

**THE EFFECT OF TWO READING CONDITIONS
ON COMPREHENSION FOR NINTH GRADE STUDENTS**

THESIS

Submitted to the Graduate Committee of the
Department of Education and Human Development

State University of New York

College at Brockport

in Partial Fulfillment of the
Requirements for the Degree of
Masters of Science in Reading

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May 1998

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Abstract

The purpose of this study was to determine the most effective way of delivering instruction, as it related to reading, in the classroom. The study compared comprehension scores yielded from oral reading and silent reading from prose found in the world literature anthology used in a ninth grade humanities program.

Thirty-nine urban, ninth grade general education students participated in this study. In order to avoid any bias, one classroom teacher and not the researcher conducted the reading assessment during one class period. Students from four classes were tested within a one week period of time, in morning classes. The oral reading and comprehension questions were administered before the silent reading and comprehension questions.

The research questions were:

1. Which reading condition, silent or oral, yields the highest comprehension scores on materials found in the anthology currently used in a ninth grade humanities program?

2. How do the students' reading abilities, as determined by eighth grade reading scores, relate to their most successful condition of reading?

The data were collected and then analyzed using a t test. There was not a statistically significant difference on the reading comprehension scores from oral and silent reading. When students were divided into quartiles, the third quartile demonstrated a trend toward significance with higher comprehension from the oral reading. The other three quartiles did not demonstrate a statistically significant difference between the two reading conditions.

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CHAPTER I

STATEMENT OF THE PROBLEM

Purpose

The purpose of this study was to determine the most effective way of delivering instruction, as it pertained to written materials, within the classroom.

Need for the Study

Researchers have periodically questioned the use of oral reading versus silent reading for close to one hundred years. While comprehension has always been a factor in the studies, early research was conducted to determine if silent reading was more efficient than oral reading. Efficiency was determined by a combination of reading rate and comprehension scores (Pintner, 1913, Pintner & Gilliland, 1916).

Studies of silent versus oral reading have been conducted predominately with elementary students. Although a few studies are available using college students, minimal information regarding oral versus silent reading at the high school level is available. Pintner and Gilliland (1916) compared oral and silent reading at different grade levels, including high school. They found that 60% of

the high school students did better reading silently. While some other studies included eighth grade students or college freshmen, no other studies were found using high school students.

While many elementary studies advocate the use of oral reading, limited studies with college students demonstrate that silent reading can be effective. High school teachers have to extrapolate information from the studies using college students.

In conjunction with the reading condition, reading ability provides additional insight. In 1975 Elgart compared reading comprehension through three different conditions: oral, silent and listening and recommended that future research assess comprehension in the three conditions and study it in relation to reading ability.

While the majority of studies of this nature have been conducted with elementary students, the information obtained from this high school project will help high school teachers plan their instructional program to maximize reading comprehension. The study provides the teacher with practical information regarding oral reading in the classroom versus silent reading in the classroom.

Research Questions

1. Which reading condition, silent or oral, yields the highest comprehension scores on materials found in the anthology currently used in a ninth grade humanities program?
2. How do the students' reading abilities, as determined by eighth grade reading scores, relate to their most successful condition of reading?

Definitions

Oral reading: Students, selected on a volunteer basis, took turns reading paragraphs out loud in a voice that could be heard by the entire class. Students did not have an opportunity to rehearse their portion of the passage before it was their turn to read out loud.

Preliminary Competency Test in Reading (PCT): When the ninth grade students were in eighth grade, they were given this assessment. The reading score that they obtained was used to classify subjects by general reading ability. This test was mandated by New York State for all eighth grade students.

Text explicit questions: While the focus of the ninth grade humanities curriculum was writing, the majority of the comprehension questions were text explicit because they allowed the most objective capabilities for scoring. Text explicit questions were questions in which the answer was found at a single location in the passage.

Text implicit questions: These questions require the student to infer or “read between the lines” to determine the answer. For the purpose of this study, no text implicit questions were included.

CHAPTER II

REVIEW OF LITERATURE

Purpose

The purpose of this study was to determine the most effective way of delivering instruction, as it pertained to written materials, within the classroom.

Introduction

The controversy of silent reading versus oral reading has been discussed, debated, researched, and studied since approximately 1880 (Allington, 1984). While older students were encouraged to use silent reading, it traditionally was not used with students below the fourth grade. Allington reported that after Zirbe's study in 1918 recommending silent reading, educators began using silent reading in the primary grades. He stated that Zirbe advocated teaching silent reading so that students would develop skills in this area.

There were three predominant opinions regarding the importance of oral reading instruction. The most popular belief was that oral reading was a vehicle to achieve successful silent reading skills (Allington, 1984).

... The goal of reading instruction is an independent silent reader who reads with understanding and insight. Oral reading and silent reading are different: the eyes move differently, the mouth moves in the one and should not move in the other, the one is primarily for an audience and the other is for oneself. (Heinrich, 1976, p. 15)

Others felt that oral reading hindered mastery of silent reading skills. And the third attitude was that oral reading was an “art form” that was worth learning (Allington, 1984).

Allington (1984) summarized the reading condition trends in the mid-twentieth century (p. 831). In 1935, while the emphasis was on oral reading, the “successful” teachers integrated silent reading into the reading program. During the late 1940s and early 1950s, educators preferred a balance of both oral and silent reading. And then, in the late 1950s and early 1960s, oral reading became the modality of choice.

Throughout the history of research in silent and oral reading, three main processes have been researched to determine their effect on the reading condition. Research on eye movements, reading rate, and comprehension have yielded conflicting results (Allington, 1984). Elgart (1975) reported that oral reading involves the visual and auditory senses, whereas silent reading and listening only involve the visual sense. Salasoo (1986) stated that “oral reading includes an immediate vocalization response and is slower than silent reading” (p. 60).

Good readers do not make many dialect-based miscues in oral reading and still have high comprehension. “Dialect involved miscues do not interfere with the reading process or the construction of meaning, since they move to the reader’s own language” (Barnitz, 1997, p. 459).

Garner and Kraus (1981-82) studied forty seventh grade students to determine if there was a difference between the good comprehenders and the poor comprehenders in their ability to monitor their reading. The researchers put informational inconsistencies in passages the students were required to read. Following the reading of the passages, the subjects were interviewed. The poor comprehenders were unsuccessful at detecting the errors. On the other hand, the good comprehenders were somewhat successful with the between-sentence errors and very successful at detecting the errors within the sentences. When the subjects were interviewed regarding strategies, the good comprehenders said they used the context and the poor comprehenders said they just skipped the part that they did not understand. This might explain why some poor comprehenders might have difficulties with comprehension on silent passages.

Mosenthal (1978) found that “children tend to treat more information as ‘Given’ when aurally processing than when visually processing. And conversely, children tend to treat more information as ‘New’ when visually processing than when aurally processing” (p.267).

When students read orally in the classroom, listening comprehension is a critical component. Duker (1965) compares listening to hearing and reading to seeing.

An important distinction must be drawn between hearing and listening. Just as seeing is essential to, but not the same as, reading, so hearing is a prerequisite of listening but not an equivalent. Listening and reading both involve comprehension, interpretation, and evaluation, which hearing and seeing do not. (Duker, 1965, p. 321)

Durrell (1969) made direct raw score comparisons between listening comprehension and reading comprehension for three to four thousand children per grade level, first through eighth. He found that children's listening vocabulary was superior to their reading vocabulary in all primary grades. At the fifth grade level, the reading comprehension approached 90% of the listening comprehension. By the time the students were in eighth grade, the two abilities were equal.

Early Research

Pintner (1913) felt that oral reading was a vehicle used to teach pronunciation, accentuation, and expression. He said that "this habit of articulation during silent reading is one of the chief factors determining the rate of reading" (p. 333). Pintner felt that students did not need to pronounce words aloud, to develop perfect articulation.

In 1913, Pintner tested 23 fourth grade students. The first portion of the research examined the quantity of material read under the two conditions and the second portion examined the comprehension from the two conditions. Averages were tallied for both conditions and the students averaged 20 lines during the allotted time in the oral condition and 28 lines in the silent condition. In terms of comprehension, the average for the oral condition was .34 and .40 for the silent condition. Looking at individuals, “fifteen children show superiority in silent reading, six in oral, and two show exactly the same percentage of reproduction in oral and silent reading” (p. 337). Pintner felt that students should be instructed with silent reading in school and training good readers was more valuable than training good articulators.

Pintner and Gilliland (1916) evaluated 130 students in the following groupings: college, high school, grades 7 and 8, grades 5 and 6, and grades 3 and 4. Each student was evaluated in reading speed, comprehension as measured by number of concepts retold, and reading value which was a combination of the two scores. They found that 73% of the college students were more successful with silent reading and 55% of the high school students were more successful with silent reading. On the other hand, 63% of the third and fourth grade students were more successful with the oral reading.

Pintner and Gilliland (1916) felt strongly that

...the advantage in silent reading would have been greater and would have shown itself much earlier in the grades, if it had not been for the strong influence of early training in oral reading to which most of our children are needlessly subjected. Silent reading should be taught much more and much earlier in our schools. (p. 212)

Rogers (1937) measured oral and silent reading comprehension in 24 good college readers and in 24 poor college readers. In the first portion, the amount of time was held constant and in the second portion, the amount of reading material was held constant. As a result, Rogers concluded that the research did “not show any appreciable difference in comprehension between oral and silent reading situations for either poor or good readers” (p. 397).

Beginning reading was taught through the entire first grade year by a non-oral method and compared to a predominantly phonics approach and to another approach which did not emphasize phonics (McDade, 1937). In the non-oral method, no oral reading was permitted at all, including requests to parents not to allow the child to use oral reading at home. At the end of the year, the tests “showed that the oral method was not necessary for the successful teaching of reading to the class” (p. 503). All the students that were taught using the non-oral method reached or exceeded the first grade reading requirements and the majority reached or exceeded their mental age grade expectancy.

Advantages and Disadvantages of Both Oral and Silent Reading

Wilkinson, Wardrop and Anderson (1988) re-evaluated a study that yielded results advocating silent reading. As a result, they disputed the Leinhardt, Zigmond, and Cooley study of 1981. They found that “the students’ entry-level reading abilities had a significant direct effect on time spent in silent reading but no such effect on time spent on oral or ‘indirect’ reading.” (p. 127) The results suggested that oral reading was more effective because it required active participation and the teacher enhanced the material. The initial study by Leinhardt, Zigmond, and Cooley, evaluated 105 students with learning disabilities. Considering the population, it is questionable that either team of researchers came to a conclusion which would affect reading instruction for non-handicapped students.

Juel and Holmes (1981) and Holmes (1985) conducted studies which did not find one reading condition, silent or oral, preferable over the other. Juel and Holmes (1981) studied 48 students from second and fifth grades. For each grade, they used twelve good readers and twelve poor readers. They required students to read sentences to determine if the same cognitive processes were used for silent and oral reading. Their results indicated that silent and oral reading depict a comparable cognitive process. They found evidence that less processing is required for difficult words in silent reading.

Swalm (1972) researched oral reading, silent reading, and listening comprehension with 324 students from second, third, and fourth grades. Students were randomly grouped to one of the three reading conditions. If they were in the oral reading conditions, they received no help on any unknown words. While second grade students did significantly better on oral reading, there was no significant difference between the three reading conditions for the third and fourth grade students. Swalm then analyzed the results by reading level. The above average readers in all three grades did better when they were reading than when they were listening. The average readers comprehended well in all three conditions. Listening comprehension was the most effective condition for the low readers. The poor readers did not do well with the silent reading.

Holmes (1985) studied the effect of four different conditions of reading on comprehension using 48 college students as subjects. The four conditions employed were: oral reading to an audience, oral reading to oneself, silent reading, and silent reading while listening. Silent and oral reading to oneself were the most successful conditions of reading. While there were statistically significant differences among the four conditions of reading, there were not significant differences between silent and oral reading to oneself.

Salasoo (1986) studied the cognitive processing in sixteen college students when they read silently and orally. While the students read faster when they read

silently, it took them longer to retrieve the information. Conversely, it took the students longer to read orally, but they were able to retrieve the information faster. Salasoo concludes by stating that the “data suggest that differences due to the reading mode are primarily a function of the speed of higher level integration and comprehension processes that occur when subjects read texts for comprehension”(p. 68).

Wilkinson and Anderson (1995) studied one hundred third grade children; half were from a school of working class citizens and half were from a school of middle class citizens. While half the participants from each school used guided oral reading lessons, the other half used guided silent reading lessons. The object of this research was to evaluate the sociocognitive process in guided silent reading. In this setting, the students demonstrated increased engagement during the silent reading. They found that “the benefits of silent reading are socially constructed. Positive effects on student comprehension, if any, are indirect and mediated by the way teachers and students interact in small-group lessons (p. 736).”

Oral Reading

Traditionally, oral reading is used for instruction at the primary level and is even more prevalent for instruction with poor readers (Wilkinson & Anderson,

1995). “By the middle and upper grades, silent reading received the primary emphasis, but in many schools, the emphasis on oral reading at these levels was still rated ‘considerable’” (Allington, 1984, p. 832).

Logical reasoning suggests that oral reading should have certain important advantages over silent reading since it is the method which returns the skeletal written word to its original, more complex form, with the helpful modifiers of sound and gesture. (Collins, 1961, p. 79)

Numerous studies have been conducted with elementary students to ascertain the effectiveness of oral reading versus silent reading. While few studies using high school students were located, more studies were found using college students as subjects.

Juel and Holmes (1981) stated the good readers comprehended well in both conditions, silent and oral, and poor readers did poorly on comprehension assessments in both conditions. Allington (1984) reported that “poor readers experience proportionally more oral than silent reading compared to good readers.”

McConaughy (1985) pointed out that poor readers can comprehend well when the text is written in a predictable format. Some genres, such as narrative stories, are easier to comprehend than others, such as argumentative texts.

Tierney and Cunningham (1984) reported that teachers ask students to read orally when the students find the textbook difficult to read.

Schumm and Baldwin systematically altered words within passages to determine word recognition proficiency for passages read orally and silently. The subjects were 24 students in each of the following grades: second, fourth, sixth, and eighth. The students were able to identify a greater number of altered words when the passages were reading orally than when they were read silently. While the second grade students' results did not reach statistical significance, all other grades did.

In 1975, Elgart conducted a study of 45 third grade students to compare their comprehension through three different conditions: oral reading, silent reading, and listening comprehension. The oral reading subtest was administered individually, the silent reading test was administered to groups of six or less students, and the listening portion was administered to fifteen students at one time. The results demonstrated that oral reading was statistically more effective than silent reading or listening comprehension. Individual testing in the oral reading condition might have impacted these results. Listening comprehension scores were higher than silent reading comprehension scores. During this research, students' abilities were not a factor, and Elgart recommends that future research assess comprehension in the three conditions and study it in relation to reading ability.

Rowell (1976) studied 240 students in third and fourth grade in Connecticut to determine whether they read and comprehended better when using silent or oral reading. Urban and suburban students obtained significantly higher results with oral reading than with silent reading. On the other hand, the rural students did not fare better in the oral condition than in the silent condition. When looking at the results from another point of view, Rowell found that the boys obtained a significantly higher score for the oral reading. On the other hand, there was not a significant difference between the oral and silent reading scores for the girls.

Hampleman (1958) compared the listening and reading comprehension ability of fourth and sixth grade students. He tested approximately 300 students using the Durrell-Sullivan Reading Achievement Test. He found that listening comprehension was significantly superior to reading comprehension for both fourth and sixth grade. The listening comprehension was better for the easy materials. The length of the passage did not appear to effect the difference between the two reading conditions. However, he did note that the increase in mental age decreases the difference between the listening and reading comprehension.

Sixty second semester college freshmen were the subjects of Collins' study (1961). Oral reading proved to be statistically significantly better than

silent reading. The subjects who used oral reading did much better on the very easy and the very difficult passages. Collins suggests that teachers use more oral reading especially when comprehension is a weakness for a student.

Silent Reading

In the classroom setting, when students volunteer to read out loud, disruptions to the reading process may evolve (Allington, 1984). It might be beneficial for the teacher to predetermine who will read out loud and in what order so that the students will not lose their train of thought and hinder their comprehension. Tierney (1984) and Wilkinson and Anderson (1995) support the belief that oral reading, especially when it is slow, can lead to inattention and boredom. Allington (1984) states that silent reading can keep students engaged and on task.

Many (1965) studied 352 sixth grade students and compared their silent reading comprehension to their listening comprehension. He found that the students did better on silent reading comprehension than on listening comprehension. The results were statistically significant at the 1% level. The reliability of the test was slightly higher for the silent reading (.90) test than for the listening comprehension (.82).

Skinner, Cooper, and Cole (1997) found that silent previewing of a passage was not effective by itself. However, when the subjects read along silently as the researcher read the passage aloud at a slow rate, the subjects had a more successful oral reading experience than when the researcher read at a fast pace. Skinner states that students spend a great deal of time reading silently as teachers or classmates read aloud and that “this study presents a feasible and practical intervention for the classroom setting” (p. 333).

Summary

Oral reading versus silent reading has been studied for many years with some conflicting results. In the early 1900s, researchers felt that silent reading was a more efficient use of time than oral reading. Success in reading condition is certainly impacted by age and reading ability. Research points out advantages and disadvantages of both reading conditions. While many research projects have examined this question at the elementary level and some at the college level, only one study included high school students.

CHAPTER III

DESIGN OF THE STUDY

Purpose

The purpose of this study was to determine the most effective way of delivering instruction, as it pertained to written materials, within the classroom.

Methodology

Subjects

Thirty-nine urban, ninth grade students who had not repeated their current grade were the subjects of this study. While the students were in four different classes with the same teacher, they were tested during one of two mornings within a week of each other. The students' ages ranged from 14 to 16, and no students in this study were classified as Special Education students.

Materials and Instruments

The students read two passages obtained from World Tapestries, An Anthology of Global Literature (Appendix A). This textbook was being used in their ninth grade humanities program. The two passages which were selected pertained to Canada. These passages were chosen because the students would not be studying Canada during the year and, therefore, there was little chance that they had read these stories.

The oral passage contained 341 words and was written at a 4.7 grade level according to the Flesch-Kincaid Formula. The Flesch Readability Ease was 87.2 for the oral passage. The silent passage contained 353 words and was written at a 4.3 grade level according to the Flesch-Kincaid Formula. The Flesch Readability Ease was 84.1 for the silent passage. Both passages contained an equal number of footnotes to provide the students with pronunciations and definitions for unknown words.

Five multiple choice comprehension questions were supplied for each passage (Appendix B). The researcher-developed questions were text explicit.

Student reading scores from the eighth grade PCT were part of this study. Reading scores were used to divide the subject into quartiles, with the first quartile consisting of the poorest readers, the second and third quartiles consisted of the average readers and the fourth quartile was the good readers.

Procedures

All testing was administered by the classroom teacher and not the researcher. The teacher introduced the Oral passage by saying, “This story takes place in Canada during the worldwide Great Depression of the 1930s. During this terrible economic period, as many as one in four people in the United States and Canada were unemployed. You will need to pay close attention because you will be asked to answer comprehension questions after we read this passage.”

After the teacher read the introduction to the oral passage, student volunteers took turns reading the passage aloud. Five volunteers read the story. In order to assure that no student previewed the passage, students were selected spontaneously. No student was forced to read aloud during this portion of the study. If a student asked for help with a word, the teacher pronounced it for him/her. The teacher did not embellish any of the reading material.

After the passage was read, the teacher collected all copies of the story and distributed the questions. Students put their names and class periods on the question sheets. The teacher read each question and the answer choices aloud and the students marked the correct answer on their question sheets. The teacher then collected all question sheets.

Then the teacher introduced the Silent passage by saying “This story takes place in Canada at the end of the economic turmoil of the Great Depression. Jean

has a visual disability and is in a new school where she is in regular classes for the first time. You will need to pay close attention because you will be asked to answer comprehension questions after we read this passage.”

Then the teacher distributed the passage and the students read the silent passage. When all the students finished reading, the stories were collected and the questions were distributed. The questions for the silent passage were handled in the same manner as they were for the oral passage.

Analysis of Data

A t test was used to compare reading comprehension scores for oral and silent reading. Additionally, students were ability-grouped as high, average and low readers based on their scores on the Preliminary Competency Test in Reading. Reading comprehension scores for these three groups were analyzed.

CHAPTER IV

ANALYSIS OF DATA

Purpose

The purpose of this study was to determine the most effective way of delivering instruction, as it pertained to written materials, within the classroom.

Findings and Interpretations

Although 59 students originally participated in the study, results could only be used from 39 of the subjects. Eighteen students were deleted from the study because they did not take the Preliminary Competency Test in eighth grade and those scores were needed for the study. Two students were deleted because they were classified as special education students.

Table One on the following page shows the students' Preliminary Competency Test Percentiles, oral comprehension scores and silent comprehension scores. Forty-six percent of the students obtained the same grade on both the oral and silent comprehension. Twenty-eight percent of the students

achieved higher scores on the oral comprehension and 26% obtained higher scores on the silent comprehension.

Table 1: Reading Comprehension Scores

Student ID	8 th Grade PCT Percentiles	Oral Comprehension	Silent Comprehension
101	75	80	80
102	75	100	80
103	75	100	100
104	70	80	100
105	70	100	100
106	61	40	100
107	61	100	100

201	58	100	100
202	58	100	100
203	58	100	80
204	58	40	80
205	58	100	100
206	55	100	80
207	55	100	100
208	52	80	100
209	49	100	80
210	47	100	100
211	47	100	100
212	47	100	100

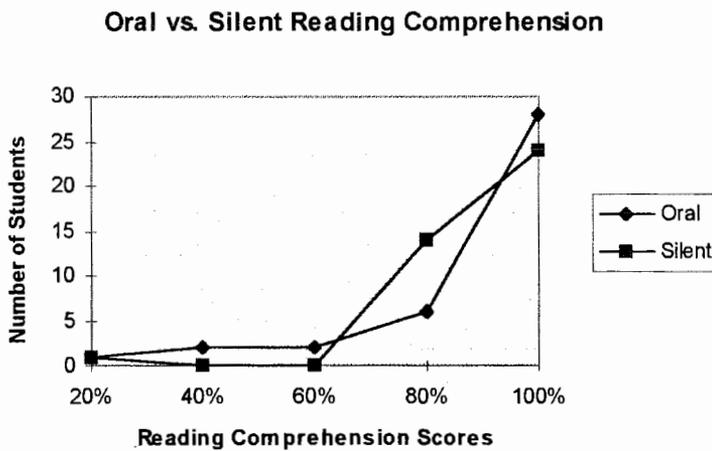
Student ID	8 th Grade PCT Percentiles	Oral Comprehension	Silent Comprehension
301	45	100	80
302	45	100	80
303	42	100	80
304	42	100	80
305	37	100	100
306	37	100	80
307	34	100	100
308	34	60	80
309	31	80	100
310	31	100	80

401	29	100	100
402	29	100	20
403	27	100	100
404	27	80	100
405	24	100	100
406	24	60	80
407	21	100	100
408	17	100	100
409	17	80	100
410	16	20	100

Oral Comprehension versus Silent Comprehension Entire sample, n=39

The scores were remarkably similar on the two different tests. The mean on the oral reading comprehension test was 89.74, with a standard deviation of 19.68. The mean on the silent reading comprehension test was 90.77, with a standard deviation of 14.92. The following graph compares the oral and silent reading comprehension scores.

Figure 1:



A t -test was used to compare the mean scores for oral and silent reading. The t value was -0.258. Table Two provides a summary of scores for oral and silent reading.

Table 2:
Summary of Scores by Reading Condition

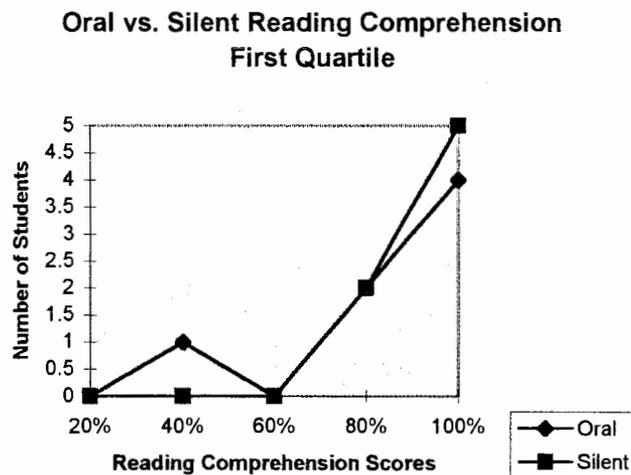
	Oral Reading	Silent Reading
Number of Subjects	39	39
Mean	89.74	90.77
Standard Deviation	19.68	14.92
t Score	-0.258	0.258
$t \geq 1.687$ is significant at the .05 level		

While the silent reading comprehension was slightly better, it was not statistically significant.

Oral Comprehension versus Silent Comprehension Top (First) Quartile, n=7

The mean for the oral reading comprehension was 85.71, with a standard deviation of 20.60. The mean for the silent reading comprehension was 94.29, with a standard deviation of 9.04. The following graph compares the oral and silent reading comprehension scores.

Figure 2:



A t -test was used to compare the mean scores for oral and silent reading. The t value was -0.292. Table Three provides a summary of scores for oral and silent reading.

Table 3:
Summary of Scores by Reading Condition - Top Quartile

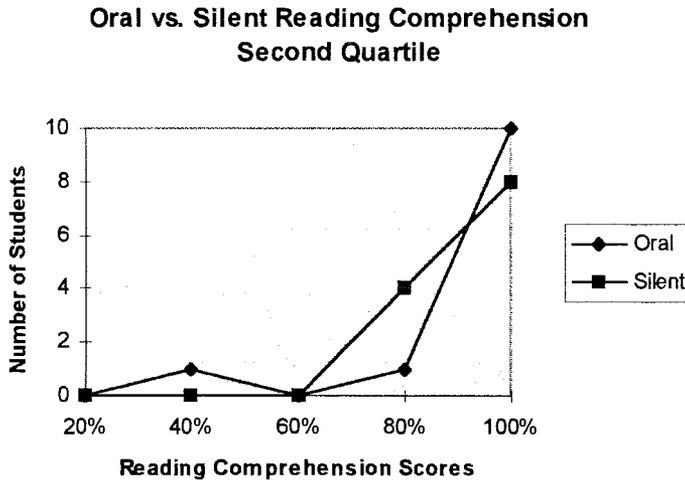
	Oral Reading	Silent Reading
Number of Subjects	7	7
Mean	85.71	94.29
Standard Deviation	20.60	9.04
t Score	-0.292	0.292
$t \geq 1.943$ is significant at the .05 level		

The silent reading comprehension was slightly better and not statistically significant.

Oral Comprehension versus Silent Comprehension Second Quartile, n=12

Both tests had a mean of 93.33, however their standard deviations differed. The oral reading comprehension test had a standard deviation of 17.0 and the silent reading comprehension test had a standard deviation of 9.43. The following graph compares the oral and silent reading comprehension scores.

Figure 3:



A t -test was used to compare the mean scores for oral and silent reading. The t value was 0. Table Four provides a summary of scores for oral and silent reading.

Table 4:
Summary of Scores by Reading Condition - Second Quartile

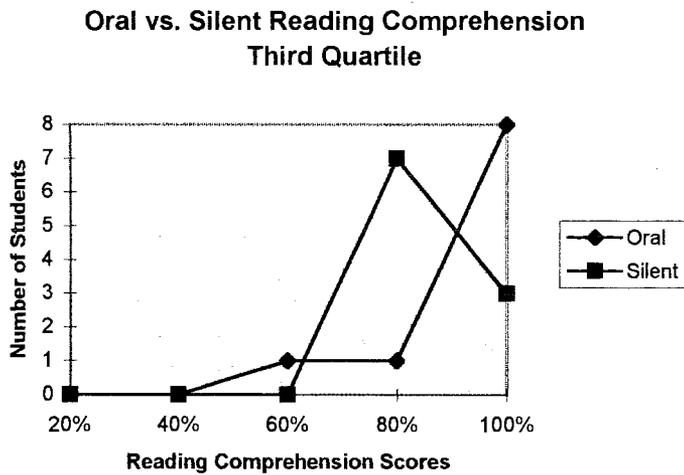
	Oral Reading	Silent Reading
Number of Subjects	12	12
Mean	93.33	93.33
Standard Deviation	17.0	9.43
t Score	0	0
$t \geq 1.796$ is significant at the .05 level		

The t value of 0 indicated no difference between the oral and silent reading.

Oral Comprehension versus Silent Comprehension Third Quartile, n=10

The mean for the oral reading comprehension was 94, with a standard deviation of 12.81. The mean for the silent reading comprehension was 86, with a standard deviation of 9.17. The following graph compares the oral and silent reading comprehension scores.

Figure 4:



A t -test was used to compare the mean scores for oral and silent reading. The t value was 1.524. Table Five provides a summary of scores for oral and silent reading.

Table 5:
Summary of Scores by Reading Condition - Third Quartile

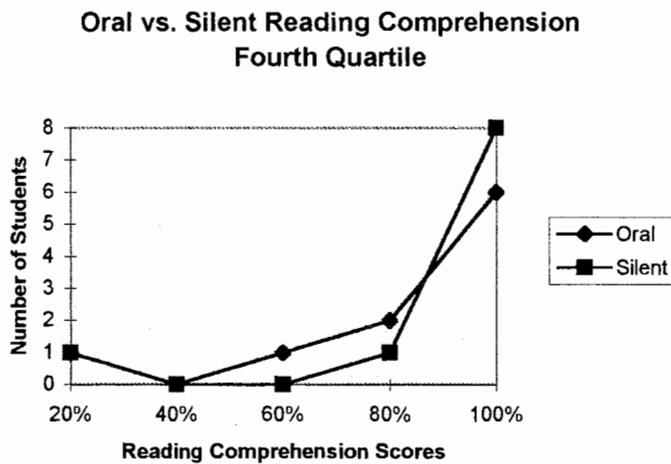
	Oral Reading	Silent Reading
Number of Subjects	109	10
Mean	94	86
Standard Deviation	12.81	9.17
t Score	1.524	-1.524
$t \geq 1.833$ is significant at the .05 level		

Although it is not significant at the .05 level, the oral reading comprehension was better than the silent reading comprehension for this quartile. It is significantly better at the .10 level.

Oral Comprehension versus Silent Comprehension Low (Fourth) Quartile, n=10

The mean for the oral reading comprehension was 84, with a standard deviation of 24.98. The mean for the silent reading comprehension was 90, with a standard deviation of 24.08. The following graph compares the oral and silent reading comprehension scores.

Figure 5:



A t -test was used to compare the mean scores for oral and silent reading.

The t value was 0.519. Table Six provides a summary of scores for oral and silent reading.

Table 6:

Summary of Scores by Reading Condition - Low Quartile

	Oral Reading	Silent Reading
Number of Subjects	10	10
Mean	84	90
Standard Deviation	24.98	24.08
t Score	0.519	-0.519
$t \geq 1.833$ is significant at the .05 level		

The oral reading comprehension was slightly better and not statistically significant.

Summary

Overall, the reading comprehension scores are quite similar for both oral and silent reading. The t test, means, and graph of the entire population demonstrate how close the comprehension scores are for both reading conditions.

The third quartile obtained higher scores in oral reading but was not statistically significant at the .05 level. No other quartile showed obvious preferences of one reading condition over another.

CHAPTER V

CONCLUSIONS AND IMPLICATIONS

Purpose

The purpose of this study was to determine the most effective way of delivering instruction, as it pertained to written materials, within the classroom.

Conclusions

There is not enough evidence to indicate that one reading condition is more effective than another. Although 46% of the sample obtained the same scores on both reading conditions, 28% scored higher on oral reading comprehension and 26% scored higher on silent reading comprehension. Some individuals presumably feel that they are more successful comprehending when they read orally and others probably feel more successful reading silently. It would have been interesting to ask the students which reading condition is more successful for them.

The students were divided into quartiles based on their achievement scores as measured by the 1997 Preliminary Competency Test. Although they

were divided into quartiles, the top quartile consisted of students whose percentile ranking ranged from 61 to 75. This group represented the school's top quartile, but is not representative of a top quartile of a normative population. If this research had been conducted with a top quartile whose percentile rankings were 85 to 100, there might have been more of a trend favoring silent reading.

While not statistically significant at the .05 level, oral reading comprehension was statistically significant at the .10 level in the third quartile. As suggested by the Hampleman (1958) study, the students' listening comprehension is still stronger than their silent reading comprehension because their mental age is possibly lower than the chronological age for their grade. While this is a possible explanation for the third quartile, it would seem that the fourth quartile would demonstrate a similar trend, which it does not.

While the researcher's original intention was to have this study counterbalanced, the examiner omitted that step in the directions. This omission may have affected the results. On the one hand, the administration of the oral reading comprehension test first might have provided the students a chance to warm up as well as the opportunity to preview the types of questions they would need to answer. On the other hand, students might have been tired out from concentrating throughout the testing and by the time they answered the silent reading comprehension questions, they lost their motivation to try their hardest.

The research was designed so that it could be conducted within a single class period. Due to this constraint, the passages were short and the students were not required to remember a considerable amount of information for the comprehension tests. This is possibly a contributing factor to the small discrepancy between test scores.

Implications for Future Research

It would be beneficial to test students with longer reading passages on multiple reading levels. If this were researched, it might be determined that the difficulty of the reading passage is a factor which contributes to the more successful reading condition. This research used a reading anthology which was being used in the ninth grade humanities program. Although the students were in ninth grade, the reading level of these passages was much lower than their chronological grade.

In conducting a future research project related to this study, students' reading comprehension scores should be compared to their mental age as determined by an intelligence test.

Another interesting variation would be to test reading comprehension immediately and then one week later. This would demonstrate how the two reading conditions relate to long term memory.

Classroom Implications

While this study did not yield results which indicated one reading condition was preferable over another, it does show that results are similar. The teacher's purpose for reading should dictate which reading condition is used. If the teacher needs to embellish information, the oral condition might be more effective.

The use of both reading conditions provides an element of variety in the classroom. Students might be more motivated and therefore more successful if they are given a variety of oral and silent reading experiences.

When working with students with low reading achievement, oral reading might be more effective. Although this was not determined to be the case with the fourth quartile, the third quartile had a tendency to be more successful with oral reading.

References

- Allington, R.L. (1984). Oral reading. In P.D. Pearson (Ed.), Handbook of Reading Research (pp. 829-864). New York, NY: Longman.
- Barnitz, J.G. (1997). Dialect barriers to reading comprehension revisited. The Reading Teacher, 50 (6), 454-459.
- Callaghan, M. (1997) "All the years of her life." In A. Jolin (Ed.), World Tapestries: An Anthology of Global Literature (pp. 366-373). Upper Saddle River, NJ: Globe Fearon Educational Publishers.
- Collins, R. (1961). The comprehension of prose materials by college freshmen when read silently and when read aloud. The Journal of Educational Research, 55 (2), 79-82.
- Duker, S. (1965). Listening and reading. The Elementary School Journal, 65 (4), 321-329.
- Durrell, D.D. (1969). Listening comprehension versus reading comprehension. Journal of Reading, 12, 455-460.
- Elgart, D. (1975). Oral reading, silent reading, and listening comprehension: A comparative study. Journal of Reading Behavior, 10 (2), 203-207.
- Garner, R. & Kraus, C. (1981-82). Good and poor comprehender differences in knowing and regulating reading behaviors. Educational Research Quarterly, 6 (4), 5-12.
- Hampleman, R.S. (1958). Comparison of listening and reading comprehension ability of fourth and sixth grade pupils. Elementary English, 35 (1), 49-55.
- Heinrich, J.S. (1976). Elementary oral reading: Methods and materials. The Reading Teacher, 30 (Oct.), 10-15.
- Holmes, B. (1985). The effect of four different modes of reading on comprehension. Reading Research Quarterly, 20 (3), 575-585.

- Juel, C. & Holmes, B. (1981). Oral and silent reading of sentences. Reading Research Quarterly, 16 (4), 545-568.
- Little, J. (1997). "Little by Little." In A. Jolin (Ed.), World Tapestries: An Anthology of Global Literature (pp. 376-383). Upper Saddle River, NJ: Globe Fearon Educational Publishers.
- Many, W.A. (1965). Is there really any difference - reading vs. listening? The Reading Teacher, 19 (Nov.), 110-113.
- McConaughy, S. (1985). Good and poor readers' comprehension of story structure across different input and output modalities. Reading Research Quarterly, 20 (1), 219-232.
- McDade, J.E. (1937). A hypothesis for non-oral reading: Argument, experiment, and results. Journal of Educational Research, 30 (7), 489-503.
- Mosenthal, P. (1978). The new and given in children's comprehension of presuppositive negatives in two modes of processing. Journal of Reading Behavior, 10 (3), 267-278.
- Pintner, R. (1913). Oral and silent reading of fourth grade pupils. The Journal of Educational Psychology, 4, 333-337.
- Pintner, R. & Gilliland, A.R. (1916). Oral and silent reading. The Journal of Educational Psychology, 7, 201-212.
- Rogers, M.V. (1937). Comprehension in oral and silent reading. The Journal of General Psychology, 17, 394-397.
- Rowell, E.H. (1976). Do elementary students read better orally or silently? The Reading Teacher, 29 (4), 367-370.
- Salasoo, A. (1986). Cognitive processing in oral and silent reading comprehension. Reading Research Quarterly, 21 (1), 59-69.
- Schumm, J.S. & Baldwin, R.S. (1989). Cue system usage in oral and silent reading. Journal of Reading Behavior, 21 (2), 141-154.

- Skinner, C.H., Cooper, L. & Cole, C.L. (1997). The effects of oral presentation previewing rates on reading performance. Journal of Applied Behavior Analysis, 30 (2), 331-333.
- Swalm, J.E. (1973). A comparison of oral reading, silent reading, and listening comprehension. Education, 92 (4), 111-115.
- Tierney, R. & Cunningham, J. (1984). Research on Teaching Reading Comprehension. In P.D. Pearson (Ed.), Handbook of Reading Research (pp. 609-655). New York, NY: Longman.
- Wilkinson, I. & Anderson, R. (1995). Sociocognitive processes in guided silent reading: A microanalysis of small-group lessons. Reading Research Quarterly, 30 (4), 710-740.
- Wilkinson, I., Wardrop, J. & Anderson, R. (1988). Silent reading reconsidered: Reinterpreting reading instruction and its effects. American Educational Research Journal, 25 (1), 127-144.

Appendix A

ORAL PASSAGE

They were closing the drugstore, and Alfred Higgins, who had just taken off his white jacket, was putting on his coat and getting ready to go home. The little grey-haired man, Sam Carr, who owned the drugstore, was bending down behind the cash register, and when Alfred Higgins passed him, he looked up and said softly, "Just a moment, Alfred. One moment before you go."

The soft, confident, quiet way in which Sam Carr spoke made Alfred start to button his coat nervously. He felt sure his face was white. Sam Carr usually said "Good night" brusquely,¹ without looking up. In the six months he had been working in the drugstore Alfred had never heard his employer speak softly like that. His heart began to beat so loud it was hard for him to get his breath. "What is it, Mr. Carr?" he asked.

"Maybe you'd be good enough to take a few things out of your pocket and leave them before you go," Sam Carr said.

"What things? What are you talking about?"

"You've got a compact² and a lipstick and at least two tubes of toothpaste in your pockets, Alfred."

"What do you mean? Do you think I'm crazy?" Alfred blustered. His face got red and he knew he looked fierce with indignation.³ But Sam Carr, standing by the door with his blue eyes shining bright behind his glasses and his lips moving underneath his grey mustache, only nodded his head a few times, and then Alfred grew very frightened and he didn't know what to say. Slowly he raised his hand and dipped it into his pocket, and with his eyes never meeting Sam Carr's eyes, he took out a blue compact and two tubes of toothpaste and a lipstick, and he laid them one by one on the counter.

"Petty⁴ thieving, eh, Alfred?" Sam Carr said. "And maybe you'd be good enough to tell me how long this has been going on."

"This is the first time I ever took anything."

¹ **brusquely** (BRUSK-lee) *adv.* roughly, abruptly, bluntly

² **compact** (KAHM-pakt) *n.* a small case containing face powder, a powder puff, and usually a mirror

³ **indignation** (ihn-dihg-NAY-shuhn) *n.* anger brought on by something unjust, unworthy, or mean

⁴ **petty** (PEHT-ee) *adj.* small in value

SILENT PASSAGE

I was eating my porridge¹ when Hugh, hurrying too fast, fell down the back stairs. Before Mother could get up, he limped in, sniffing slightly, and displayed a bumped elbow for her inspection. Mother examined it gravely.

“A slight haematoma,”² she said in a serious voice. “And an abrasion³ almost visible to the naked eye. You’ll live.”

Hugh, who always recovered with the speed of light and who won Mother’s admiration with his bravery, chuckled at the impressive words.

“What does that mean?” he asked.

“A little bruise and a scrape I can hardly see.”

I glowered at my oatmeal. Why did she have to smile at him like that? He was not so special. I searched my mind for something terrible he had done that I could tell her about.

“Jean, hurry up or you’ll be late,” Grandma said.

I did not want to go to school. We were going to have another mental arithmetic test, and I still did not know my times tables. If only I could fall down and break my leg...

Four-year-old Pat grinned at me.

“Huwwy up, Jean,” she parroted. “You be late.”

I wanted to slap the wide smile off her silly little face. Instead I scooped up a few drops of milk on the tip of my spoon and let it fly. The tiny bit of milk splashed her on the nose. I laughed. Before anyone could stop her, Pat grabbed up her mug filled to the brim with milk and sent its entire contents sloshing over me, soaking me to the skin.

The next thing I knew, I was back upstairs changing out of my wet serge⁴ dress, cotton petticoat, long brown stockings and underwear into clean dry clothes. Not only was this going to make me really late, but Mother handed me the knitted suit Aunt Gretta had made for my tenth birthday. The ribbed blue skirt was sewn onto a sleeveless cotton vest. Over it went a horizontally striped blue and pink sweater with short sleeves. Nobody else in Miss Marr’s class had a homemade knitted suit anything like it.

¹ **porridge** (PAWR-ihj) *n.* oatmeal boiled in water or milk until thick, eaten as cereal

² **haematoma** (hee-muh-TOH-muh) *n.* a bruise

³ **abrasion** (uh-BRAY-zuhn) *n.* a skin scrape

⁴ **serge** (serj) *n.* a kind of strong cloth, usually of wool, with slanting ridges across it

Appendix B

ORAL PASSAGE - Comprehension Questions

DIRECTIONS: Circle the best answer to each question.

1. How long had Alfred Higgins worked at the drugstore?
 - a. six weeks
 - b. three months
 - c. six months
 - d. one year

2. Sam Carr talked to Alfred Higgins because Alfred _____.
 - a. stole some items
 - b. was going to get a raise
 - c. wanted to leave work early
 - d. worked late

3. Alfred Higgins felt _____.
 - a. sad
 - b. happy
 - c. excited
 - d. frightened

4. What did Alfred Higgins wear while working?
 - a. jeans
 - b. white jacket
 - c. sneakers
 - d. blue shirt

5. What was in Alfred Higgins' coat pocket?
 - a. toothpaste
 - b. gum
 - c. money
 - d. apple

SILENT PASSAGE - Comprehension Questions

DIRECTIONS: Circle the best answer to each question.

1. How old was Pat?
 - a. four
 - b. one
 - c. ten
 - d. seven

2. In this story, a mental arithmetic test is used to see if Jean knows _____.
 - a. addition facts
 - b. multiplication facts
 - c. division facts
 - d. subtraction facts

3. What did Pat throw at Jean?
 - a. milk
 - b. juice
 - c. hot chocolate
 - d. soda

4. If someone recovers with the “speed of light”, it means they recover _____.
 - a. slowly
 - b. painfully
 - c. painlessly
 - d. quickly

5. Jean was in a hurry to get to _____.
 - a. church
 - b. her friend’s house
 - c. school
 - d. bed