

THE EFFECT OF AN ORAL READING PROGRAM ON READING ACHIEVEMENT,
LISTENING VOCABULARY AND ATTITUDE TOWARD READING
OF GRADE FIVE CHILDREN

by

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ABSTRACT

THE EFFECT OF AN ORAL READING PROGRAM ON READING ACHIEVEMENT, LISTENING VOCABULARY AND ATTITUDE TOWARD READING OF GRADE FIVE CHILDREN

In all lessons, teachers communicate ideas orally in their daily contact with children. In this oral presentation teachers set models for children of correct pronunciation, intonation, and rhythm of speech. Listening to these speech patterns is of primary importance to children in developing comprehension in any language arts or communication skills program.

Because it places primary emphasis on interpretation, oral reading by the teacher is one approach to reading instruction aimed at developing pupil's listening and reading vocabulary and comprehension. When the teacher reads orally to the children, she can alter her speed, use inflection, emphasis and pause, and create the atmosphere essential to making the lines sound as the author probably intended them to. It is assumed that this kind of reading not only helps to increase pupils' listening and reading vocabulary, but makes them aware of the types of content juvenile literature can offer them.

The major hypotheses of this study were: (1) to determine the effect of a program of oral reading by the teacher on children's silent reading achievement, listening vocabulary; attitude toward

reading; (2) to determine the relationships between each of the following factors taken in turn: silent reading achievement; listening vocabulary; attitude toward reading; intelligence; socioeconomic status; (3) to determine the differences if any, in the silent reading achievement, listening vocabulary, and attitude toward reading of boys and girls.

Eight grade five teachers, each teaching two reading classes in the Vancouver schools, were utilized in this experimental study. One class taught by each teacher served as the control class and the other the experimental class. In each case both classes got the same reading lessons from their teacher. However, in the experimental group the fifty minute reading lesson was shortened to forty minutes. The teacher read a children's novel for the remaining ten minutes. The program lasted for twelve weeks.

As pretests, the Gates MacGinitie Reading Tests Survey D Form M-1, the Peabody Picture Vocabulary Test Form A, and the San Diego County Inventory of Reading Attitude were given in the first week of January, 1968. Alternate forms of the Gates MacGinitie Reading Tests Survey D and of the Peabody Picture Vocabulary Test together with the same form of the San Diego County Inventory of Reading Attitude were given as posttests in the last week of March, 1968.

Analysis of covariance was used to determine any difference in the treatment.

Product-moment correlation coefficients were calculated

between the means of the gain scores on each of the dependent variables for both boys and girls in the experimental as well as in the control group.

The findings did not show any significant difference in silent reading achievement, listening vocabulary and attitude toward reading between the treatment groups.

In the experimental group, the boys seem to have benefited more than the girls in silent reading comprehension. The boys comprehended better than the girls after the treatment.

The oral reading by the teacher seems to have nullified the influence of intelligence and socio-economic status of children of low IQ and socio-economic level. Children of these categories in the experimental group made significantly greater gains in silent reading comprehension and total silent reading achievement than children in the same categories in the control group.

When socio-economic status was held constant, the relationships in the experimental group between intelligence and gain scores on each of the dependent variables were not significant. All the children in this group seemed to progress regardless of their intelligence.

When intelligence was held constant, in the experimental group, the relationships between socio-economic status and gain scores on each of the dependent variables were not significant. However, the negative significant relationships between socio-economic status and

gain scores in silent reading speed and accuracy and socio-economic status and total silent reading achievement for the girls of low socio-economic level indicates that these girls improved in these two aspects of reading achievement. Also, the boys as well as the girls of low socio-economic level progressed in their total silent reading achievement.

These findings seem to suggest that boys particularly need some kind of reading materials which increase their background of reading vocabulary and comprehension.

Also, children of low IQ and socio-economic level seem to need some acquaintance with unfamiliar words, phrases and sentence structures which provide background for their later silent reading.

CHAPTER I

INTRODUCTION

In all lessons, teachers communicate ideas orally in their daily contact with children. In this oral presentation teachers set models for children of correct pronunciation, intonation, and rhythm of speech. Listening to these speech patterns is of primary importance to children in developing comprehension in any language arts or communication skills program. As Strickland has said:

"Listenability" like readability is composed of many factors. Speech uttered in pleasant tones, easily heard, and presented in rhythmical and familiar sentence patterns facilitates understanding. In addition when topics are of interest and within the experience range of children, motivation to listen is increased.¹

Because it places primary emphasis on interpretation, oral reading by the teacher is one approach to reading instruction aimed at developing pupil's listening and reading vocabulary and comprehension. Oral reading involves the act of interpreting and expressing the thoughts and feelings of a writer to an interested listener.²

When the teacher reads orally to children, she can alter her speed, use inflection, emphasis and pause, and create the atmosphere essential to making the lines sound as the author probably intended them to. It is assumed that this kind of reading not only helps to increase

¹ Ruth Strickland, The Language Arts in the Elementary School (Boston: D. C. Heath and Co., 1957), p.121.

² Sterl Artley, "Technique for Developing Oral Reading Skill," A Report of the Thirteenth Annual Conference and Course on Reading, D. L. Cleland, editor (University of Pittsburgh, June 17-18, 1957) p.109.

pupils' listening and reading vocabulary and extend their acquaintance with different types of sentence structure, but also makes them aware of the types of content juvenile literature can offer them.

Paul McKee stressed that:

Some class periods assigned to instruction in children's literature in Grades 3 through 6 should be devoted to the teacher's reading of choice selection to the pupils. When this oral reading is done well, pupils can gain considerable enjoyment of excellent writings and become aware of and interested in the types of content which literature offers. At times they can also add words to their vocabulary, hear different sentence structures with which they need to be more familiar than they are, and acquire background for their later silent reading of literature.³

These gains in reading and listening achievement resulting from teachers' reading to children have not been experimentally demonstrated. In the classroom, pupils' repetition of words is often considered proof of listening. Teachers have taken for granted that a background of knowledge and skill is required for efficient listening. They themselves have not been fully instructed about the skills of listening. This lack of training is evident when they caution pupils to listen without giving them any instruction in how to listen.

The study of attitude toward reading is needed for better understanding of reading process. Spache believes that many discrepancies between intelligence and reading test results can be explained by factors such as attitude toward reading, socio-economic status and

³ Paul McKee, Reading a Program of Instruction for the Elementary School, (New York: Houghton Mifflin Co., 1966), p. 453.

the exposure of reading materials⁴ all of which influence reading performance. On the other hand, McKee reports that adequate instruction in reading provides for the teaching of certain understandings, certain skills, and certain attitudes, all of which taken together⁵ constitute reading power.

If the development of favorable attitudes toward reading is an objective in reading instruction, then studies of children's attitude toward reading should be made.

This research was an attempt to discover the relationships among findings in reading achievement, listening vocabulary and attitude toward reading.

I. THE PROBLEM

The major purposes of this study were: (1) to determine the effect of a program of oral reading by the teacher on children's silent reading achievement, listening vocabulary and attitude toward reading; (2) to determine the relationships between each of the following factors taken in turn: silent reading achievement; listening vocabulary; attitude toward reading; intelligence; socio-economic status; (3) to determine the differences, if any, in the silent reading achievement, listening vocabulary and attitude toward reading of boys and girls.

⁴ George D. Spache, "Construction and Validation of a Work-Type Auditory Comprehension Reading Test," Educational and Psychological Measurement, 10:249, Summer, 1950.

⁵ Paul McKee, The Teaching of Reading in the Elementary School (Cambridge, Massachusetts: Houghton Mifflin Co., 1948), p.129.

Hypotheses tested. The following hypotheses were tested:

1. There are significant differences between the means of the gains of the experimental and control groups in each of the following measured variables:

- a. silent reading speed and accuracy
- b. silent reading vocabulary
- c. silent reading comprehension
- d. total silent reading achievement
- e. listening vocabulary
- f. attitude toward reading

when the groups are statistically equated with respect to pretest scores on those variables, on socio-economic status, and on intelligence.

2. There are significant differences between the means of the gains of the boys and the girls in the experimental group in each of the measured variables.

3. In the experimental and control groups there are significant relationships between gains in:

- a. reading achievement and listening vocabulary
- b. listening vocabulary and attitude toward reading
- c. reading achievement and attitude toward reading

4. There are significant relationships between intelligence as measured by an intelligence test and the gain scores in each of the measured variables in both the experimental and control groups.

5. There are also significant relationships between socio-

economic status as measured by an occupational scale and the gain scores in each of the measured variables.

6. If socio-economic status is held constant, there will be positive relationships between intelligence and the gain scores in each of the measured variables, in both sex groups and in both treatment groups.

7. If intelligence is held constant, there will be positive relationships between socio-economic status and the gain scores in each of the measured variables, in both sex groups and in both treatment groups.

Importance of the study. Studies ^{5, 6, 7, 8} have been made of the differences between children's listening achievement and reading achievement after they have experienced a structured program in the development of listening skills. The findings of these studies indicate the importance of teaching listening. However, Horrworth ⁹ stated that,

⁵
C. I. Erickson Irving King, "A Comparison of Visual and Oral Presentation of Lesson in the Case of Pupils From the Third to Ninth Grades," School and Society, 6:146-48, 1947.

⁶
R. D. Russell, "A Comparison of Two Methods of Learning," Journal of Educational Research, 18:235-38, 1928.

⁷
William E. Young, "The Relation of Reading Comprehension and Retention to Hearing Comprehension and Retention," Journal of Experimental Education, 5:30-39, September, 1936.

⁸
Richard S. Hampleman, "Comparison of Listening and Reading Comprehension Ability of Fourth and Sixth Grade Pupils," (unpublished doctoral dissertation, Indiana University, 1955), p. 220.

⁹
Gloria L. Horrworth, "Listening: A Facet of Oral Language," Elementary English, 43:856-864, October, 1966.

even though listening was being taught in some schools, the gap between the actual teaching of listening and research on listening was still great due to the difficulty of gathering data, the lack of teacher preparation and of access by the teacher to the tools and techniques for teaching this skill. Evidently, studies have not been done in which the children are required to listen but are not being deliberately taught a structured program of listening skills development.

Virtually the only instruction in listening that children and young people receive in schools is the quite useless admonition to 'pay attention' and listen carefully.¹⁰ The teacher is not fully aware that if ever children understand what they hear, it is because the ideas they listen to are closely related to their interests and experiences. On the other hand, if children are distracted by people and things around them, they may appear to be listening to the ideas being presented but little or no interaction is taking place. Thus the children may not be comprehending what they are hearing. Since 57.5 per cent of children's school days is spent listening to the teacher,¹¹ it is important to determine the quality of their listening when they have received no formal program of listening instruction.

The primary purpose of this study was to determine the effect of a program of oral reading by the teacher on children's silent read-

10

Harold A. Anderson, "Needed Research in Listening," Elementary English, 36:215-25, April, 1952.

11

Miriam E. Wilt, "A Study of Teacher Awareness of Listening as a Factor in Elementary Education," (unpublished doctoral dissertation, Pennsylvania State College, University Park, 1949), pp.190-91.

ing speed, vocabulary and comprehension, total silent reading achievement, listening vocabulary and attitude toward reading when no discussion occurred following the oral reading. A need existed to evaluate the objectives of the British Columbia Language Arts Program for Grades IV and VI, related to the development of "skills of listening . . . attitudes, appreciation and habits necessary for efficient progress in the English language,"¹² when teachers do not teach a program of listening and when no interaction or discussion between the children and teacher takes place.

A second purpose of this study was to determine the significant differences of the mean gain scores between the control and experimental groups in silent reading speed and accuracy, vocabulary and comprehension, and in total silent reading achievement, all as measured by the Gates MacGinitie Reading Tests Survey D Forms M-1 and M-2; in listening vocabulary as measured by the Peabody Picture Vocabulary Test; and in attitude toward reading as measured by the San Diego Inventory of Reading Attitude. The relationships between listening vocabulary and reading achievement, listening vocabulary and attitude toward reading, reading achievement and attitude toward reading was also studied.

A final purpose of this study was to determine the effect of the variables intelligence, socio-economic status, and sex on child-

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Department of Education, A Guide to Teaching the English Language Arts, Intermediate Levels 11, 12, and 13 (Grades IV, V, and VI) (Victoria, B.C.: The Department of Education, 1967), pp. 1-11.

ren's reading achievement, listening vocabulary, and attitudes toward reading.

II. DEFINITION OF TERMS

Reading program. In this study, each teacher taught reading to two grade five classes one of which was the experimental and the other the control group. The teacher prepared the same lessons for both groups. In the experimental group, ten minutes of the fifty minute period was devoted to oral reading by the teacher. In the control group, the full fifty minute period was used in the same manner as in the experimental group except that the teacher did not read to the class for ten minutes, however, she continued the discussion of the lesson. This reading program lasted for twelve weeks.

Reading achievement. The aspects of reading achievement referred to in this study are silent reading speed and accuracy, vocabulary and comprehension, and total silent reading achievement. Silent reading speed and accuracy is defined by the rapidity of reading with understanding; silent reading vocabulary as a sampling of children's reading vocabulary; silent reading comprehension as the children's ability to read with understanding and fill in blank spaces in certain prose passages.

Listening. Listening in this study is defined as the passive form of listening where no discussion or interaction takes place between the children and the teacher doing the oral reading.

Listening vocabulary. This term is used to describe the meaning of a word the children hear and associate with the projected pictures of the Peabody Picture Vocabulary Test.

Attitude toward reading. This term includes the relationships of attitude toward the reading process itself, of attitude and success in reading and of the development of attitude from the content of the reading materials. It is also used to describe the children's desire to read, their choice of materials and the time they spent in their reading.

III. SCOPE AND LIMITATION

This study has been planned to explore the effectiveness of a program of oral reading by the teacher on the development of Grade Five children's silent reading achievement, listening vocabulary, and attitude toward reading. Grade Five children have been selected for this study because research studies^{13, 14} have shown the advantages of listening over reading as a mode of learning to be greatest early in the intermediate grades and less during the later elementary years.

A possible limitation of the procedures in this experiment is the fact that the stories were read by eight different teachers. The teacher's interest in the program, his teaching ability, and his per-

¹³Young, op. cit. p. 32.

¹⁴Myrtle Clara Studdard Bonner, "A Critical Analysis of the Relationship of Reading Ability to Listening Ability," (unpublished doctoral dissertation, Auburn University, Auburn, 1960), p.130.

sonality would affect the oral reading and the administration of the tests. However, many of the individual teacher variables will be controlled because the same teacher taught a pair of control and experimental classes. Similarly, class discussion following the oral reading was not permitted in order to control the influence of different teacher's abilities to help pupils learn through such discussion.

It is possible, though, that some "Hawthorne effect" may have permeated the experimental teaching situation and may have been carried over to the control group.

CHAPTER II

REVIEW OF RELATED LITERATURE

Because of the lack of research directly related to the study of listening activity when no interaction between teacher and children takes place, the writer was able to report only the literature concerning programs of creative and active forms of listening. The following review includes studies involving (1) the relative effectiveness of listening and reading as modes of learning; (2) the factors that influence listening and reading activities; (3) children's attitude toward reading.

I. LISTENING AS MODE OF LEARNING

The importance of teaching listening as one of the language arts has recently received some attention by both administrators and teachers. Studies have been made to ascertain the effect of such training on learning in general and on reading in particular. In attempting to measure the effectiveness of learning by listening over learning by reading, Russell¹ planned a listening program for children in grades five, seven and eight. The same materials were read twice by the teacher to one group of children, by the children themselves in a second group at the rate of speed the teacher used to read in the first group, and by the children themselves at their own reading speed

1

R. D. Russell, "A Comparison of Two Methods of Learning," Journal of Educational Research, 18:235-38, 1928.

in the third group. He reported that grade five children learned more by the oral presentation than by their own silent reading. In grade seven, the relative effectiveness of reading and listening were practically equal and in grade nine, reading was slightly favored. Of these two ways of teaching reading, that is listening to materials twice or reading silently, Russell concluded that neither was more effective than the other.

2

Rankin compared reading and listening ability of children in grades three through seven. In the experimental group he had the teachers read the portion of the Detroit Reading Test III which children ordinarily read silently and had the control group read the test silently according to the procedure. The grade placement median in listening and reading were compared at each grade level. The findings showed that the difference between the two modes of presentation was greatly in favor of listening at the grade three level. However, this advantage tended to become less at the beginning of grade five. It seems evident that the less competent the children are in reading the better listeners they become and vice versa. Rankin concluded that for elementary school children the rate of development in listening comprehension is much greater than in reading.

3

Young studied the relative effectiveness of different modes of presentation namely; (1) the teacher read aloud a selection to the

2

Paul T. Rankin, "Listening Ability II: Its Importance, Measurement and Development," Chicago School Journal, 12:417-20, June, 1930.

3

William E. Young, "The Relation of Reading Comprehension and Retention to Hearing Comprehension and Retention," Journal of Experimental Education, 5:30:39, September, 1936.

pupils; (2) the teacher read aloud while the children read the same material silently; (3) the children read the selection silently once at their own rate; (4) the children read the selection silently once for the length of time the teacher read aloud in the first method. Each selection was presented once in each class, and each class experienced at least three modes of presentation. The findings showed a positive difference in favor of the oral presentations. The teacher's oral presentation alone was effective as when this oral presentation was simultaneous with the children's silent reading of the same selection. However, when the teacher variable was held constant, the positive difference in favor of the oral presentation in the first and second methods over the reading presentation of the same materials in the third or fourth methods did not show; they were equally effective.

From the above findings it is apparent that listening and reading as modes of learning are almost equally effective when the attributing factors of the teacher is held constant. However, in the lower grades, listening seems to be a more effective way of learning. It is possible that if children were taught listening skills early in these grades, they could be more efficient readers. Nevertheless, formal instruction in school is directed more towards reading than listening.

Canfield⁴ designed an experiment to gather information on

⁴ G. Robert Canfield, "How Useful Are Lessons on Listening," Elementary School Journal, 62:147-51, December, 1961.

the effectiveness of direct and indirect instruction for developing the ability of grade five children to understand the spoken language. In one experimental group where direct instruction was used, the training emphasized the qualities of a good listener. The teachers in this group attempted, with the aid of twelve prepared lessons, varied techniques and devices to develop the listening skills of the children. In the second experimental group where the instruction was indirect, the teachers used the same twelve lessons but the qualities of a good listener were not given any emphasis. A third group which served as the control group did not receive any lessons or training for the development of a good listener. The mean gains in listening ability of both experimental groups compared with the control group were statistically significant at the .01 level. Nevertheless, when the mean scores were adjusted by the analysis of covariance, the significant differences among the mean gains of the groups independent of the initial differences in listening skill failed to show. ✓

Even though the gains in learning appear to favor the groups who received formal instruction in listening skills, the four studies cited above do not supply sufficient evidence to indicate that either listening or reading is superior to the other as mode of learning.

II. FACTORS THAT INFLUENCE READING AND LISTENING ACTIVITIES

Reading achievement. Most research studies on the relationship between listening and other language arts have been centered around the effect of listening ability on reading achievement.

⁵ Berry said that comprehension of the spoken word is positively related to comprehension of the printed word. ⁶ Hildreth supported this statement with the findings that learning to recognize words is more easily accomplished when the words met in reading are in the listening and speaking vocabulary of the child. ⁷ According to Young intermediate children who do poorly in comprehending what they read do poorly in comprehending what they hear. ⁸ Likewise, Spearitt concluded that children who did well on reading and reasoning tests and who could remember long sequences of symbols tended to do well in listening comprehension tests.

⁹ Winter found a correlation of .53 between listening and reading comprehension, .51 between listening and reading vocabulary both of which are significant at the .01 level. She concluded that listening and reading have many factors in common which make one as important as the other in learning. ¹⁰ Many supported this finding with the conclusion that a close relationship exists between skills involved

⁵ Althea Beery, "Interrelationships Between Listening and Other Language Arts Areas," Elementary English, 31:36-45, March, 1954.

⁶ Gertrude Hildreth, "An Individual Study in Word Recognition," Elementary School Journal, 35:606-19, April, 1945.

⁷ Young, op. cit.

⁸ Donald Spearitt, "A Factorial Analysis of Listening Comprehension," (unpublished doctoral dissertation, Harvard University, 1961).

⁹ Clotilda Winter, "Listening and Learning," Elementary English, 43:569-72, October, 1966.

¹⁰ Wesley A. Many, "Is There Really Any Difference-Reading vs. Listening?" The Reading Teacher, 19:110-13, November, 1965.

in comprehending orally and in comprehending visually presented materials.

11

Hollow's study was designed primarily to determine whether a planned program of listening instruction would improve the listening abilities of intermediate grade children and whether ability to listen was related to reading achievement. Her findings revealed a positive correlation of .55 between listening and reading comprehension, .47 between listening and reading vocabulary both of which were significant at the .01 level.

Listening and reading are skills which involve the processes of comprehension, evaluation, and interpretation but both differ in their manner of reception. Reading can be done at the individual's own rate of speed and if some portion of the selection was not fully understood it can be re-read. On the other hand, the listener depends upon the speaker who controls the speed of his utterances, the emphasis of his messages and the interaction that may occur in the listener. Therefore, the listener may or may not have the opportunity to comprehend the message and be able to retain the pertinent information.

The foregoing studies have shown the relationship between listening and reading. This relationship is important in learning from a logical point of view, also, Listening is the first of the language arts a child learns to use, so it is the basis for learning the other language arts. Through listening children can learn new

11

Mary Kevin Hollow, "An Experimental Study of Listening Comprehension at the Intermediate Grade Level," (unpublished doctoral dissertation, Fordham University, 1955).

words, phrases, and sentence structures all of which are important in building power in reading. Also, because learning through listening is equally effective as learning through reading, especially in the early school years, it is necessary that both listening and reading skills be taught formally and simultaneously.

Intelligence. The important role intelligence plays in developing listening and reading skills has been studied by many researchers. Pratt¹² reported that intelligence is as important in reading ability as it is in listening ability. Hollow¹³ concluded that systematic instruction in listening comprehension substantially benefited those pupils with low, average and high intelligence. The positive correlations between listening and intelligence in the three group levels were all significant at the .01 level. Consistent findings between listening and intelligence were reported by Winter.¹⁴ These studies indicated that intelligence is a contributing factor in the listening and reading abilities of children.

Although the relationship between listening and intelligence was found to be significant at the .01 level,^{15,16} a major criticism

¹² Edward Pratt, "Experimental Evaluation of a Program for the Improvement of Listening," Elementary School Journal, 43:315-20, March, 1956.

¹³ Ibid., p. 320.

¹⁴ Winter, op. cit.

¹⁵ William Bruce Legge, "Comparison of Listening Abilities of Intermediate Grade Pupils Categorized According to Intelligence, Achievement and Sex," (unpublished doctoral dissertation, Dis. Abst. 2947-A, 1966).

¹⁶ Canfield, op. cit.

of listening tests in their resemblance to intelligence tests. The same basic method of presenting material orally to indicate understanding is a pattern used in both tests. Therefore, it is necessary to be cautious in using intelligence test scores as the only factor that would affect the child's success in scholastic achievement.

Ross stated that:

We commonly assume that the direction of relationship is from intelligence to listening. How bright the child is determined by how well he listens. It is interesting to conjecture whether the opposite might not be true. The child who for one reason or another, never learns to listen lives in a self-made cell isolated from the world about him. As surely as if he lived in a hidden mountain village or in a desert, he is cut off from the stimulating influences that contribute to optimum development of his intellect.¹⁷

¹⁸ Legge claimed that listening ability is even more highly related to scholastic achievement than it is to intelligence. ¹⁹ Canfield supported this claim when he reported a correlation of .50 between listening tests and intelligence tests and .64 between listening tests and reading comprehension tests. The high correlation between listening tests and reading comprehension seemed to indicate that the ability to listen can be a good indicator of the child's success in scholastic achievement. ²⁰ Winter concluded that intelligence is not the only

¹⁷ Ramon Ross, "A Look At Listeners," Elementary School Journal, 64:369-72, April, 1964.

¹⁸ Legge, op. cit.

¹⁹ Canfield, op. cit.

²⁰ Winter, op. cit.

factor that affects listening ability but that there are also other factors which may be considered although she did not mention these.

Socio-economic status. The influence of socio-economic status on children's learning has been the purpose of several studies. Davis²¹ discovered that children's future goals in life differed with each socio-economic level. Children from middle and high socio-economic levels have higher aspirations, such as pursuing their studies in the hopes of obtaining a college degree whereas children from lower socio-economic levels have little or no motivation to continue their studies other than the immediate goals of being able to communicate and perhaps get any kind of job.

Gaugh²² found that positive relationships exist between socio-economic levels and vocabulary, reading ability and personality adjustment. Hill and Giammatteo²³ found similar relationships between socio-economic status and vocabulary and reading achievement. These findings revealed that children from lower socio-economic status do not overcome their cultural deficiencies by grade three. The effect of the socio-economic factor was evident in the reported scholastic achievement. Ross²⁴ supported these findings with the conclusion that good

²¹ A. Davis, Child Training and Social Class in Child Behavior and Development, New York: Mc: Graw-Hill, 1943.

²² H. G. Gaugh, "Relationship of Socio-economic Status to Personality Inventory and Achievement Tests Survey," Journal of Educational Psychology, 37:540, 1946.

²³ Edwin H. Hill and Micheal C. Giammatteo, "Socio-economic Status and Its Relationship to School Achievement in the Elementary School," Elementary English, 40:265-70, March, 1963.

²⁴ Ross, op. cit.

listeners tended to come from middle and upper middle socio-economic levels of society.

Sex. Reports that boys lag behind girls in reading achievement have led to studies of this phenomenon. Gates²⁵ studied the influence of sex differences on the reading ability of Grades 3 through 8. He reported that when the differences on reading raw scores were converted into differences in reading grades, based on grade norms, the girls were superior by about 0.2 reading grade in Grades 3 and 4, by about 0.3 in Grades 5 and 6, and by 0.4 in Grades 7 and 8. The differences for comprehension were 0.2, 0.3 and 0.2 grades respectively. However, when the differences were converted into standard scores, no consistent trend was found; the average for all grades and all tests showed a superiority of slightly less than 0.2 standard deviation for the girls. He further explained that although the boys made the highest scores a little more frequently than did the girls, the statistical findings demonstrating their superiority were too inconsistent from test to test and from grade to grade to be reliable. The greater variability of the boys seemed to be due primarily to the fact that a greater porportion of boys got low scores. He added that the usual explanation for girls' superiority in reading was that they mature earlier than boys.

Gates findings were based on the approximated intelligence

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Arthur I. Gates, "Sex Differences in Reading Ability," Elementary School Journal, 61:431-34, May, 1960-61.

and socio-economic status of 13,114 pupils. Also his study was a status research involving only one survey type reading test rather than a study involving improvement in reading achievement using a pre and posttest designs. He believed that the data suggested an environmental rather than hereditary explanation accounted for the girls' growing superiority over the boys' in reading achievement. ✓

He stated that:

It is possible that more girls than boys pursue a kind of life in which more respect, more incentives, and more opportunities for reading appear earlier and persist longer. Contrariwise, more boys than girls may find little or no early need for learning to read. These boys fall behind the girls at the beginning, and a relatively large number of them remain in the conspicuously poor reading group throughout the grades.²⁶

In Winter's²⁷ study the mean difference in reading achievement for girls was found to be higher than the boys. This difference was significant at the .01 level. Lundsteen²⁸ found the mean difference in favor of girls at the .01 level. However, the girls' superiority in the different language arts cannot be definitely conclusive. Winter stated that understanding, time and help given to boys may lead to the development of their delayed skills in listening and reading achievement.²⁹

²⁶
Ibid.

²⁷
Winter, op. cit.

²⁸
Sara W. Lundsteen, "Teaching and Testing Critical Listening in the Fifth and Sixth Grades," Elementary English, 41:743-47, Nov., 1964.

²⁹
Ibid.

Wyatt³⁰ studied sex differences in reading achievement in three approaches to grade one reading instruction, separate sex grouping, linguistic, and a control group using the basal reader. In the first approach the teachers were helped to adjust their reading methods to the behavioral tendencies of the boys and the girls who were grouped separately for reading instruction. In the second group, the linguistic approach to teaching reading was used with the hope that such a method would facilitate the learning of boys because linguistic approach would require little rote memory and would promote generalizing about sound-letter relationships. The control group used basal readers and ability grouping. The differences among the three treatment groups were revealed on tests measuring listening, visual discrimination, and rate of learning words at sight.

There were no significant differences between boys' and girls' achievement test scores in paragraph meaning, oral reading rate and accuracy, regardless of the approaches to beginning reading instruction used. However, the sex-grouping approach seemed more effective for boys than the control approach for the tests of word meaning. Wyatt concluded that the reading achievement lag of the boys seemed to depend upon something other than the teaching method used after the children entered formal reading instruction in the first grade.³¹

³⁰ Nita M. Wyatt, "Sex Differences in Reading Achievement," Elementary English, 43:596-600, 1966.

³¹ Ibid.

III. CHILDREN'S ATTITUDE TOWARD READING

The aim of instruction in developmental reading is to promote growth in important attitudes and habits common to most reading activities as well as growth in the skills which are directly related to the reading process. However, little research has been done on children's attitude toward reading. ³² Sister Josephina attempted to determine those subjects which children preferred the most, as well as the least in school. She discovered that 9 per cent of 335 Grade Five children like reading "best" while 3 per cent liked English. She concluded that the creative aspects, and dramatic potentialities of the children's reading materials appear to have lost importance to their thinking due possibly to teacher presentation. ³³

³⁴ Healy studied the effects of changing children's attitude toward reading on a group of grade five children. The children were allowed to choose reading groups according to interest, select from a wide variety of materials, select child group leaders on a rotating basis, and plan creative activities. A combination of small group instruction, flexible grouping, reading partners, and individualized

³² Sister Josephina, C.S.J., "A Study of Attitudes in the Elementary Grades," Journal of Educational Sociology, 33:56-60, October, 1956.

³³ Ibid. p.59.

³⁴ Ann Kirtland Healy, "Effects of Changing Children's Attitudes Toward Reading," Elementary English, 42:269-72, March, 1965.

instruction was used. Changes in attitudes were assessed by recording reading behavior, observing competency in finding information, and the use of free time, as well as by a questionnaire. A great improvement was noted in the children's attitude toward reading.

When the same children were in junior high school Healy again assessed their reading achievement and attitudes toward reading. A significant difference at the .01 level was found between the experimental group and control subjects in total reading achievement gains and in number of books read during the first semester. She concluded that these students maintained their achievement in reading and their favorable attitude toward reading.³⁵

In the establishment of the norms of the San Diego Inventory of Reading Attitude for Grade Five children in Vancouver School, the writer found a difference significant at the .01 level between the boys' and the girls' attitude toward reading. Using the same instrument, Wyatt³⁶ reported significant differences in attitude toward reading among sexes in the linguistic approach compared with two other approaches. However, the exact difference was not stated.

If the development of a more favorable attitude toward reading can produce for both sexes more reading and better reading achievement as they advance in their schooling, then it is important that attitude

³⁵ Ibid.

³⁶ Wyatt, op. cit.

toward reading may be considered in developing children's reading potentials especially the boys. However, Davis warned:

It seems clear that the first thing we have to do, if we are to help (disadvantaged) students improve their attitudes toward themselves and toward the school work, is to change our attitudes toward them. If they are to develop hope for their futures and faith in their ability to achieve a useful life, we must have faith in them. No one does anything well in life unless he feels that ³⁷ someone has faith in him and in his ability to achieve. ✓

CHAPTER III

DESCRIPTION OF EXPERIMENTAL PROCEDURE 37

For a more precise description of the experimental procedure, this chapter is divided into the following sections: (1) selection of the population, (2) procedure and measurement of variables, and (3) experimental design and statistical analysis.

I. SELECTION OF THE POPULATION

In the fall of 1967, permission was obtained from the Vancouver School Board to work in schools where grade five teachers were each instructing two reading classes. With the help of the Vancouver School Board's assistant director of Research and Statistics, two schools were selected at random from each of the nine administrative zones of the Vancouver School District. Because it was important to control the teacher variable in this study it was necessary to select from these sixteen schools only those in which the same teacher instructed two different sections of grade five reading classes. Only nine out of the eighteen schools originally selected by random met this criterion.

The principals of the schools designated for the study were invited to a conference at which the possibility of conducting the experiment was discussed. The writer thus had the opportunity of meeting the principals whose cooperation was so necessary for the success of the experiment. All the principals except one gave permission to have the experiment conducted in their schools.

100-11-2

It was suggested at the principals' meeting, that a day be set aside at which the teachers concerned might be introduced to the experiment. The writer met all the teachers from the eight participating schools in the study at this teachers' conference. The nature of the study and the procedures involved were discussed with the teachers and their cooperation was solicited. The starting date of the experiment was set. The selection of the experimental group from each pair of classes in each school was made. Permission was obtained from the teachers to allow the writer to observe both experimental and control classes in each school as frequently as possible during the experiment.

A plan for each teacher to read orally to the experimental group for ten minutes of their allotted daily fifty minute reading period was discussed. A flexible redistribution of the total weekly fifty minutes of oral reading was also suggested, with the provision that the whole fifty minutes was not to be given in one sitting. It was made clear that the program of oral reading by the teacher should not alter or disturb the teaching procedures in the two reading sections each teacher instructed. However, in the experimental class the teacher had to devise a means by which he either had to limit the discussion of the lesson he was presenting or shorten the lesson itself to provide time for the ten minutes of oral reading, a re-organization which obviously reduced the instruction which otherwise would have occurred between teacher and children. No revision of the current reading program was made for the control group.

It has been mentioned that the schools involved in this study were distributed throughout the different zones of the City of Vancouver. This wide distribution of schools ensured a cross-section of the various socio-economic levels of Vancouver school children.

The sixteen fifth grade classes were composed of 546 children. There were 274 boys and girls in the experimental group while 272 were in the control group. However, a change in the reading program within the experimental period prevented two schools from continuing participation in this study. In the final sample there six participating schools with a total of 186 children in the experimental group and 174 in the control group. From this final sample all pretests and posttests in reading achievement and listening vocabulary and inventories of reading attitudes were obtained for the data analysis.

II. PROCEDURES AND MEASUREMENT OF VARIABLES

Three student pretests-posttests were given: the Gates MacGinitie Reading Tests Survey D Form M-1, the Peabody Picture Vocabulary Test Form A, and the San Diego Inventory of Reading Attitude were administered as pretests and the Gates MacGinitie Reading Tests Survey D Form M-2, the Peabody Picture Vocabulary Test Form B and the San Diego Inventory of Reading Attitude were given as posttests. The Gates MacGinitie Reading Tests Survey D includes three major subtest measures-silent reading speed and accuracy, silent reading vocabulary and silent reading comprehension abilities. The three subtest scores were added to obtain the total silent reading achievement. Four scores for each form of this test were tabulated for each child. The Peabody

Picture Vocabulary Test was the listening vocabulary test. A record was kept of each child's score on the two forms of this test. The San Diego Inventory of Reading Attitude was administered before and after the experiment to provide pretest and posttest scores respectively on the variable attitude toward reading. A total of six separate pairs of pretest, posttest scores were tabulated for each child.

The availability of the Gates MacGinitie Reading Test Survey D was the principal reason for its selection. However, its high reliability and its validity were also two factors which lead to its choice. This reading survey had also two forms which were necessary for the pretest, posttest measures.

Although the Peabody Picture Vocabulary Test is generally used to measure children's intelligence, in this study it was selected to measure the general listening vocabulary of the children rather than the listening vocabulary related specifically to the words they heard during the teachers' oral reading. Although this test is usually administered individually it was given as a group test in this study. Childers found r 's, significant at the .01 level, between the group administration of the Peabody Picture Vocabulary Test and the Otis and Stanford Achievement Test, and thus established the concurrent validity of the Peabody Picture Vocabulary Test administered in this manner.

¹
Perry R. Childers, "Concurrent Validity of A Group Administered Peabody Vocabulary Test," The Journal of Educational Research, 60:92-93, October, 1966.

Before the testing period was started, a pilot study of the Peabody Picture Vocabulary Test was conducted to determine the basal and ceiling points for grade five children. This pilot study was conducted with a group of grade five children who were not participating in the experiment.

In this pilot study, and also in the main study, the Peabody Picture Vocabulary Test was administered to groups of children by projecting overhead transparencies of each of the test plates onto a white wall at 10 second intervals. As the psychometrician projected the plates, she presented the verbal stimulus associated with each plate. In the pilot study responses were scored which determined that plate 31 would be the basal point and 140 the ceiling point.

The San Diego Inventory of Reading Attitude is an inventory for evaluating children's attitude toward reading. It tests the relationship of attitude toward the reading process itself, the relationship between attitude and success in reading and changes in and development of reading attitudes. It also ascertains children's motivation towards reading, their choice of material and the time they devote to their reading. One limitation to this inventory is the absence of an equivalent form when the posttest was given after a three months time lapse.

Through the permission of the San Diego County's Superintendent of Schools, the San Diego Inventory of Reading Attitude was used for the Vancouver school children in this study. However, the norm for the Vancouver Schools had to be established.

Through the Research and Statistics Section of the Vancouver School Board, the establishment of the grade five norms of the San Diego Inventory of Reading Attitude for Vancouver Schools was made in the first week of January, 1968. Sixteen schools were selected at random from the Vancouver Schools and at each school the instrument was administered to all grade five children. The inventory was given by the teacher and to encourage the children to give honest answers to the questions, they were told that the scores would not affect their grades. The inventory was given to 537 girls and 545 boys, a total of 1,082 grade five children. The norms established for this group of children were the basis for the interpretation of the data in this study.

The IQ scores that were used to determine intelligence were the scores on the Henmon-Nelson Tests of Mental Ability. This test had been given at the end of the previous school term by the Research Division of the Vancouver School Board to all the children in the Vancouver Schools. The scores on this test for the subjects of this study were made available by the school administrators and by the Research Section of the Vancouver School Board.

The socio-economic status of each child was ascertained by having the child write about the occupational roles of his father or mother. This occupation, as described by the child, was referred to the Blishen's Occupational Scale.

The two novels used by the teachers in the oral reading were The King's Fifth and King of the Wind. These books were chosen by

a committee composed of librarians and the intermediate supervisor of the Vancouver Schools with regard to the following criteria:

1. That the book be similar, in content material, to the type of books frequently borrowed by both boys and girls;
2. That it be, in the opinion of the selection committee, of good literary quality;
3. That it be at least at grade seven level of readability as determined by the Dale-Chall Formula for Predicting Readability;
4. That as much as possible it must not have been seen or read by the children before.

Although King of the Wind, was a Newbery Award Winner in 1949, it seemed that the present group of children to whom it would be read would be just as much captivated by its freshness and charm as they would be The King's Fifth, a runner-up for the Newbery Award in 1967.

The investigator had the opportunity to observe at intervals throughout the study the implementation of lessons for the two groups of children in each school, the control and experimental groups, whereby in the experimental group, ten minutes of the fifty minute reading period was devoted to oral reading by the teacher. It was noted that there was consistency in the presentation of the same lesson to both control and experimental groups. Although in the experimental group, ten minutes per period was spent in the oral reading, this same amount of time in the control group was devoted to further discussion about the current reading lesson.

III. THE EXPERIMENTAL DESIGN AND STATISTICAL ANALYSIS

Because the purpose of this study was to determine the effect of oral reading by the teacher of selected novels on the children's silent reading achievement, listening vocabulary and attitude toward reading, the analysis of covariance was used in which the adjusted means of the experimental and control groups were compared.

A total of 360 children in both treatment groups completed the experiment. Pretest scores, intelligence and socio-economic status were used as covariates in each comparison. Eighteen different tests of significant differences were made utilizing the BMD04V.

Product-moment correlation coefficients were calculated between the means of the gain scores in reading achievement and listening vocabulary; listening vocabulary and attitude toward reading; reading achievement and attitude toward reading for both boys and girls in the experimental as well as in the control group.

The .05 level of significance was selected as the criterion for acceptance of the hypotheses.

CHAPTER IV

FINDINGS AND INTERPRETATIONS

In this chapter, the results of statistical analysis are presented and interpreted. Since the data analysis is divided into two sections, this chapter deals with (1) the analysis of covariance and (2) the coefficients of correlation.

I. ANALYSIS OF COVARIANCE

Tests of significant differences were made between the means of the gains of the boys in the experimental group and boys in the control group on each of the six dependent variables. Similar comparisons were made between the means of the gains of the girls in these two treatment groups. Pretest scores, intelligence and socioeconomic status were used as covariates in each of the comparisons. The data resulting from this analysis appear in Tables I and II. It is apparent that the oral reading by the teacher, when implemented within the concurrent reading program, caused no significant difference in all measures of reading achievement, listening vocabulary and attitude toward reading for boys and girls. However, the trend of improvement is in favor of the experimental group.

The major hypothesis that a program of oral reading by the teacher would significantly affect the silent reading achievement, listening vocabulary and attitude toward reading was rejected. No significant differences existed between treatment groups in both sex

TABLE I
COMPARISON OF MEAN DIFFERENCES IN THE GAIN SCORES
OF A PROGRAM OF ORAL READING VS. NO PROGRAM OF ORAL
READING BETWEEN THE TREATMENT GROUPS FOR BOYS

Dependent Variables	Mean Gains Ex	Con	Difference	F	Significance Level
Silent reading:					
a. speed and accuracy	5.08	4.04	1.04	1.035	(n.s.)
b. vocabulary	.50	1.75	-1.25	0.607	(n.s.)
c. comprehension	5.85	4.15	1.70	1.935	(n.s.)
d. total achievement	11.59	9.72	1.87	0.869	(n.s.)
Listening:					
e. vocabulary	2.56	1.28	1.28	0.025	(n.s.)
Attitude:					
f. toward reading	1.29	1.37	.08	0.524	(n.s.)

df=1/174 $F_{.95}=3.84$

Pretest, intelligence and socio-economic status used as covariates in each comparison.

TABLE II
COMPARISON OF MEAN DIFFERENCES IN THE GAIN SCORES
OF A PROGRAM OF ORAL READING VS. NO PROGRAM OF ORAL
READING BETWEEN THE TREATMENT GROUPS FOR GIRLS

Dependent Variables	Mean Gains Ex	Mean Gains Con	Difference	F	Significance Level
Silent reading:					
a. speed and accuracy	4.51	4.57	-.06	0.255	(n.s.)
b. vocabulary	2.13	3.97	-1.84	3.737	(n.s.)
c. comprehension	4.20	2.95	1.25	0.224	(n.s.)
d. total achievement	11.09	11.41	-.32	0.055	(n.s.)
Listening:					
e. vocabulary	4.32	3.56	.74	0.659	(n.s.)
Attitude:					
f. toward reading	.54	.24	.30	0.896	(n.s.)

df=1/176 $F_{.95}=3.84$

Pretest, intelligence and socio-economic status used as covariates in each comparison.

groups in all measured variables and no significant differences existed between the treatment groups for boys and girls combined.

According to Table III, the hypothesis that there would be significant differences between the means of the gains of the boys and the girls in the experimental group was accepted on the variable of silent reading comprehension. However, the hypothesis was rejected for the other five variables because the mean gain differences were non-significant.

It must be noted as shown in Table IV that no significant differences on any of the dependent variables resulted between the boys and the girls in the control group. The unexpected sex difference in the experimental treatment on silent reading comprehension was contrary to the hypothesis that the girls would achieve more than the boys. This findings needs further explanation and investigation.

The boys in the experimental group benefited more than did the girls from the oral reading by the teacher. Such an hypothesis is borne out by the greater gain score achieved by the boys on silent reading comprehension. The mean difference between the boys' and the gain scores was significant at the .05 level. This gain indicates that the experimental treatment had more impact on the boys than on the girls insofar as silent reading comprehension is concerned.

The program of oral reading also might have helped the boys more than the girls in the development of their skills in listening to and understanding passages. These skills might have some transfer to silent reading comprehension. The novel, The King's Fifth, was

TABLE III
COMPARISON OF MEAN DIFFERENCES IN THE GAIN SCORES
BETWEEN THE BOYS AND THE GIRLS IN THE EXPERIMENTAL GROUP
IN EACH OF THE SIX DEPENDENT VARIABLES

Dependent Variables	Mean Gains Boys	Mean Gains Girls	Difference	F	Significance Level
Silent reading:					
a. speed and accuracy	5.07	4.51	.56	0.248	(n.s.)
b. vocabulary	.50	2.13	-1.63	0.737	(n.s.)
c. comprehension	5.84	4.20	1.64	4.995	.05
d. total achievement	11.60	11.10	.50	0.501	(n.s.)
Listening:					
e. vocabulary	2.56	4.31	-1.75	0.596	(n.s.)
Attitude:					
f. toward reading	1.29	.52	.77	0.605	(n.s.)

df=1/181 $F_{.95} = 3.84$

Pretest, intelligence and socio-economic status used as covariates in each comparison.

TABLE IV
COMPARISON OF MEAN DIFFERENCES IN THE GAIN SCORES
BETWEEN THE BOYS AND THE GIRLS IN THE CONTROL GROUP
IN EACH OF THE SIX DEPENDENT VARIABLES

Dependent Variables	Mean Gains		Difference	F	Significance Level
	Boys	Girls			
Silent reading:					
a. speed and accuracy	4.04	4.51	-.54	0.019	(n.s.)
b. vocabulary	1.75	2.97	-1.22	2.228	(n.s.)
c. comprehension	4.15	2.95	1.20	2.221	(n.s.)
d. total achievement	9.72	11.41	-1.69	0.003	(n.s.)
Listening:					
e. vocabulary	2.28	3.56	-1.26	0.829	(n.s.)
Attitude:					
f. toward reading	1.37	.24	1.13	0.186	(n.s.)

df=1/169 $F_{.95} = 3.84$

Pretest, intelligence and socio-economic status used as covariates in each comparison.

a story of the heroic world of the Spanish conquerors and the King of the Wind was a story of an Arabian stallion. The plot of each story together with the fact that their human character was a male, might have motivated the boys to listen to the stories with more interest than the girls showed. This more intense interest and listening may have been reflected in the greater gains in silent reading comprehension.

II. COEFFICIENTS OF CORRELATION

It can be seen in Table V, that for the experimental group the hypothesis was rejected that there were significant relationships between gains in silent reading achievement, and listening vocabulary, listening vocabulary and attitude toward reading, and silent reading achievement and attitude toward reading. The coefficients of correlation indicate indifferent or negligible relationships. As would be expected, the relationships between reading speed and accuracy and total silent reading achievement, silent reading vocabulary and total silent reading achievement, silent reading comprehension and total silent reading achievement were all significant at the .01 level. Also, the relationships between silent reading speed and accuracy and silent reading vocabulary, and silent reading speed and accuracy and silent reading comprehension were significant at the .01 level. Nevertheless, for the experimental group the relationship between silent reading vocabulary and silent reading comprehension was not significant, in contrast to the control group as shown in Table VI.

TABLE V
COEFFICIENTS OF CORRELATION BETWEEN THE GAINS
IN THE SIX DEPENDENT VARIABLES FOR THE
THE EXPERIMENTAL GROUP

	SA	V	C	Tot	LV	Att
SA	1					
	**					
V	.25	1				
	**					
C	.24	.12	1			
	**	**	**			
Tot	.69	.58	.73	1		
LV	-.07	-.03	.09	-.00	1	
Att	.05	.03	.05	.04	.03	1
df=1/184	* r _{.05} = .138		** r _{.01} = .181			

SA Silent reading speed and accuracy

V Silent reading vocabulary

C Silent reading comprehension

Tot Total silent reading achievement

LV Listening vocabulary

Att Attitude toward reading

For these variables, the difference between the r 's of the experimental and the control groups was significant at the .05 level.

In Table VI, it can be noted that for the control group the hypothesis that there were significant relationships between gains in silent reading achievement and listening vocabulary and between attitude toward reading and listening vocabulary was rejected. The hypothesis that there was significant relationship between gains in silent reading achievement and attitude toward reading was accepted. However, this hypothesis had to be rejected for the experimental group. Also, the relationship between silent reading vocabulary and listening vocabulary was found to be significant at the .01 level, a finding that did not show in the experimental group. The difference between the r 's of the control and the experimental group in this particular relationship was significant at the .05 level.

As shown in Table VII, the hypothesis that there were significant relationships between intelligence as measured by an intelligence test and the gains in each of the measured variables was rejected for the boys and for the girls separately in the experimental group. However, in the same experimental group, a negative relationship between intelligence and the variable silent reading comprehension was significant at the .05 level. Therefore, the hypothesis on this particular relationship may be accepted, although the relationship is very small and of dubious importance.

In the control group, the hypothesis was accepted between

TABLE VI
COEFFICIENTS OF CORRELATION BETWEEN THE GAINS IN
THE SIX DEPENDENT VARIABLES FOR THE
CONTROL GROUP

	SA	V	C	Tot	LV	Att
SA	1					
V	.35**	1				
C	.18**	.27**	1			
Tot	.65**	.71**	.72**	1		
LV	-.01	.20**	-.05	.05	1	
Att	.14*	.08	.13*	.14*	.00	1
df=1/174		r = .138 .05		r = .181 .01		

SA Silent reading speed and accuracy

V Silent reading vocabulary

C Silent reading comprehension

Tot Total silent reading achievement

LV Listening vocabulary

Att Attitude toward reading

TABLE VII

COEFFICIENTS OF CORRELATION BETWEEN INTELLIGENCE
AND GAIN SCORES ON EACH OF THE SIX DEPENDENT VARIABLES
IN THE EXPERIMENTAL AND CONTROL GROUPS

	Experimental			Control		
	Boys 92	Girls 94	Total 186	Boys 87	Girls 87	Total 174
SA	.04	-.13	-.05	-.13	.07	-.02
V	.05	-.06	.02	.09	-.00	.08
C	-.14	-.08	-.13*	.05	.07	.02
Tot	-.08	-.14	-.11	-.01	.06	.02
LV	.08	-.04	.04	.30**	.29**	.31**
Att	.12	-.01	.04	-.09	-.18	-.16*
df=1/90		r _{.05} = .205*		r _{.01} = .267**		
df=1/200		r _{.05} = .138		r _{.01} = .181		
SA	Silent reading speed and accuracy					
V	Silent reading vocabulary					
C	Silent reading Comprehension					
Tot	Total silent reading achievement					
LV	Listening vocabulary					
Att	Attitude toward reading					

intelligence and the gain scores of the variable listening vocabulary. A coefficient of correlation which was significant at the .01 level was found for the boys and the girls separately as well as for the total group of children. A negative relationship between intelligence and attitude toward reading was also found to be significant at the .01 level.

In the control group, the boys and the girls separately and the children as a group with high intelligence tended to listen more effectively than their counterparts with low intelligence. Intelligence seems to have some influence over gains when no treatment is given, but when treatment is given this effect is overcome or balanced out. On the other hand, the control group of children with low intelligence tended to change their attitude toward reading which might be attributed to some factors not revealed in this study.

As tabulated in Table VIII, the hypothesis that there were significant relationships between socio-economic status as measured by an occupational scale and the gain scores in the measured variables was rejected for the boys in the experimental group. However, a negative relationship was found between socio-economic status and the variable silent reading speed and accuracy; and between socio-economic status and total silent reading achievement for the girls in the same treatment group. The relationships were both significant at the .01 level, but again were rather small.

The same hypothesis was rejected in the control group except

TABLE VIII

COEFFICIENTS OF CORRELATION BETWEEN SOCIO-ECONOMIC STATUS
AND GAIN SCORES ON EACH OF THE SIX DEPENDENT VARIABLES IN
THE EXPERIMENTAL AND CONTROL GROUPS

	Experimental			Control		
	Boys 92	Girls 94	Total 186	Boys 87	Girls 87	Total 174
SA	.01	-.26**	-.12	-.13	.06	-.12
V	-.02	-.16	.08	.09	.04	-.00
C	-.12	-.16	-.13	.05	-.00	-.05
Tot	-.09	-.31**	-.19**	.01	.05	-.06
LV	-.01	-.07	-.04	.30**	.04	.03
Att	.08	-.02	.03	-.09	.16	.08
df=1/90		r = .205 * .05		r = .267 ** .01		
df=1/200		r = .138 * .05		r = .181 ** .01		

SA Silent reading speed and accuracy

V Silent reading vocabulary

C Silent reading comprehension

Tot Total silent reading achievement

LV Listening vocabulary

Att Attitude toward reading

for the boys in the variable listening vocabulary. The relationship between socio-economic status and listening vocabulary was significant at the .01 level.

What these relationships tell is that the girls from the low socio-economic level in the experimental group improved their silent reading speed and accuracy as well as their silent reading achievement more than did the girls in the high and middle socio-economic levels. The total experimental group of children from the low socio-economic level progressed in their silent reading comprehension and in their silent reading achievement more than the children in the same same socio-economic level in the control group. Apparently, the boys from the high and middle socio-economic levels in the control group listened more effectively than the boys in the low socio-economic level. Socio-economic status seems to have some influence over the gain scores when no treatment is given, but when treatment is given the effect is overcome or balanced out.

As shown in Table IX, the hypothesis that there would be significant positive relationships between intelligence and gain scores in each of the measured variables in both sex groups and in both treatment groups when socio-economic status was held constant was rejected.

In the control group, however, the hypothesis was accepted except for the variable listening vocabulary. The positive relationship, between intelligence and listening vocabulary for the boys, for the girls and for the total boys and girls were all significant at the

TABLE IX

COEFFICIENTS OF CORRELATION BETWEEN INTELLIGENCE AND GAIN SCORES
ON EACH OF THE SIX DEPENDENT VARIABLES IN THE EXPERIMENTAL AND
CONTROL GROUPS WHEN SOCIO-ECONOMIC STATUS WAS HELD CONSTANT

	Experimental			Control		
	Boys 92	Girls 94	Total 186	Boys 87	Girls 87	Total 174
SA	.04	-.05	-.02	-.04	.05	.00
V	-.06	-.01	.05	.13	-.02	.09
C	-.12	-.03	-.09	.07	-.07	.04
Tot	-.05	-.04	-.05	.04	.05	.04
LV	.08	-.02	.05	.30 ^{**}	.29 ^{**}	.31 ^{**}
Att	.10	-.00	.03	.11	.24 ^{**}	.19 ^{**}
df=1/90	r = .205 [*] .05 [*]			r = .267 ^{**} .01 ^{**}		
df=1/200	r = .138 [*] .05 [*]			r = .181 ^{**} .01 ^{**}		

SA Silent reading speed and accuracy

V Silent reading vocabulary

C Silent reading comprehension

Tot Total silent reading achievement

LV Listening vocabulary

Att Attitude toward reading

.01 level. Also, the relationship between intelligence and attitude toward reading for the girls and the total boys and girls were positive at the .05 and .01 levels respectively.

The boys and the girls in the experimental group were benefited by the treatment. The gain scores they made in listening vocabulary and attitude toward reading become independent of intelligence after the treatment. On the other hand, in the control group the boys' and the girls' gain scores in listening vocabulary tended to follow their intelligence level. So did the boys' and girls' gain scores in attitude toward reading. Under the control condition, the children's gain scores in listening vocabulary and attitude toward reading were dependent on intelligence.

The hypothesis that there would be positive relationships between socio-economic status and gain scores on each of the measured variables, in both sex groups and in both treatment groups when intelligence was held constant was rejected in the experimental group. However, as shown in Table X, there were some unexpected negative relationships. These were found between socio-economic status and the variables silent reading speed and accuracy; and total silent reading achievement for the girls and between socio-economic status and the total boys and girls for the variable total silent reading achievement. These findings were significant at the .01 level.

In the control group, the hypothesis was accepted on the variable attitude toward reading. The relationship between socio-econo-

TABLE X

COEFFICIENTS OF CORRELATION BETWEEN SOCIO-ECONOMIC STATUS AND GAIN
SCORES ON EACH OF THE SIX DEPENDENT VARIABLES IN THE EXPERIMENTAL
AND CONTROL GROUPS WHEN INTELLIGENCE WAS HELD
CONSTANT

	Experimental			Control		
	Boys 92	Girls 94	Total 186	Boys 87	Girls 87	Total 174
SA	.00	-.23**	-.12	-.34	.04	-.12
V	-.04	-.14	-.09	-.15	.05	-.02
C	-.08	-.14	-.10	-.10	-.02	-.06
Tot	-.07	-.28**	-.17*	-.24**	.03	-.07
LV	-.03	-.06	-.05	-.03	-.04	-.05
Att	.05	-.02	.02	.07	.22*	-.13*
df=1/90		r _{.05} = .205*			r _{.01} = .267**	
df=1/200		r _{.05} = .138			r _{.01} = .181	

SA Silent reading speed and accuracy

V Silent reading vocabulary

C Silent reading comprehension

Tot Total silent reading achievement

LV Listening vocabulary

Att Attitude toward reading

mic status and attitude toward reading when intelligence was held constant was significant at the .05 level for the girls. This was the only positive finding. The relationships between socio-economic status and (a) silent reading speed and accuracy and (b) total silent reading achievement were negative for the boys. A negative relationship between socio-economic status and attitude toward reading was also significant at the .05 level for the total boys and girls of the same treatment group.

What this says is that the girls in the experimental treatment who came from the low socio-economic level increased their silent reading speed and accuracy as well as their total silent reading achievement more than the girls in the high and middle socio-economic levels. The total boys and girls in the low socio-economic level progressed more in their total silent reading achievement than those children from the high and middle socio-economic levels.

In the control group, the boys from the low socio-economic level tended to improve their silent reading speed and accuracy as well as their total silent reading achievement. However, not unexpectedly, the girls in the same treatment group from the high and middle socio-economic levels had a better attitude toward reading than the girls from the low socio-economic level. When the boys and the girls were taken as a group, the children from the low socio-economic level improved their attitude toward reading more favorably than the children from the high and middle socio-economic

levels. This change of attitude toward reading for the boys and girls from the low socio-economic level might be attributed to some factors not revealed in this study.

CHAPTER V

SUMMARY AND FINDINGS

This chapter is devoted to a summary of the findings of this study, to the formulation of some conclusions that seem warranted by the findings, to a consideration of the educational implications of the findings, and to some suggestions for future research. The chapter is divided into four sections in the order indicated in the previous sentence.

I. SUMMARY OF THE FINDINGS

This study had attempted to determine the effect of a program of oral reading by the teacher on grade five children's silent reading speed and accuracy, silent reading vocabulary, silent reading comprehension, total silent reading achievement, listening vocabulary and attitude toward reading. Although no significant differences were found between the treatment groups, it was evident that the children in the experimental group benefited by the program of oral reading by the teacher even when no interaction between the children and the teacher doing the oral reading took place.

When the data for sex differences in the experimental group were analyzed, the findings revealed that the treatment affected the boys more than the girls. The experimental group of boys progressed significantly in their silent reading comprehension. However, no significant findings in any of the measured variables were found be-

tween the boys and the girls in the control group.

In the opinion of the investigator, a probable reason for this sex difference in the experimental group is that the oral reading program may have induced the boys more than the girls to hear new words, phrases and sentence structures which would enrich their language background and thus improve their silent reading achievement.

It was hypothesized that there would be significant relationships between total silent reading achievement and each of silent reading speed and accuracy, silent reading vocabulary and silent reading comprehension; and between silent reading speed and accuracy and each of silent reading vocabulary and silent reading comprehension; and between silent reading vocabulary and silent reading comprehension. This hypothesis was substantiated for the control group. It was also sustained for the experimental group except for the relationship between silent reading vocabulary and silent reading comprehension which proved to be non-significant.

It is possible that the program of oral reading made the children in the experimental group more context conscious than were the children in the control group. This context consciousness might have militated against the experimental group on the vocabulary in isolation, synonym type of silent reading vocabulary test used in the Gates MacGinitie Reading Test Survey D.

Apparently, the oral reading program seemed to have erased in the experimental group some sources of variance due to the influence

of intelligence. In this group no significant relationships were found between intelligence and each of silent reading achievement, listening vocabulary and attitude toward reading. These findings held true for the control group also except for the relationship between intelligence and listening vocabulary. In the control group a positive significant relationship was found between intelligence and listening vocabulary for the boys and for the girls separately and for the total group of children. This result might have been anticipated because it would appear logical that children of high and average intelligence would listen more effectively than children of low intelligence.

The oral reading program also, appeared to have nullified in the experimental group some sources of variance due to the influence of socio-economic status. While the children in this group improved in their silent reading comprehension and total silent reading achievement, the improvement was shown most by the children of low socio-economic level. It is possible that the children in the high and average socio-economic levels were already more facile with the words, phrases and sentence structures they heard from the oral reading by the teacher than the children from the low socio-economic level. This program probably gave the children from the low socio-economic level some acquaintance with the words, phrases and sentence structures which they had not acquired before the oral reading program.

In the control group, however, as it was to be expected, the

boys of high and middle socio-economic levels listened more effectively than the boys in the low socio-economic level of the same group.

When socio-economic status was held constant, the relationships in the experimental group between intelligence and gain scores on each of the dependent variables were not significant. All the children in this group seemed to progress regardless of their intelligence. These findings were not revealed in the control group. The boys, and the girls separately and the children with high and average intelligence in the control group tended to listen more effectively than those with low intelligence. Also, in the same group the children with high and average intelligence had a better attitude toward reading than those with low intelligence.

When intelligence was held constant, in the experimental group, the relationships between socio-economic status and gain scores on each of the dependent variables were not significant. However, the negative significant relationships between socio-economic status and gain scores in silent reading speed and accuracy and socio-economic status and total silent reading achievement for the girls of low socio-economic level indicated that these girls improved in these two aspects of reading achievement. Also, the boys as well as the girls of low socio-economic level progressed in their total silent reading achievement. These findings could perhaps be attributed to the oral reading program.

In the control group, the boys from the low socio-economic level improved in their silent reading speed and accuracy and total silent reading achievement. On the other hand, the girls from the high and middle socio-economic levels tended to have better attitude toward reading. These findings were to be expected. However, the children from the low socio-economic level in the control group seemed to have changed their attitude toward reading more than the children from the high and middle socio-economic levels. This change of attitude toward reading for the boys and girls in the low socio-economic level might be attributed to some factors not revealed in this study.

II. CONCLUSION

On the basis of the foregoing summary of findings these conclusions seem warranted:

1. The program of oral reading by the teacher did not significantly affect the silent reading speed and accuracy, silent reading vocabulary, silent reading comprehension, total silent reading achievement, listening vocabulary and attitude toward reading of the children in the experimental group compared to those children in the control group.
2. In the experimental group, there was a significant difference between the gain scores of the boys and the girls in silent reading comprehension. The boys comprehended better than the girls after the treatment.

3. In the experimental group, no significant relationships were found between the gain scores on the total silent reading achievement and each of listening vocabulary and attitude toward reading. When the relationships between silent reading speed and accuracy and each of silent reading vocabulary and silent reading comprehension; and between silent reading vocabulary and silent reading comprehension were analyzed, no significant relationship between silent reading vocabulary and silent reading comprehension was found. It would appear that the program of oral reading by the teacher made the children in the experimental group more context conscious.

In the control group, there was a significant relationship between silent reading achievement and attitude toward reading. Also, a significant relationship was found between silent reading vocabulary and silent reading comprehension.

4. In the experimental group, there were no significant relationships between intelligence and the gain scores on each of the six dependent variables.

In the control group, there were significant relationships between intelligence and listening vocabulary and between intelligence and attitude toward reading.

5. In the experimental group, there were no positive relationships between socio-economic status and the gain scores on each of the six dependent variables. However, there were negative

significant relationships between socio-economic status and silent reading speed and accuracy and socio-economic status and total silent reading achievement for the total boys and girls.

Among the boys in the control group, there was a positive significant relationship between socio-economic status and listening vocabulary.

6. When socio-economic status was held constant, all the children in the experimental group benefited in all of the measured dependent variables. The oral reading program had improved the children's silent reading achievement, listening vocabulary and attitude toward reading regardless of their intelligence.

On the other hand, when socio-economic status was held constant in the control group, the children's listening vocabulary and attitude toward reading were influenced by their intelligence. The children from the high and average intelligence groups listened more effectively and had better attitude toward reading than the children of low intelligence.

7. When intelligence was held constant, in the experimental group, all children of low socio-economic level progressed in their silent reading speed and accuracy and total silent reading achievement.

However, when intelligence was held constant in the control group, the girls attitude toward reading was influenced by their socio-economic status. The boys of low socio-economic level seemed

to have improved their silent reading speed and accuracy and total silent reading achievement. Also, the children of low socio-economic level seemed to have changed their attitude toward reading due to some factors not revealed in this study.

III. EDUCATIONAL IMPLICATIONS

While this study is not conclusive in determining the effect of a program of oral reading by the teacher when no interaction between the children and teacher doing the oral reading takes place, the evidence seems to support the influence of such a program with children of low IQ and or socio-economic level. Although the findings did not show any significant difference between the treatment groups, the program benefited the children in the experimental group. Moreover, the sex difference revealed in the study suggested that the boys particularly need some kind of reading materials which increase their interest and expand their background of vocabulary and comprehension. It is reasonable that if oral reading by the teacher is implemented in the concurrent reading program, the children will be induced to listen and they will be exposed to unfamiliar words, phrases and sentence structures. This acquaintance with unfamiliar elements of the language will provide background for their later silent reading. It is also reasonable that the oral reading by the teacher will lead to improved teacher-pupil relationships. Furthermore, the model of the teacher's enthusiasm for reading may result

in better pupils' attitude toward reading for children in low IQ and socio-economic groups.

Finally, it is quite possible that a program of oral reading by the teacher such as the one described in this study might have had more significantly favorable results if the teacher had been permitted to discuss the story with the children as she read it to them.

IV. SUGGESTIONS FOR FURTHER RESEARCH

If and when a randomized groups of schools and group of children are available and two sufficiently large groups of teachers can be used, one group teaching experimental classes and the other group teaching control classes, a more carefully controlled study will be possible.

If the conditions stated above were followed and if class discussions followed and occurred during the oral reading the study might result in more significant findings.

Although this study was not designed to investigate the effects of such a program of oral reading at different IQ or socio-economic levels, the findings seem to support the view that this kind of program would be beneficial to pupils in these categories. Research designed to confirm or refute these findings should be undertaken.

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