 - b. Colored book jackets.
 - c. Attractive illustrations from books.
 - d. Pictures of persons or places.

¹ Guy L. Bond and Eva Bond, Developmental Reading in High School. p. 149.

² Evangeline Colburn, A Library for the Intermediate Grades, p. 24.

2. Conferences with individual pupils who need to make a conscious effort to improve the quality of their reading.
3. Brief talks to the class on the advantages of reading widely.
4. Reading aloud short passages from a book, calling attention to certain parts of it, or showing pictures.
5. Attractive display of new books or of books which are being overlooked upon the shelves.
6. The use of scrapbooks which contain the cover jackets of books.
7. The individual records kept by the children.
8. Assembly programs.
9. Observation of special days during the year.
10. Allowing children's own interests to serve as the chief guide in directing them, beginning at their own level and working upward.

Summaries of books and magazines read are included in Chapter III.

CHAPTER III

ANALYSIS AND INTERPRETATION OF DATA

Distribution of Intelligence Quotients and Chronological Ages

Table I shows the distribution of pupils of the seventh grade control group according to intelligence quotient and chronological age. The range of I Q's for both boys and girls of this group is 90-110. The median chronological age is 13 years for the boys and 12 years for the girls.

Table II shows the distribution of pupils of the seventh grade experimental group according to intelligence quotient and chronological age. The range of I Q's is 90-116 for the boys and 85-110 for the girls. The median age is 12 years for both boys and girls.

Table III shows the distribution of pupils of the eighth grade control group according to intelligence quotient and chronological age. The range of I Q's for the boys and girls of this group is 80-118. The median age for both boys and girls is 13 years.

Table IV shows the distribution of pupils of the eighth grade experimental group according to intelligence quotient and chronological age. The range of I Q's is 75-118 for the boys and 80-118 for the girls. The median age for both boys and girls is 13 years.

TABLE I

DISTRIBUTION OF PUPILS OF THE CONTROL GROUPS ACCORDING TO
INTELLIGENCE QUOTIENT AND CHRONOLOGICAL AGE

Grade	: Number :			:	: Number :		
	: Boys :	I.Q. :	C.A. :		: Girls :	I.Q. :	C.A. :
Seven	6	90-110	13	:	5	90-110	13
	2		12	:	11		12
	1		11	:	7		11
Total Number	9			:	21		
Median			13	:			12

TABLE II

DISTRIBUTION OF PUPILS OF THE EXPERIMENTAL GROUPS ACCORDING TO
INTELLIGENCE QUOTIENT AND CHRONOLOGICAL AGE

Grade	: Number :			:	: Number :		
	: Boys :	I.Q. :	C.A. :		: Girls :	I.Q. :	C.A. :
Seven	5	90-116	13	:	3	85-110	13
	9		12	:	4		12
	3		11	:	5		11
Total Number	17			:	12		
Median			12	:			12

TABLE III

DISTRIBUTION OF PUPILS OF THE CONTROL GROUPS ACCORDING TO
INTELLIGENCE QUOTIENT AND CHRONOLOGICAL AGE

Grade	: Number :			: Number :		
	: Boys :	I.Q. :	C.A. :	: Girls :	I.Q. :	C.A. :
Eight	6	80-118	14	2	80-118	14
	9		13	10		13
	6		12	4		12
Total Number	21			16		
Median			13			13

TABLE IV

DISTRIBUTION OF PUPILS OF THE EXPERIMENTAL GROUPS ACCORDING TO
INTELLIGENCE QUOTIENT AND CHRONOLOGICAL AGE

Grade	: Number :			: Number :		
	: Boys :	I.Q. :	C.A. :	: Girls :	I.Q. :	C.A. :
Eight	8	75-118	14	2	80-118	14
	9		13	6		13
	5		12	7		12
Total Number	22			15		
Median			13			13

The Gates Reading Survey, Form I and II, was used in this study.

Table V shows the progress made by the control group of the seventh grade as shown by the results of the Gates Reading Survey, Form I and II.

The boys made a gain of .6 while the girls made a gain of .1. The boys are above the standard norm on both tests while the girls of this group made the norm on Form I and are slightly above the norm on Form II.

Table VI shows the progress made by the experimental group of the seventh grade as shown by the results of the Gates Reading Survey. The boys and girls made a median gain of .5. Both groups are above the standard norm.

Table VII shows the progress made by the control group of the eighth grade as shown by the Gates Reading Survey. The boys of this group show a median gain of .6 while the girls made a gain of .5. Both boys and girls are below the standard norm on this test.

Table VIII shows the progress made by the eighth grade experimental group as shown by the results of the Gates Reading Survey. The boys show a median gain of 1.1 while the girls made a gain of .7.

TABLE V

PROGRESS MADE BY THE CONTROL GROUP OF THE SEVENTH GRADE
AS SHOWN BY THE RESULTS OF THE GATES READING SURVEY

Boys N = 17				Girls N = 12			
Pupil	Form I	Form II	Gain	Pupil	Form I	Form II	Gain
B.A.	6.9	7.6	.7	C.A.	3.1	2.8	-.3
J.B.	4.7	4.8	1.1	J.B.	6.5	6.6	.1
B.B.	8.9	9.5	.6	E.C.	5.0	4.7	-.3
J.C.	7.4	8.7	1.3	B.D.	8.3	8.3	.0
R.C.	8.4	10.3	.9	P.E.	10.6	10.5	-.1
R.G.	8.3	8.6	.3	B.J.	9.5	9.8	.3
D.G.	6.1	5.9	.2	M.R.	7.6	9.7	2.1
J.H.	9.6	10.2	.6	M.S.	6.2	8.1	1.9
D.H.	7.4	7.2	-.2	M.W.	3.6	3.7	.1
J.J.	10.2	11.4	1.2	D.W.	8.4	9.4	.0
J.L.	6.2	6.4	.2	D.W.	5.9	6.9	1.0
C.P.	7.1	8.5	1.4	C.M.	7.9	7.7	-.2
J.P.	6.8	7.8	1.0				
R.R.	7.2	8.2	1.0				
M.R.	7.8	7.9	.1				
F.W.	5.0	5.4	.4				
B.W.	6.9	7.2	.3				
Median	7.2	7.9	.6		7.0	7.9	.1
Standard Norm	7.0	7.5			7.0	7.5	

TABLE VI

PROGRESS MADE BY THE EXPERIMENTAL GROUP OF THE SEVENTH GRADE
AS SHOWN BY THE RESULTS OF THE GATES SURVEY

Pupil	Boys N = 9			Pupil	Girls N = 21		
	Form I	Form II	Gain in Achievement		Form I	Form II	Gain in Achievement
L.C.	5.5	9.0	3.5	P.A.	7.1	7.6	.5
C.H.	9.4	10.6	1.2	P.B.	6.4	7.0	.6
D.H.	8.4	8.4	.0	V.B.	7.3	6.7	-.6
J.L.	7.8	8.2	.4	L.B.	6.1	7.8	1.7
R.M.	9.3	9.9	.6	G.B.	5.2	7.7	2.5
W.P.	8.3	8.6	.3	S.G.	6.7	6.0	-.2
T.R.	8.2	9.1	.9	J.H.	8.3	9.0	.7
J.S.	8.6	8.4	-.2	D.L.	7.9	8.4	.5
J.S.	7.3	7.8	.5	M.L.	7.9	8.4	.5
				S.M.	6.8	7.7	.9
				C.M.	6.2	6.5	.3
				M.M.	7.9	7.7	-.2
				M.N.	7.0	6.7	-.3
				M.R.	9.0	9.2	.2
				D.S.	5.1	4.9	-.2
				V.S.	7.0	6.8	-.2
				G.S.	7.4	8.8	.4
				S.S.	7.9	7.4	-.5
				M.T.	5.4	6.8	1.4
				N.T.	7.2	8.2	1.0
				B.W.	7.3	7.3	.0
Median	8.3	8.6	.5		7.1	7.6	.5
Standard Norm	7.0	7.5			7.0	7.5	

TABLE VII

PROGRESS MADE BY THE CONTROL GROUP OF THE EIGHTH GRADE
AS SHOWN BY THE RESULTS OF THE GATES READING
SURVEY

Pupil	Boys N = 21			Pupil	Girls N = 16		
	Form I	Form II	Gain in Achievement		Form I	Form II	Gain in Achievement
J.B.	7.0	7.6	.6	J.A.	7.0	8.9	2.9
R.B.	8.0	8.6	.6	G.B.	9.4	9.9	.5
T.B.	5.9	7.5	1.6	J.B.	6.2	6.8	.6
C.C.	5.5	7.7	2.2	R.D.	10.0	9.8	-.2
B.E.	8.3	10.1	1.8	B.E.	8.8	7.9	-.9
C.F.	8.5	8.8	.3	C.K.	7.5	8.0	.5
L.G.	5.7	6.3	.6	F.M.	8.8	9.7	.9
J.G.	6.4	7.9	1.5	M.N.	8.3	9.2	.9
J.J.	8.1	9.7	1.6	M.S.	5.2	5.4	.2
E.M.	9.5	10.7	1.2	G.S.	8.0	8.4	.4
D.N.	5.9	8.9	3.0	V.T.	6.5	7.7	1.2
J.P.	8.6	10.7	2.0	D.T.	6.5	7.1	.6
R.P.	5.2	6.6	1.4	Z.W.	6.2	6.4	.2
J.R.	10.6	10.6	.0	G.W.	7.7	7.2	.5
W.S.	10.0	9.8	-.2	V.W.	9.2	10.1	.9
D.S.	6.1	6.0	-.1	N.T.	6.1	6.4	.3
R.S.	5.9	5.6	-.3				
G.S.	10.1	10.4	.3				
H.T.	6.8	7.2	.4				
E.W.	5.6	6.8	1.2				
L.W.	6.6	7.2	.6				
Median	6.8	7.9	.6		7.6	8.0	.5
Standard Norm	8.0	8.5			8.0	8.5	

TABLE VIII

PROGRESS MADE BY THE EXPERIMENTAL GROUP OF THE EIGHTH GRADE
AS SHOWN BY THE RESULTS OF THE GATES READING SURVEY

Pupils	Boys N = 22			Pupil	Girls N = 15		
	Form I	Form II	Gain in Achievement		Form I	Form II	Gain in Achievement
B.B.	5.8	6.8	1.0	H.A.	7.6	9.3	1.7
J.B.	10.0	11.0	1.0	B.A.	9.0	10.2	1.2
G.B.	4.6	6.1	1.5	L.C.	7.2	7.1	-.1
S.C.	7.9	8.7	.8	G.D.	5.4	6.5	1.1
D.C.	3.9	4.7	.8	M.D.	9.8	10.6	.8
J.C.	8.4	10.5	2.1	M.H.	10.2	10.9	.7
D.H.	8.4	10.3	1.9	J.K.	9.4	9.0	-.4
J.G.	6.4	8.4	2.0	J.L.	11.1	10.7	-.4
E.G.	5.3	6.0	.7	R.M.	6.8	7.4	.6
L.H.	11.4	12.0	.6	J.N.	7.6	8.4	.8
B.H.	7.7	9.7	2.0	D.R.	10.3	10.0	.6
D.J.	6.8	8.0	1.1	C.S.	9.1	9.9	.7
E.K.	5.8	7.2	1.4	W.S.	7.2	8.6	1.4
L.L.	6.0	7.4	1.4	S.U.	8.0	9.0	1.0
J.M.	3.8	4.6	.8	M.D.	10.1	10.8	.7
C.N.	8.4	10.2	1.8				
J.T.	5.1	5.7	.6				
E.S.	9.9	10.4	.5				
L.S.	9.0	10.8	1.8				
M.T.	5.0	7.7	2.7				
G.W.	7.5	8.2	.7				
K.Y.	5.4	6.0	.6				
Median	6.6	8.1	1.1		9.0	9.3	.7
Standard Norm	8.0	8.5			8.0	8.5	

The Shank Test of Reading Comprehension, Form A and B, was used in this study. The test utilizes six different types of questions. The results show that there is a considerable range of ability in each group.

Table IX shows the scores on types of responses and total scores made by the control group of the seventh grade. The scores for the boys range from 18 to 76 and from 18 to 74 for the girls. The median for both boys and girls is slightly below the standard norm. The median for the boys is 44.0 and the median for the girls is 41.5.

Table X shows the scores made by the seventh grade experimental group on the Shank Test of Reading Comprehension. The range of scores for the boys is from 55 to 75. The range of scores for the girls is 30 to 70. Both groups are above the standard norm. The median for the boys is 63.0 while the median for the girls is 54.0.

Table XI shows the scores on types of responses and total scores made by the experimental group of the seventh grade on the Shank Test of Reading Comprehension, Form B. The scores for the boys range from 34.0 to 75.0 while the girls' scores range from 25.0 to 79.0. The median score for the boys is 60.0 and the median for the girls is 54.0.

Table XII shows the scores on types of responses and total scores made by the experimental group of the seventh grade on the Shank Test of Reading Comprehension, Form B. The median for the boys of this group is 60.0 while the median for the girls is 51.0. Both groups are above the standard norm. The range of scores for the boys of this group is from 50.0 to 67.0 while the range of scores for the girls is from 38.0 to 65.0.

TABLE IX

SCORES ON TYPES OF RESPONSES AND TOTAL SCORES MADE BY CONTROL GROUP
OF THE SEVENTH GRADE ON THE SHANK TEST OF READING COMPREHENSION
FORM A

Pupil	Boys N = 17								Pupil	Girls N = 12							
	Types of Responses									Types of Responses							
	a	b	c	d	e	f	g	Total		a	b	c	d	e	f	g	Total
B.A.	6	2	6	6	3	18	3	44	C.A.	0	0	5	3	2	10	0	20
J.B.	5	2	4	4	3	12	0	30	J.B.	4	2	5	3	3	15	1	33
B.B.	7	6	5	7	3	28	6	62	E.C.	2	3	4	4	2	23	0	39
J.C.	6	5	4	5	4	24	5	53	B.D.	6	4	4	5	4	18	3	44
R.C.	7	7	7	6	4	25	6	55	R.E.	8	8	6	8	5	32	7	74
R.G.	7	5	6	5	5	20	5	55	B.J.	6	7	5	6	4	29	8	65
D.G.	2	3	1	3	3	13	1	26	M.R.	6	6	5	6	1	23	4	51
J.H.	6	8	5	7	4	25	5	60	M.S.	5	5	5	4	2	15	2	38
D.H.	5	3	6	5	2	19	2	42	M.W.	2	1	2	1	1	11	0	18
J.J.	7	8	7	8	6	32	8	76	D.W.	9	8	6	7	5	25	6	66
J.L.	3	4	2	3	1	16	2	31	D.W.	3	4	3	3	2	13	1	29
C.P.	4	3	5	5	1	22	2	42	C.M.	7	6	6	6	4	26	6	62
J.P.	5	5	3	2	1	18	1	35									
R.R.	5	7	4	5	4	31	1	57									
M.R.	7	6	6	6	4	27	5	61									
F.W.	1	1	2	1	2	11	0	18									
B.W.	5	4	6	3	4	19	2	43									
Median	5.0	5.0	5.0	5.0	3.0	20.0	2.0	44.0		5.5	4.5	5.0	4.5	2.0	21.5	2.5	41.5
Norm	5.4	5.1	4.9	4.7	3.9	18.5	2.9	45.4		5.4	5.1	4.9	4.7	3.9	18.5	2.9	45.4

TABLE X

SCORES ON TYPES OF RESPONSES AND TOTAL SCORES MADE BY EXPERIMENTAL GROUP
OF THE SEVENTH GRADE ON THE SHANK TEST OF READING COMPREHENSION
FORM A

Pupil	Boys N = 9								Pupil	Girls N = 21							
	Types of Responses									Types of Responses							
	a	b	c	d	e	f	g	Total		a	b	c	d	e	f	g	Total
L.C.	7	6	4	5	3	27	3	55	P.A.	5	9	6	6	6	34	5	68
C.H.	8	7	9	8	3	33	7	75	P.B.	8	8	8	6	4	27	4	65
D.H.	8	7	6	6	6	26	7	68	V.B.	6	7	4	4	4	21	6	52
J.L.	8	6	7	5	3	28	6	63	L.B.	4	6	5	4	3	19	2	43
R.M.	7	9	8	6	3	26	6	65	G.B.	3	3	4	4	1	15	0	30
W.P.	5	8	5	3	2	30	4	57	S.G.	5	5	7	5	4	24	4	54
T.R.	8	6	7	6	5	29	3	64	J.H.	6	7	7	4	4	31	4	63
J.S.	7	6	6	8	4	27	4	62	D.L.	6	7	6	5	5	31	3	63
J.S.	7	5	4	5	3	29	3	56	M.L.	6	6	3	4	2	27	4	52
									S.M.	6	5	6	6	2	25	3	53
									C.M.	5	4	6	5	7	23	4	54
									M.M.	8	5	7	8	4	31	7	70
									M.N.	7	4	4	5	4	27	2	53
									M.R.	8	7	7	3	6	26	3	60
									D.S.	3	4	2	5	4	13	0	31
									V.S.	4	4	5	5	4	24	2	40
									G.S.	5	7	7	6	3	25	4	57
									S.S.	7	7	7	5	4	25	4	59
									M.T.	4	5	3	4	4	25	2	47
									N.T.	6	6	3	4	2	27	4	52
									B.W.	6	5	6	6	3	27	1	54
Median	7.0	6.0	6.0	6.0	3.0	28.0	4.0	63.0		6.0	6.0	6.0	5.0	4.0	25.0	4.0	54.0
Norm	5.4	5.1	4.9	4.7	3.9	18.5	2.9	45.4		5.4	5.1	4.9	4.7	3.9	18.5	2.9	45.4

TABLE XI

SCORES ON TYPES OF RESPONSES AND TOTAL SCORES MADE BY CONTROL GROUP
OF THE SEVENTH GRADE ON THE SHANK TEST OF READING COMPREHENSION
FORM B

Pupil	Boys N = 17								Pupil	Girls N = 12							
	Types of Responses									Types of Responses							
	a	b	c	d	e	f	g	Total		a	b	c	d	e	f	g	Total
B.A.	6	6	5	6	5	25	3	56	C.A.	0	1	3	3	1	14	0	22
J.B.	5	3	5	4	3	18	1	39	J.B.	5	5	4	4	2	15	3	38
B.B.	6	8	9	8	7	27	5	70	E.C.	6	2	4	3	1	20	1	37
J.C.	8	7	9	3	5	27	3	62	B.D.	7	6	6	6	4	25	6	58
R.C.	8	7	6	7	6	26	5	65	P.E.	9	7	8	8	8	32	7	79
R.G.	7	5	7	5	6	26	4	60	B.J.	8	8	8	4	7	30	4	69
D.G.	3	4	4	1	2	19	1	34	M.R.	8	8	7	8	9	30	3	73
J.H.	8	7	6	7	6	21	5	60	M.S.	4	4	7	5	4	21	2	47
D.H.	8	9	6	5	5	31	3	67	M.W.	3	3	2	3	2	11	1	25
J.J.	7	8	9	5	6	33	7	75	D.W.	7	8	7	7	7	31	5	72
J.L.	6	5	3	3	4	18	4	43	D.W.	5	6	5	5	3	25	1	50
C.P.	8	6	5	7	7	27	4	64	C.M.	8	7	7	6	3	26	5	62
J.P.	6	5	4	6	3	17	3	44									
R.R.	10	9	7	5	6	30	1	68									
M.R.	8	6	6	6	7	26	4	63									
F.W.	6	6	5	6	3	17	3	44									
B.W.	6	7	6	5	3	23	5	55									
Median	7.0	6.0	6.0	5.0	5.0	26.0	4.0	60.0		6.5	6.0	6.5	5.0	3.5	24.0	3.0	54.0
Norm	6.0	5.7	5.5	5.2	4.4	20.6	3.3	50.7		6.0	5.7	5.5	5.2	4.4	20.6	3.3	50.7

TABLE XII

SCORES ON TYPES OF RESPONSES AND TOTAL SCORES MADE BY EXPERIMENTAL GROUP
OF THE SEVENTH GRADE ON THE SHANK TEST OF READING COMPREHENSION
FORM B

Pupil	Boys N = 9								Pupil	Girls N = 21							
	Types of Responses									Types of Responses							
	a	b	c	d	e	f	g	Total		a	b	c	d	e	f	g	Total
L.C.	7	6	5	5	6	24	5	58	P.A.	6	6	5	4	3	27	5	56
C.H.	8	7	7	5	5	29	5	66	P.B.	4	5	4	3	4	20	1	41
D.H.	6	6	5	7	6	28	5	63	B.B.	6	6	6	5	5	25	2	55
J.L.	6	5	4	6	6	26	5	58	L.B.	5	5	5	5	3	19	4	46
R.M.	7	9	8	7	3	27	6	67	G.B.	5	6	4	4	4	21	2	46
W.P.	8	7	6	7	5	24	3	60	S.G.	6	5	6	5	4	19	2	47
T.R.	6	7	6	7	5	27	2	60	J.H.	7	8	8	5	7	27	4	65
J.S.	7	9	8	5	3	33	1	66	D.L.	8	7	6	5	4	29	4	63
J.S.	7	7	5	2	5	21	2	50	M.L.	7	7	7	3	4	22	1	51
									S.M.	6	6	5	4	3	20	4	48
									C.M.	5	5	5	4	3	17	1	40
									M.M.	8	6	7	5	7	26	3	62
									M.N.	5	7	6	3	5	24	4	55
									M.R.	8	7	7	4	7	23	6	62
									D.S.	5	4	3	4	4	19	3	42
									B.S.	3	6	4	4	5	23	4	49
									G.S.	7	6	6	4	5	25	7	60
									S.S.	6	7	6	6	5	26	5	61
									M.T.	3	5	4	4	3	19	1	39
									N.T.	6	7	5	5	6	21	2	52
									B.W.	5	5	6	5	2	22	3	48
Median	7.0	7.0	6.0	6.0	5.0	27.0	5.0	60.0		6.0	6.0	6.0	4.0	4.0	22.0	3.0	51.0
Norm	6.0	5.7	5.5	5.2	4.4	20.6	3.3	50.7		6.0	5.7	5.5	5.2	4.4	20.6	3.3	50.7

Table XIII shows the scores on types of responses and total scores made by the control group of eighth grade on the Shank Test of Reading Comprehension, Form A. The median for the boys is 46.0, which is below the standard norm. The median for the girls is 55.5, which is slightly above the standard norm.

Table XIV shows the scores on types of responses and total scores made by the experimental group of the eighth grade on the Shank Test of Reading Comprehension, Form A. The score for the boys is 56.5, while the median score for the girls is 71.0. Both groups are above the standard norm.

Table XV shows the scores on the types of responses and total scores made by the control group of the eighth grade on the Shank Test of Reading Comprehension, Form B. The median score for the boys is 56.0, which is slightly below the standard norm, while the score for the girls is 64.0 which is considerably higher than the standard norm.

Table XVI shows the scores on the types of responses and total scores made by the experimental group of the eighth grade on the Shank Test of Reading Comprehension, Form B. The median for the boys which is 50.5 is below the standard norm. The median score for the girls is 79.6 which is 21.3 above the standard norm.

TABLE XIII

SCORES ON TYPE OF RESPONSES AND TOTAL SCORES MADE BY CONTROL GROUP
OF EIGHTH GRADE ON SHANK TEST OF READING COMPREHENSION,
FORM A

Pupil	Boys N = 21								Pupil	Girls N = 16							
	Types of Responses									Types of Responses							
	a	b	c	d	e	f	g	Total		a	b	c	d	e	f	g	Total
J.B.	5	6	6	5	3	27	4	56	J.A.	8	4	7	7	5	28	5	64
R.B.	6	5	4	6	4	17	4	46	G.B.	7	8	8	7	7	28	7	72
T.B.	3	4	3	4	4	20	3	41	J.B.	4	5	4	4	3	17	0	37
C.C.	4	1	3	5	3	25	3	44	R.D.	7	8	8	5	5	27	6	66
B.E.	6	2	6	5	5	20	5	49	B.E.	6	6	6	5	4	22	6	55
C.F.	7	8	6	6	6	25	6	64	C.K.	6	6	5	6	5	29	4	61
L.G.	5	5	5	2	3	22	1	43	F.M.	7	6	8	7	6	30	7	71
J.G.	5	1	4	2	3	21	2	39	M.N.	5	4	5	4	4	24	6	52
J.J.	6	7	6	7	5	27	4	62	M.S.	3	5	2	4	2	20	2	39
E.M.	6	6	7	7	5	23	5	59	G.S.	8	7	7	5	6	27	7	67
D.N.	6	4	3	6	3	20	4	46	D.T.	5	4	5	5	4	19	4	46
J.P.	7	7	6	7	5	28	7	67	B.T.	5	3	4	5	4	20	2	43
R.P.	6	4	5	4	1	17	3	40	Z.W.	5	3	1	4	3	15	3	34
J.R.	10	10	9	7	7	36	9	87	G.W.	5	6	6	6	4	24	5	56
W.S.	4	5	6	7	5	27	4	58	B.W.	7	8	8	7	6	29	7	72
D.S.	4	3	3	0	3	16	1	30	N.T.	5	0	2	4	4	19	3	37
R.S.	4	3	3	2	2	14	1	29									
G.S.	7	8	6	6	7	23	8	65									
N.T.	4	4	5	5	5	20	3	46									
E.W.	5	4	3	4	3	19	3	41									
L.W.	5	4	6	5	3	19	3	47									
Median	6.0	4.0	5.0	5.0	3.0	21.0	4.0	46.0		5.5	5.5	6.0	5.0	4.0	24.0	5.0	55.5
Norm	6.3	6.2	5.6	5.4	4.8	22.1	3.6	54.0		6.3	6.2	5.6	5.4	4.8	22.1	3.6	54.0

TABLE XIV

SCORES ON TYPES OF RESPONSES AND TOTAL SCORES MADE BY THE EXPERIMENTAL GROUP
OF THE EIGHTH GRADE ON THE SHANK TEST OF READING COMPREHENSION
FORM A

Pupil	Boys N = 22								Pupil	Girls N = 15							
	Types of Responses									Types of Responses							
	a	b	c	d	e	f	g	Total		a	b	c	d	e	f	g	Total
B.B.	4	3	4	5	0	22	2	40	H.A.	6	6	6	7	5	26	3	59
J.B.	9	7	9	8	7	30	9	79	B.A.	7	7	6	7	7	31	7	72
G.B.	4	3	2	3	4	12	1	29	L.C.	6	5	3	6	4	20	3	47
S.C.	7	8	9	6	3	30	4	67	G.D.	2	4	3	4	3	17	0	33
D.C.	1	5	4	4	3	18	1	36	M.D.	9	8	9	7	7	30	9	79
J.C.	7	8	9	8	3	37	5	77	M.H.	9	8	9	6	9	37	8	86
D.H.	7	6	7	7	7	31	7	72	J.K.	8	8	7	6	6	29	7	71
J.G.	7	7	7	3	5	20	4	53	J.L.	9	8	9	7	6	32	9	80
E.G.	4	5	4	5	4	23	1	46	R.M.	5	5	6	4	5	21	3	49
L.H.	9	10	10	10	9	37	10	95	J.N.	7	7	6	5	7	23	4	59
B.H.	6	7	8	6	3	28	7	65	D.R.	8	9	9	7	4	29	8	74
D.J.	8	6	5	5	7	24	5	60	G.S.	9	7	6	5	6	31	5	69
E.K.	3	4	4	3	4	15	3	36	W.S.	4	6	5	5	4	26	5	55
L.L.	5	6	7	3	4	18	2	45	S.U.	8	6	7	7	6	35	6	75
J.M.	2	3	3	4	1	18	3	34	M.D.	8	8	9	8	7	36	8	84
C.N.	7	8	8	9	6	27	8	73									
J.P.	4	2	4	3	4	19	2	38									
E.S.	6	6	7	5	6	32	6	68									
L.S.	7	9	9	5	5	35	8	78									
M.T.	2	3	4	4	5	18	0	36									
G.W.	7	7	9	7	4	31	5	70									
K.Y.	5	5	6	7	2	17	1	43									
Median	6.0	6.0	7.0	5.0	4.0	23.5	4.0	56.5		8.0	7.0	6.0	6.0	6.0	29.0	6.0	71.0
Norm	6.3	6.2	5.6	5.4	4.8	22.1	3.6	54.0		6.3	6.2	5.6	5.4	4.8	22.1	3.6	54.0

TABLE XV

SCORES ON TYPE OF RESPONSES AND TOTAL SCORES MADE BY CONTROL GROUP
OF EIGHTH GRADE ON SHANK TEST OF READING COMPREHENSION,
FORM B

Pupil	Boys N = 21								Pupil	Girls N = 16							
	Types of Responses									Types of Responses							
	a	b	c	d	e	f	g	Total		a	b	c	d	e	f	g	Total
J.B.	7	8	6	4	7	29	4	65	J.A.	8	8	6	4	6	28	3	63
R.B.	7	8	6	6	5	28	5	65	G.B.	8	8	6	7	8	31	6	74
P.B.	7	6	6	4	5	23	4	55	J.B.	5	6	5	5	4	16	3	44
C.C.	5	4	4	2	4	18	1	38	R.D.	8	8	9	7	5	31	7	75
B.E.	8	8	8	7	6	31	7	75	B.E.	9	8	8	8	8	32	7	80
C.F.	5	7	7	4	7	30	5	66	C.K.	8	8	6	4	8	29	3	66
L.G.	4	4	6	4	3	27	1	49	F.M.	7	8	8	6	7	33	7	76
J.G.	7	8	5	6	3	25	2	56	M.N.	7	8	6	5	7	25	4	62
J.J.	9	8	8	7	7	31	4	74	M.S.	5	6	5	5	5	19	2	47
E.M.	9	8	8	8	6	30	8	77	G.S.	9	9	9	7	9	32	9	83
B.N.	6	6	4	4	4	20	3	47	B.T.	6	7	7	5	5	28	3	61
J.P.	7	8	7	7	7	30	6	72	D.T.	6	6	6	4	8	25	3	58
R.P.	4	4	5	4	1	18	2	38	Z.W.	4	3	2	7	3	20	4	43
J.R.	10	9	9	9	9	33	8	87	G.W.	8	7	5	7	6	26	6	65
W.S.	7	8	8	5	4	26	3	62	V.W.	10	8	9	8	5	35	6	81
D.S.	3	5	4	5	4	16	2	39	N.T.	8	6	5	3	5	19	0	46
R.S.	5	4	3	3	4	20	4	43									
G.S.	10	8	8	8	8	33	8	83									
H.T.	5	6	5	3	5	18	4	46									
E.W.	5	5	5	4	4	17	3	43									
L.W.	7	7	7	3	4	21	4	54									
Median	7.0	7.0	6.0	4.0	5.0	26.0	4.0	56.0		8.0	8.0	6.0	5.5	6.0	28.0	4.0	64.0
Norm	6.6	6.6	5.7	5.6	5.2	24.6	3.9	58.2		6.6	6.6	5.7	5.6	5.2	24.6	3.9	58.2

TABLE XVI

SCORES ON TYPES OF RESPONSES AND TOTAL SCORES MADE BY THE EXPERIMENTAL GROUP
OF THE EIGHTH GRADE ON THE SHANK TEST OF READING COMPREHENSION
FORM B

Pupil	Boys N = 22								Pupil	Girls N = 15							
	Types of Responses									Types of Responses							
	a	b	c	d	e	f	g	Total		a	b	c	d	e	f	g	Total
B.B.	6	5	6	4	3	24	0	48	H.A.	8	8	8	6	7	33	6	76
J.B.	9	8	8	5	8	33	5	76	B.A.	8	8	8	7	7	28	7	73
G.B.	4	5	4	5	5	17	1	41	L.C.	7	7	6	7	4	22	3	56
S.C.	5	5	7	4	4	22	4	51	G.D.	2	4	3	4	2	21	2	38
D.C.	2	2	3	3	2	19	0	31	M.D.	8	7	8	7	8	32	8	78
J.C.	9	9	9	8	8	36	4	83	M.H.	9	8	10	7	7	36	9	86
D.H.	8	8	9	7	8	32	5	77	J.K.	9	8	7	5	8	34	7	78
J.G.	7	7	7	4	5	27	4	61	J.L.	9	9	8	9	9	31	8	83
E.G.	8	6	7	3	3	23	0	50	R.M.	5	6	5	5	4	22	2	49
L.H.	10	9	9	9	9	36	9	91	J.N.	8	8	5	4	6	24	3	58
B.H.	7	6	8	5	3	27	3	59	D.R.	8	8	9	8	9	31	7	80
D.J.	5	6	4	1	0	18	2	36	G.S.	8	8	7	7	7	27	6	70
E.K.	5	5	5	2	3	18	2	40	W.S.	9	8	8	8	7	35	6	79
L.L.	5	7	6	3	4	22	2	49	S.U.	7	8	9	3	5	28	6	66
J.M.	2	3	4	1	3	17	2	32	M.D.	(moved)							
C.N.	8	8	6	5	7	29	4	67									
J.P.	4	5	5	2	3	20	0	39									
E.S.	10	9	7	6	8	32	4	76									
L.S.	8	9	8	6	7	37	4	79									
M.T.	4	5	6	4	3	21	1	44									
G.W.	5	5	6	6	3	26	4	55									
K.Y.	5	5	7	4	5	20	3	49									
Median	5.5	6.0	6.5	4.0	4.0	23.5	3.0	50.5		8.0	8.0	8.0	7.0	7.0	29.5	6.0	79.5
Norm	6.6	6.6	5.7	5.6	5.2	24.6	3.9	58.2		6.6	6.6	5.7	5.6	5.2	24.6	3.9	58.2

Table XVII is a comparison of the median scores of the boys of the seventh grade control and experimental groups on the types of responses on the Shank Test of Reading Comprehension, Form A, which shows that the boys of the experimental group made considerably higher scores on all types of responses except type "e", ability to recognize references. The girls of the experimental group made considerably higher scores on all types of responses than the control group on the Shank Test of Reading Comprehension, Form A. The median score for the boys of the control group is 44.0 as compared to 63.0 for the experimental group. The girls of the control group made a median score of 41.5 as compared to 54.0 for the experimental group.

Table XVIII, which is a comparison of the median scores on Form B of the Shank Test of Reading Comprehension, shows that the boys of the seventh grade control and experimental groups made the same median score. The boys of the control group made a higher score on type "e", ability to recognize references and the experimental group made a higher score on type "f", ability to recognize true or false statements. The girls of the control group made a considerably higher score than the experimental group. The control group made a higher score on type "a", ability to give direct details and type "c", ability to give content meaning as a whole. The experimental group made a higher score on type "e", ability to recognize references.

Table XIX is a comparison of the median scores on Form A of the Shank Test of Reading Comprehension which shows that the boys of the eighth grade experimental group made considerably higher scores than the boys of the control group, except on type "a", ability to give direct details and type "g", ability to give words of synonymous meaning. The girls of the experimental group made a decidedly higher score on all types

of responses than the girls of the control group.

Table XX, which is a comparison of median scores made by the eighth grade control and experimental groups on the Shank Test of Reading Comprehension, Form B, shows that the boys of the eighth grade control group made a higher score on all types of responses except type "c", ability to give content meaning as a whole, and type "d", ability to determine whether or not a definite idea is stated.

The girls of the experimental group made a decidedly higher score than the girls of the control group. The girls of both the experimental and control group made the same score on type "a", ability to give direct details and type "b" ability to give implied details.

The median score for the boys of the control group is 56.0, and the median for boys of the experimental group is 50.5. The median for the girls of the control group is 64.0, while the median for the experimental group is 79.5.

TABLE XVII

COMPARISON OF MEDIAN SCORES MADE BY THE SEVENTH GRADE CONTROL AND EXPERIMENTAL GROUPS
ON TYPES OF RESPONSES ON THE SHANK TEST OF READING COMPREHENSION, FORM A

Group	No. of Boys	Types of Responses							Total	Group	No. of Girls	Types of Responses							Total
		a	b	c	d	e	f	g				a	b	c	d	e	f	g	
Control	17	5.0	5.0	5.0	5.0	3.0	20.0	2.0	44.0	Control	12	5.5	4.5	5.0	4.5	2.0	21.5	2.5	41.5
Experi- mental	9	7.0	6.0	6.0	6.0	3.0	28.0	4.0	63.0	Experi- mental	21	6.0	6.0	6.0	5.0	4.0	25.0	4.0	54.0

TABLE XVIII

COMPARISON OF MEDIAN SCORES MADE BY THE SEVENTH GRADE CONTROL AND EXPERIMENTAL GROUPS
ON TYPES OF RESPONSES ON THE SHANK TEST OF READING COMPREHENSION, FORM B

Group	No. of Boys	Types of Responses							Total	Group	No. of Girls	Types of Responses							Total
		a	b	c	d	e	f	g				a	b	c	d	e	f	g	
Control	17	7.0	6.0	6.0	5.0	5.0	26.0	4.0	60.0	Control	12	6.5	6.0	6.5	5.0	3.5	24.0	3.0	54.0
Experi- mental	9	7.0	7.0	6.0	6.0	5.0	27.0	5.0	60.0	Experi- mental	21	6.0	6.0	6.0	4.0	4.0	22.0	3.0	51.0

TABLE XIX

COMPARISON OF MEDIAN SCORES MADE BY THE EIGHTH GRADE CONTROL AND EXPERIMENTAL GROUPS
ON TYPES OF RESPONSES ON THE SHANK TEST OF READING COMPREHENSION, FORM A

Group	No. of Boys	Types of Responses							Total	Group	No. of Girls	Types of Responses							Total
		a	b	c	d	e	f	g				a	b	c	d	e	f	g	
Control	21	6.0	4.0	5.0	5.0	3.0	21.0	4.0	46.0	Control	16	5.5	5.5	6.0	5.0	4.0	24.0	5.0	55.5
Experimental	22	6.0	6.0	7.0	5.0	4.0	23.5	4.0	56.5	Experimental	15	8.0	7.0	6.0	6.0	6.0	29.0	6.0	71.0

TABLE XX

COMPARISON OF MEDIAN SCORES MADE BY THE EIGHTH GRADE CONTROL AND EXPERIMENTAL GROUPS
ON TYPES OF RESPONSES ON THE SHANK TEST OF READING COMPREHENSION, FORM B

Group	No. of Boys	Types of Responses							Total	Group	No. of Girls	Types of Responses							Total
		a	b	c	d	e	f	g				a	b	c	d	e	f	g	
Control	21	7.0	7.0	6.0	4.0	5.0	26.0	4.0	56.0	Control	16	8.0	3.0	6.0	5.5	6.0	28.0	4.0	64.0
Experimental	22	5.5	6.0	6.5	4.0	4.0	23.5	3.0	50.5	Experimental	15	8.0	8.0	8.0	7.0	7.0	29.5	6.0	79.5

Table XXI shows the progress made by the control group of the seventh grade on the Shank Test of Reading Comprehension. The boys were 1.4 below the standard norm on Form A and the results of the tests on Form B show that they are 9.3 above the norm. The girls were 3.9 below the norm on Form A and 3.3 above the norm on Form B. The boys show a median gain of 10.0, while the median gain for the girls is 5.5.

Table XXII shows the progress made by the experimental group on the Shank Test of Reading Comprehension. The median for the boys on Form A and B is above the standard norm. The median is 2.0. The girls of this group are above the standard norm on both tests. They show a median gain of 2.0.

Table XXIII shows the progress made by the control group of the eighth grade on the Shank Test of Reading Comprehension. The boys show a median gain of 7.0, while the median gain for the girls is 9.0. The girls are above the standard norm on both tests, while the median for the boys is slightly below the standard.

Table XXIV shows the progress made by the experimental group of the eighth grade as shown by the Shank Tests of Reading Comprehension. The boys are above the standard norm on both tests and show a median gain of 5.5. The girls have a much higher score than the boys on both tests. The median gain for the girls is 4.0.

TABLE XXI

PROGRESS MADE BY THE CONTROL GROUP OF THE SEVENTH GRADE
AS SHOWN BY THE SHANK READING TEST OF COMPREHENSION

Boys N = 17				Girls N = 12			
Pupil	Form A	Form B	Gain in Comprehension	Pupil	Form A	Form B	Gain in Comprehension
B.A.	44	56	12	C.A.	20	22	2
J.B.	30	39	9	J.B.	33	38	5
B.B.	62	70	8	E.C.	39	37	-2
J.C.	53	63	10	B.D.	44	58	14
R.C.	55	65	10	P.E.	74	79	5
R.G.	55	60	5	B.J.	65	69	4
D.G.	26	34	8	M.R.	51	73	22
J.H.	60	60	0	M.S.	38	47	9
D.N.	42	67	25	M.W.	18	25	7
J.J.	76	75	-1	D.W.	66	72	-6
J.L.	31	43	12	D.W.	29	50	21
C.P.	42	64	22	C.M.	62	62	0
J.T.	35	44	9				
R.R.	57	68	11				
M.R.	61	63	2				
F.W.	18	44	26				
B.W.	43	55	12				
Median	44	60	10		41.5	54	5.5
Standard Norm	45.4	50.7			45.4	50.7	

TABLE XXII

PROGRESS MADE BY THE EXPERIMENTAL GROUP OF THE SEVENTH GRADE
AS SHOWN BY THE SHANK READING TEST OF COMPREHENSION

Boys N = 9				Girls N = 21			
Pupil	Form A	Form B	Gain in Comprehension	Pupil	Form A	Form B	Gain in Comprehension
L.G.	55	58	3	P.A.	68	56	-8
C.H.	75	66	-9	P.B.	65	61	-4
D.H.	68	63	-5	B.B.	52	55	3
J.L.	63	58	-5	L.B.	43	46	3
R.M.	65	67	2	G.B.	30	46	16
W.P.	57	60	3	S.G.	54	47	-7
T.R.	64	65	1	J.H.	63	65	2
J.S.	62	66	4	D.L.	63	63	0
J.S.	56	60	4	M.L.	52	51	-1
				S.M.	53	58	5
				C.M.	54	50	-4
				M.M.	70	72	2
				M.N.	54	55	2
				M.R.	60	62	2
				D.S.	31	42	11
				V.S.	48	49	1
				G.S.	57	60	3
				S.S.	59	61	2
				M.T.	47	48	1
				N.T.	52	52	0
				B.W.	54	48	-6
Median	63.0	63.0	2		54.0	55.0	2
Standard Norm	45.4	50.7			45.4	50.7	

TABLE XXIII

PROGRESS MADE BY THE CONTROL GROUP OF THE EIGHTH GRADE
AS SHOWN BY THE SHANK TEST OF READING COMPREHENSION

Pupil	Boys N = 21			Pupil	Girls N = 16		
	Form A	Form B	Gain		Form A	Form B	Gain
J.B.	56	65	9	J.A.	63	63	0
R.B.	46	65	19	G.B.	72	74	2
T.B.	41	55	14	J.B.	37	44	7
C.C.	44	38	-6	R.D.	66	75	9
B.E.	49	75	26	B.E.	55	80	25
C.F.	64	66	2	C.K.	61	66	5
L.G.	43	49	6	F.M.	71	76	4
J.G.	38	56	18	M.N.	52	62	10
J.J.	62	74	12	M.S.	38	47	9
E.M.	59	77	18	G.S.	67	83	16
D.N.	46	47	1	V.T.	46	61	15
J.P.	67	72	5	D.T.	43	58	15
R.P.	40	38	-2	Z.W.	34	43	9
J.R.	87	87	0	G.W.	56	65	9
W.S.	58	62	4	V.W.	72	81	9
D.S.	30	39	9	N.T.	37	46	9
R.S.	29	43	14				
G.S.	65	83	18				
H.T.	46	46	0				
E.W.	41	43	2				
L.W.	27	54	7				
Mean	46.0	56.0	7.0		55.5	64.0	9.0
Standard Norm	54.0	58.2			54.0	58.2	

TABLE XXIV

PROGRESS MADE BY THE EXPERIMENTAL GROUP OF THE EIGHTH GRADE
AS SHOWN BY THE SHANK READING TEST OF COMPREHENSION

Pupil	Boys N = 22			Pupil	Girls N = 15		
	Form A	Form B	Gain		Form A	Form B	Gain
B.B.	40	48	8	H.A.	59	76	17
J.B.	79	76	-3	B.A.	72	73	1
G.B.	29	41	12	L.C.	47	56	9
S.C.	67	51	-16	G.D.	33	38	5
D.C.	36	31	-5	M.D.	59	82	13
J.C.	77	83	6	M.H.	86	86	0
D.H.	72	77	5	J.K.	71	78	7
J.G.	53	61	8	J.L.	80	83	3
E.G.	46	50	4	R.M.	49	49	0
L.H.	95	91	-4	J.N.	59	58	-1
B.H.	65	59	-6	D.R.	74	80	6
D.J.	60	66	6	G.S.	69	70	1
E.K.	36	40	4	W.S.	55	79	24
L.L.	45	49	4	S.U.	75	76	1
J.M.	34	32	-2	M.D.	84	88	4
C.N.	73	67	-6				
J.P.	38	39	1				
E.S.	68	76	8				
L.S.	78	79	1				
M.T.	36	44	8				
G.W.	70	75	5				
K.Y.	63	76	13				
Mean	61.5	60.0	5.5		71.0	76.0	4.0
Standard Norm	54.0	58.2			54.0	58.2	

TABLE XXV
 NUMBER OF BOOKS READ BY THE CONTROL GROUP
 OF THE SEVENTH GRADE

Boys N = 17				Girls N = 12			
Pupil	7B	7A	Total	Pupil	7B	7A	Total
B.A.	21	18	39	C.A.	10	10	20
J.B.	10	14	24	J.B.	26	15	41
B.B.	33	32	65	E.C.	15	12	27
J.C.	12	20	32	B.D.	19	14	33
R.C.	12	18	30	P.E.	40	20	60
R.G.	14	18	32	B.J.	20	22	42
D.G.	10	17	27	M.R.	25	15	40
J.H.	15	7	22	M.S.	8	7	15
D.H.	12	14	26	M.W.	10	15	25
J.J.	16	9	25	D.W.	10	13	23
J.L.	13	16	29	D.W.	10	12	22
C.P.	23	18	41	C.M.	12	16	28
J.P.	14	11	25				
R.R.	18	20	38				
M.R.	50	51	101				
F.W.	19	10	29				
B.W.	12	10	22				
Total	304	300	604		205	171	376

TABLE XXVI

NUMBER OF BOOKS READ BY THE EXPERIMENTAL GROUP
OF THE SEVENTH GRADE

Boys N = 9				Girls N = 21			
Pupil	7B	7A	Total	Pupil	7B	7A	Total
L.C.	11	15	25	P.A.	15	10	25
C.H.	10	2	12	P.B.	10	2	12
D.H.	27	9	36	B.B.	10	8	18
J.L.	17	8	25	L.B.	10	2	12
R.M.	15	12	27	G.B.	14	2	16
W.P.	14	9	23	S.G.	16	10	26
T.R.	10	6	16	J.H.	14	11	25
J.S.	11	13	24	D.L.	11	5	16
J.S.	41	4	47	M.L.	20	10	30
				S.M.	20	16	36
				C.M.	10	15	25
				M.M.	14	10	24
				M.N.	20	3	23
				M.R.	25	35	60
				D.S.	10	0	10
				V.S.	5	3	8
				G.S.	10	8	18
				S.S.	11	2	13
				M.T.	10	12	22
				N.T.	11	8	19
				B.W.	10	6	16
Total	156	80	236		276	178	456

TABLE XXVII
 NUMBER OF BOOKS READ BY THE CONTROL GROUP
 OF THE EIGHTH GRADE

Boys N = 21				Girls N = 16			
Pupil	8B	8A	Total	Pupil	8B	8A	Total
J.B.	14	8	22	J.A.	15	16	31
R.B.	15	10	25	G.N.	4	14	18
T.B.	12	6	18	J.B.	10	25	35
C.C.	8	6	14	R.D.	20	18	38
B.E.	13	9	22	B.E.	10	12	22
C.F.	12	8	20	C.K.	10	13	23
L.G.	10	7	17	F.M.	11	12	23
J.G.	11	11	22	M.N.	10	12	22
J.J.	15	12	27	M.S.	10	18	28
E.M.	14	10	24	G.S.	10	15	25
D.N.	18	9	27	V.T.	24	16	40
J.P.	26	8	34	D.T.	16	18	34
R.P.	15	7	22	Z.W.	10	17	27
J.R.	18	16	34	G.W.	11	7	18
W.S.	12	15	27	V.W.	15	10	25
D.S.	11	16	27	N.T.	10	10	20
R.S.	8	7	15				
G.S.	16	9	25				
H.T.	8	4	12				
E.W.	5	6	11				
L.W.	15	13	28				
Total	276	197	473		196	223	419

TABLE XXVIII
 NUMBER OF BOOKS READ BY THE EXPERIMENTAL GROUP
 OF THE EIGHTH GRADE

Pupil	Boys N = 21			Pupil	Girls N = 15		
	8B	8A	Total		8B	8A	Total
B.B.	10	10	20	H.A.	16	6	22
J.B.	50	26	76	B.A.	11	6	17
G.B.	9	6	15	L.C.	12	13	25
S.C.	18	9	27	G.D.	5	6	11
D.C.	9	5	14	M.D.	10	11	21
J.C.	12	8	20	M.H.	10	10	20
J.G.	12	10	22	J.K.	36	21	57
E.G.	5	5	10	J.L.	12	10	22
L.H.	10	7	17	R.M.	10	5	15
B.H.	14	18	32	J.N.	10	10	20
D.J.	10	7	17	D.R.	12	7	19
E.K.	10	5	15	G.S.	15	10	25
L.L.	12	5	17	W.S.	4	7	11
J.M.	4	6	10	S.U.	14	9	23
C.N.	32	7	39	M.D.	14	10	24
J.T.	9	0	9				
E.S.	12	10	22				
L.S.	15	11	26				
M.T.	15	11	26				
T.W.	11	5	16				
K.Y.	11	8	20				
D.H.	14	12	26				
Total	304	192	496		191	141	332

TABLE XXIX

MAGAZINE PREFERENCES OF THE SEVENTH GRADE CONTROL GROUP
IN ORDER OF FREQUENCY OF MENTION

Boys	:	Girls
Comics		Life
Life		Readers Digest
Popular Science		Post
Colliers		Comics
Look		Movie
Readers Digest		Journal
Good Housekeeping		Miss America
Western Magazine		Better Homes and Gardens
Boys Life		Good Housekeeping
Nature Magazine		Coronet
Farm Journal		Colliers
Household		Redbook
Post		McCalls
Movie		Liberty
Progressive Farmer		Household

TABLE XXX

MAGAZINE PREFERENCES OF SEVENTH GRADE EXPERIMENTAL GROUP
 IN ORDER OF FREQUENCY OF MENTION

Boys	:	Girls
Life		Miss America
Comics		Comics
Look		Calling All Girls
Readers Digest		Life
Post		Movie
Colliers		Readers Digest
Aviation		True Romance
Popular Mechanics		McCalls
Detective		Post
Farm Journal		Look
True		Good Housekeeping
True Story		Country Gentleman
Open Road for Boys		Companion
Calling All Boys		Calling All Boys
Newsweek		Nature

TABLE XXXI

MAGAZINE PREFERENCES OF EIGHTH GRADE CONTROL GROUP
IN ORDER OF FREQUENCY OF MENTION

Boys	:	Girls
Comics		Miss America
Readers Digest		Calling All Girls
Boys Life		Readers Digest
Saturday Evening Post		Movie
Look		Life
Sports Magazine		Comics
Life		Good Housekeeping
Aviation		McCalls
Colliers		Colliers
Farm Journal		Better Homes and Gardens
Popular Mechanics		American
Coronet		Seventeen
Popular Science		Coronet
Nature		Redbook
Detective		Journal

TABLE XXXII

MAGAZINE PREFERENCES OF EIGHTH GRADE EXPERIMENTAL GROUP
 IN ORDER OF FREQUENCY OF MENTION

Boys	:	Girls
Life		Readers Digest
Readers Digest		Life
Look		Miss America
Comics		Comics
Colliers		Look
Boys Life		Movie
Saturday Evening Post		Colliers
Time		Saturday Evening Post
Popular Science		Time
Nature		Ladies Home Journal
Aviation		Good Housekeeping
Popular Mechanics		Calling All Girls
Coronet		McCalls
Farmer Stockman		Companion
Liberty		Liberty

CHAPTER IV

SUMMARY AND CONCLUSIONS

Summary

The specific purpose of this study was to discover by means of standardized tests whether the directed study or free reading will enable pupils to make greater improvement in reading comprehension.

The groups which were included in this study were equated according to mental ability and chronological ages. A control group and an experimental group were selected from the seventh grade and a control and an experimental group were selected from the eighth grade. The groups were approximately equal in number, having 29, 30, 38 and 37, respectively. They were well distributed as to sex. There were 68 boys and 64 girls.

There was considerable difference in intelligence ratings in each group. The range of I Q's for both boys and girls in the seventh grade control group is 90-110 while the range of I Q's for the boys of the seventh grade experimental group is 90-116 and 85-110 for the girls.

The range of I Q's for both boys and girls of the eighth grade control group is 80-118, while the range of I Q's for the boys of the experimental group is slightly lower, being 75-118 while the range for the girls is 80-118.

Data included intelligence ratings, educational achievement, individual interests and leisure time activities. Questionnaires were designed to determine the pupils interests in books and magazines.

The reading program was organized around units of work which were the center of interest. The units were designed to provide for individual differences and all groups participated in this phase of the program. In addition to the unit study, the control groups were encouraged to read

widely while the experimental groups were taught by the directed study plan.

Progress was measured by standardized tests which were given at the beginning of the semester and another form of the same test was given at the close of the semester.

As was mentioned in a preceding chapter, this was not a remedial program; therefore, the retarded pupils were not segregated. The pupils were accepted on the basis of their accomplishment and the study was carried on as a part of the regular work in reading.

Conclusion

The effectiveness of the reading program is reflected in improved reading ability as shown by the results of the objective tests. Attitudes and appreciations are values which are most important, although they were not objectively measured in this study. There is every indication, through personal contact and observation, to assume that considerable advancement was made in this phase of the program.

A further study of individual pupils, their interests and needs should be made. It is not only necessary to know the level of achievement of the pupil, but it is very necessary to know something of his interests, social background and previous experience. Pupil-teacher relationship is most important. Each child should be treated as an individual and the work should be planned around centers of interests that will be flexible enough to care for individual differences. A child should be given the right to develop to the maximum of his ability, whether he is mentally accelerated or retarded. This implies that the teacher must have a sympathetic understanding of the pupil.

Table XXXVIII is a summary comparison of the control and experimental groups of the seventh and eighth grades. As will be seen, the difference between the two groups is in most cases small and in some cases not statistically significant. However, it will be observed that the experimental group is favored in most cases, although in some instances the control groups show a greater gain.

The results of the test show that the groups made a decided gain; however, there is a definite need for a continuation of the developmental program. There is evidence that there is a greater appreciation of the free reading program and also evidence that an instructional program does make a difference in the reading skills.

The teacher may be instrumental in guiding the pupils into a wide reading program and by presenting the desirable types of literature the pupils are encouraged to make better selections.

The free reading program is also an ideal situation for providing for individual differences. It offers an opportunity for pupils to read according to their own interests and abilities. It is also a means of developing initiative in selecting the books and in the evaluation of material. The pupils should be guided into a program that will challenge their reading abilities.

Recent experiments show that a continuous developmental program is very beneficial and should be carried on throughout the junior and senior high school.

The data do not justify the conclusion that either procedure of teaching is distinctly superior to the other. Neither method was consistently better as revealed by the tests.

TABLE XXXIII

SUMMARY COMPARISON OF THE CONTROL AND EXPERIMENTAL GROUPS
OF THE SEVENTH AND EIGHTH GRADE

Factors Compared	Grade	Control		Experimental	
		Median Score		Median Score	
		Boys	Girls	Boys	Girls
		Boys	Girls	Boys	Girls
Gates Reading Survey, Form I	VII	7.2	7.0	8.3	7.1
Gates Reading Survey, Form II	VII	7.9	7.9	8.6	7.6
Shank Tests of Reading Comprehension, Form A	VII	44.0	41.5	63.0	54.0
Shank Tests of Reading Comprehension, Form B	VII	60.0	54.0	63.0	55.0
Gates Reading Survey, Form I	VIII	6.8	7.6	6.6	9.0
Gates Reading Survey, Form II	VIII	7.9	8.0	8.1	9.1
Shank Tests of Reading Comprehension, Form A	VIII	46.0	55.5	61.5	71.0
Shank Tests of Reading Comprehension, Form B	VIII	56.0	64.0	60.5	76.0

Table XXXIII is a summary of median scores made by the control and experimental groups of seventh and eighth grade on the Gates Reading Survey and the Shank Test of Reading Comprehension. The boys of the experimental group of the seventh grade made a higher score on the Gates Survey Test, Form I, than the boys of the control group. The girls in the experimental group also made a higher score than the girls of the control group. The score for the boys of the experimental group is 8.3 while the score for the control group is 7.2. The girls of the experimental group made a score of 7.1 while the score for the control group is 7.0. The boys of the seventh grade experimental group made a higher score on the Gates Reading Survey, Form II, than the boys of the control group. The score for the experimental group is 8.6 while the score for the boys of the control

group is 7.9. The girls of the experimental group made a score of 7.6 while the girls of the control group made a slightly higher score. The median for the group is 7.9. Both groups are above the standard norm.

The results of the Shank Test of Reading Comprehension, Form A, show that the median scores for the boys and girls of the experimental group are decidedly higher than the scores for the control group. The median score on Form A for the experimental group is above the norm while the median for both boys and girls of the control group is slightly below the norm.

The boys of the experimental group made a higher score on Form B of the Shank Test of Reading Comprehension than the boys of the control group, and the girls in the experimental group made a higher score than the girls of the corresponding group. The median for the control and experimental group is above the standard norm.

The boys of the eighth grade control group made a higher score on the Gates Reading Survey, Form I, than the boys of the experimental group. The median score for the control group is 6.8 while the score for the experimental group is 6.6. The girls of the experimental group made a decidedly higher score than the girls of the control group. The score for the experimental group is 9.0 while the score for the control group is 6.6.

The boys of the eighth grade experimental group made a score of 8.1 on Form II of the Gates Reading Survey which is slightly higher than the score of the control group which was 7.9. The score for the girls of the experimental group is 9.1 which is considerably higher than the score for the control group which was 8.0.

The boys of the eighth grade control group made decidedly higher

scores on the Shank Tests of Reading Comprehension, Form A, than the boys of the control group. The score for the boys of the experimental group is 61.5 while the score for the control group is 46.0. The girls of the experimental group also made higher scores on this test than the girls of the control group. The score for the control group is 55.5 while the score for the experimental group is 71.0.

The boys of the eighth grade control group made a score of 56.0 on the Shank Test of Reading Comprehension, Form B, and the boys of the experimental group made 60.5. The girls of the control group made a score of 64.0 and the median for the experimental group is 76.0.

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