

**AN EXPERIMENTAL STUDY ASSESSING THE EFFECTS  
OF REPEATED READING ON FLUENCY  
AND COMPREHENSION**

**Thesis**

**Submitted to**

**The School of Education of the  
UNIVERSITY OF DAYTON**

**In Partial Fulfillment of the Requirements for**

**The Degree**

**Master of Science in Education**

**by**

**Jane Elizabeth Fetherolf**

**University of Dayton**

**Dayton, Ohio**

**April 1998**

**UNIVERSITY OF DAYTON ROESCH LIBRARY**

APPROVED BY:

## ABSTRACT

### AN EXPERIMENTAL STUDY ASSESSING THE EFFECTS OF REPEATED READING ON FLUENCY AND COMPREHENSION

Fetherolf, Jane Elizabeth  
University of Dayton, 1998

Advisor: Dr. K. Kinnucan-Welsch

The study was designed to investigate the effect of the repeated reading method on first grade fluency and comprehension. The study was conducted in a classroom comprised of 24 first graders. The control group received regular reading instruction. The experimental group received instruction through the repeated reading method. The results of the students' fluency (time and accuracy) and comprehension were recorded for each group. The differences in reading methods were analyzed. The repeated reading method had no effect on comprehension. The repeated reading method did affect time and accuracy (fluency) in some trials of the experiment. The researcher recommends that further testing be done due to the inconclusiveness of this study.

## TABLE OF CONTENTS

ABSTRACT.....	iii
LIST OF TABLES.....	vi
CHAPTER	
I. INTRODUCTION .....	1
Problem Statement	
Purpose of the Study	
Definitions of Terms	
II. REVIEW OF THE LITERATURE.....	5
Fluency	
Comprehension	
Repeated Reading Method	
III. METHODOLOGY.....	13
Subjects/Setting	
Instrumentation	
Design	
Data Analysis	
Limitations	
IV. RESULTS.....	18
V. DISCUSSION, CONCLUSION, AND RECOMMENDATIONS.....	25
Discussion	
Conclusion	
Recommendations	

<b>BIBLIOGRAPHY.....</b>	<b>28</b>
<b>APPENDICES.....</b>	<b>30</b>
<b>Appendix I--Comprehension Report Form.....</b>	<b>30</b>
<b>Appendix II--Running Record Information.....</b>	<b>31</b>

LIST OF TABLES

1. Means and Standard Deviations of Accuracy for Trial 1, 2 and 3.....19

2. Means and Standard Deviations of Comprehension for Trial 1, 2, and 3.....20

3. Means and Standard Deviations of Time for Trial 1, 2, and 3.....21

4. Means, Standard Deviations, and *t*-test for Accuracy for the Control Group and  
the Experimental Group.....22

5. Means, Standard Deviations, and *t*-test for Comprehension for the Control Group  
and the Experimental Group.....23

6. Means, Standard Deviations, and *t*-test for Time for the Control Group and the  
Experimental Group.....24

## CHAPTER I

### INTRODUCTION

It is a well known fact that reading is a very important part of the education process. There are several components to the reading process. Fluency is one of the many components. Achieving fluency is recognized as an important part of proficient reading although some researchers see fluency as a neglected component of this process (Allington, 1983; Rasinski, 1989; Reutzel & Hollingsworth, 1993). Fluency is defined as “reading with inflection, emotion, and enjoyment--and to concentrate on meaning instead of decoding” (Routman, 1988, p. 49). According to Samuels (1979), “fluency was separated into two components--accuracy of word recognition and reading speed. While both components are important, for purposes of building fluency, speed was emphasized” (p. 405).

While the end result of reading is comprehension (Fielding & Pearson, 1994), many researchers have tried various methods of fluency training to impact on students' reading comprehension. Reutzel & Hollingsworth, (1993) studied the oral recitation method versus round robin reading by comparing fluency and comprehension scores. They concluded that the oral recitation method does improve reading comprehension in second grade students. However, Yaden (1988) stated that comprehension is not an all or nothing matter decided by one exposure to a text. It has been demonstrated (Martinez & Roser, 1985; and Yaden, 1988) that repeated readings of “read-alouds” do improve comprehension.

Some researchers allude to the fact that comprehension does increase with improvement of reading speed, or fluency (Allington, 1983; Samuels, 1979). According to Biemiller (1977-78) reading speed is necessary for successful reading achievement. Some studies have been done (Biemiller, 1977-78; Dowhower, 1987; Reutzel & Hollingsworth, 1993; Rasinski, 1989; Samuels, 1979) detailing fluency training using various methods on different age groups of children, special education students, and adults. Improving fluency has been found to improve comprehension.

One such method of developing fluency is the "repeated reading" method developed by S. Jay Samuels (1979). This method has been shown to help special education students. It consists of reading a short, meaningful passage several times until a satisfactory level of fluency is reached (Samuels, 1979). Samuels believes that "as less attention is required for decoding, more attention becomes available for comprehension. Thus rereading both builds fluency and enhances comprehension" (p. 405). In Samuels' research, students recorded the reading speed and number of word recognition errors on a graph and then practiced the repeated reading method until an 85 word per minute criterion rate was reached.

Dowhower (1987) found that a 100 word per minute criterion was effective with regular second graders. Ekwall & Shanker (1993) recommended 100 words/grade level x .75. For first grade, this would equal 75 words per minute. Ekwall & Shanker also recommended a "Repeated Reading Chart" that lists words per minute and number of errors. Researchers do not agree on a criterion level for words per minute.

Routman (1988) summarizes the importance of the repeated reading method. She comments:

It is easy for the beginning reader to join in. Fluency and comprehension



improve if the students are given continuous practice. Language which may not be understood on the first reading may acquire meaning for the child if it is read again and again. As the child reads words more easily, he is better able to concentrate on meaning. In addition, because the child is familiar with the story, he is able to read it with expression in phrases that flow with the language instead of word-by-word. The students ability to read the story smoothly contributes to the enjoyment of the book. (p. 66)

#### Problem Statement

Since developing reading skills is a fundamental goal in first grade, it would seem to be necessary to examine whether fluency training through the repeated reading method will improve fluency rate and comprehension in first grade readers.

#### Purpose of the Study

The purpose of this study will be to analyze the difference in first-grade fluency and comprehension scores among students who have participated in the repeated reading method compared to text reading without instruction in this method.

#### Definitions of Terms

There are many conflicting definitions of fluency. This thesis will explore the effects of the repeated reading method on fluency and comprehension. For the purposes of research, the following definitions will be employed.

Fluency is defined as text reading characterized by speed and accuracy.

Comprehension is defined as the ability to understand what has been read.

Comprehension will be measured with a four point rating scale described in Chapter III.

Repeated reading method is defined as reading the same material two or more times to improve the rate of fluency as measured by accuracy and time.

Time is defined as speed measured by a stop-watch and divided by the number of words in the story read. Time equals the words per minute.

Traditional reading is defined for the purpose of this thesis as a method in which the story is introduced, read as a whole group, and then the students read it through once on his/her own.

### Assumptions

In order to carry out this study, the writer made the following assumptions. First grade students' performance is text related. Their comprehension is based on background knowledge to aid in understanding of the text that is currently being read. Therefore, three trials will be administered to allow for a trend over time in the development of comprehension.

## CHAPTER II

### LITERATURE REVIEW

This chapter provides an overview of relevant research. The following topics are discussed: fluency, comprehension and fluency, and the repeated reading method.

#### Fluency

Rasinski (1989) states that “Although there is no universal agreement about what constitutes reading fluency, most authorities would agree that it refers to the smooth and natural oral production of written text” (p. 690). Routman (1988) defines fluency as “reading with inflection, emotion, and enjoyment--and to concentrate on meaning instead of decoding” (p. 49). While reading experts all have their own definition of fluency, they do agree that fluency plays a big part in reading instruction.

Allington (1983) studied and hypothesized how beginning readers developed oral fluency and how to help those students that did not. Allington found that students developed fluency by: hearing fluent reading modeled; being encouraged to read with expression; increasing reading practice time; reading at an instructional level; silent reading and rereading; and developing own response to reading. Allington concluded that the two most helpful strategies were modeling of fluent reading and incorporating repeated reading into the daily routine.

Rasinski (1989) feels that fluency is an issue that needs to be taken seriously in the reading classroom. Rasinski stated that fluency is for everyone and should be an integral part of the regular reading curriculum not just used for “corrective reading

situations involving an instructor working with one, two, or a very small group of students” (p. 690). Rasinski outlined several ways to use natural classroom events to encourage repeated readings. Teachers should model repeated reading--younger students like and benefit from repeated readings of their favorite story books. Teachers should build a background for a story before reading it aloud and provide feedback to students after they read aloud. Teachers develop support during reading by providing a fluent model during choral reading. Teachers promote fluency when materials provided are relatively easy in terms of word recognition. Rasinski concluded that informed teachers can design instructional activities that incorporate the repeated reading method into the needs of their own classroom.

### Comprehension and Fluency

Comprehension is a goal of reading. As Routman (1988) commented: “Reading is much more than just being able to read words.” (p. 331) Fountas and Pinnell (1996) comment that reading is constructing meaning and that comprehending is a process--not a product of reading. According to Fountas and Pinnell, fluency, phrasing, and rate of reading are related to comprehension. They refer to many methods of fluency training that have been tried to increase comprehension such as audio tape, repeated read-alouds and story responses, oral recitation lessons, theory of automaticity, and repeated read-alouds to improve comprehension.

One of the first researchers to examine the relationship between comprehension and fluency was Samuels (1976). Samuels developed the “theory of automaticity.” Samuels discussed the “automatic process” and how it can be used to shift the focus from one process to another after the first process is mastered through much practice.

Samuels applied the theory of automaticity to reading. Once a student reaches the point of decoding automatically, which leads to reading fluently, it will leave attention free to work on comprehension. Samuels concluded that the development of automaticity in decoding will improve comprehension and that students will learn to read fluently only by reading.

Biemiller (1977-78) studied the relationship between oral reading rates and the development of reading achievement and comprehension. Biemiller wanted to examine the oral reading speed in elementary children to reveal some underlying abilities that may help determine individual differences in reading speed and achievement. Biemiller used the Metropolitan Achievement Test reading scale scores and frequency of errors in word identification while children orally read progressively more difficult passages. The study was conducted from 1969 to 1975 in several settings and with students ranging from grades 2 through 6. Biemiller found that changes occur as students become better readers. Speed increases, word identification increases, and students reading in context more easily were all evident. Furthermore, he found that boys may read less rapidly than girls, and take relatively longer to identify words out of context. Biemiller concluded that there are two major educational implications: 1) It appears that some minimal level of basic identification speed may be necessary for success in reading 2) More attention might be paid to the small amount of actual reading practice that poor readers receive. Biemiller also noted that most testing of the relationship between reading rate and comprehension has been done with older students and that there is a need for research with younger students.

Martinez and Roser (1985) believed that repeated read-alouds would improve comprehension. Martinez and Roser conducted case studies on four and five year old

children to analyze the changes in their responses when listening to unfamiliar and familiar stories. Martinez and Roser concluded that when the children were familiar with a story they talked more; the talk changed form; talk tended to focus on different aspects of the story; and when the story was read repeatedly, the children's responses indicated greater depth of understanding (comprehension).

Yaden (1988) also believed that repeated read-alouds would improve comprehension. Yaden felt that comprehension did not depend on only one exposure to a text. Yaden did a case study on a five year old child and collected and documented the types of questions raised during repeated readings of a story. Yaden found that after one or two readings questions centered around illustrations and that only after several repeated readings did better understanding of the story develop.

Rashotte and Torgesen (1985) investigated whether improved fluency and comprehension across different stories in repeated reading depend on the degree of word overlap among passages and whether repeated reading is more effective than an equivalent amount of nonrepetitive reading. The subjects of Rashotte and Torgesen's study were twelve nonfluent, learning disabled students from three different elementary schools. Under Condition 1 of the study, students repeatedly read passages in which the number of words shared among the stories was low and relatedness of context was minimal. Under Condition 2 of the study, the same students repeatedly read passages in which the word overlap among stories was high. Reading speed, word accuracy, and comprehension scores from both conditions were contrasted. This study also compared the effectiveness of repeated reading and nonrepetitive reading with equivalent amounts of reading. Under Condition 3, the students completed the same total number of readings as Condition 1 and 2; however, they only read each passage one time. The

selections read were presented on an Apple computer and students were provided feedback on reading speed and word accuracy immediately after each reading. Rashotte and Torgesen found that word commonalities among stories did affect the gains in reading speed: mean speed gains in Condition 2, where stories contained many shared words, were significantly greater than gains in Condition 1, where stories had few overlapping words. The amount of word commonality among stories, however, had less effect on error reduction or comprehension gains. Rashotte and Torgesen felt that the lack of significant findings on the comprehension measure reflected the fact that there was little room for improvement. The LD students in this study showed a good level of understanding on the pretest stories despite poor reading fluency. Rashotte and Torgesen concluded that these findings fit with Samuels' view that word repetition promotes faster word processing or word automaticity. They also noted that students liked the repeated reading method and the general feedback format regardless of the degree of improvement and that one point of usefulness for this technique may be that it encourages students to read more, or at least, to have a more positive attitude toward reading, because with each repetition of the same story the student usually achieves speed improvement.

Reutzel and Hollingsworth (1993) studied the effects of developing second-grade students' oral reading fluency using the oral recitation lesson (ORL) and the effects that fluency training may have upon students' resulting reading comprehension. Oral recitation lesson method is described as the teacher models a passage and students memorize their assigned part. Reutzel and Hollingsworth compared fluency and comprehension scores for the oral recitation lesson group and the round robin reading control group. The post test instruments used for this study consisted of a norm-

referenced standardized achievement test, the Iowa Test of Basic Skills, Level 8, Form G, comprehension sub test, and a researcher-constructed oral reading test. Statistically different levels of fluency and comprehension scores resulted in three out of four measures favoring the oral recitation group. Reutzel and Hollingsworth concluded that fluency training with the oral recitation lesson method does improve reading comprehension in second-grade students and round robin reading does not improve fluency and comprehension.

### Repeated Reading Method

Several researchers have supported the repeated reading method as developed by Samuels (1976).

Ekwall and Shanker (1993) stated that the repeated reading method suggested by S. Jay Samuels was an excellent instructional method. Dowhower (1989) stated that although there is still much to be learned, the repeated reading method is a viable instructional tool not only for disabled or remedial readers in special classes but also for developmental readers in regular classrooms. Routman (1988) felt that fluency and comprehension improve if the students are given continuous practice. Many researchers refer to the repeated reading method developed by Samuels.

Samuels (1979) studied the method of repeated reading to help students with special learning problems in a developmental reading program. In the repeated reading method, a student reads a short selection until a satisfactory level of fluency is reached. The student is timed with a stop watch until an 85 word-per-minute criterion rate is reached. Students using this technique increased initial speed in reading each new selection. The number of repeated readings needed decreased over time. Comprehension increased with each reading. Less attention is required for decoding and



attention is spent on comprehension. Samuels concluded that rereading builds fluency and enhances comprehension.

Dowhower (1987) studied the effects of repeated reading on second-grade transitional readers' fluency and comprehension. Transitional readers were described as readers ready to transition from learning to decode to learning to read fluently. Students were randomly assigned to one of two training groups. Both groups were trained in the repeated reading method. The unassisted group practiced independently. The assisted group listened to the passage on audio tape. Dowhower found that results of this investigation showed transitional readers' rate, accuracy, comprehension and prosodic reading with practiced and unpracticed passages were significantly improved by repeated reading regardless of the training procedure employed. Dowhower concluded that the use of the repeated reading method supported improved comprehension. The repeated reading method did improve the second grade students' speed, accuracy, and understanding and further research with younger students would be appropriate.

Herman (1985) wanted to find out if Samuels' (1979) method of repeated readings would improve various factors within practiced stories and transfer to new, unpracticed stories. The factors explored were rate of reading, number of speech pauses, and amount of accuracy. The study was set up over a three month period with eight less able, nonfluent, intermediate-grade students. Herman found that when compared to their performance on the initial reading of Story 1, students increased their rate of reading, decreased their total number of miscues, and improved their accuracy significantly by the initial reading on Story 5, as well as within each of the practiced stories. Herman's study clearly showed that nonfluent intermediate-grade students benefited from repeated readings. Herman found that there was a continual

improvement in rate of reading accompanied by a decrease in the total number of miscues and an increase in combined accuracy. Herman concluded that the repeated reading procedure could fit into any elementary classroom and that the key for the teacher is to identify which students would benefit from the repeated reading method: “the least fluent, less able readers.”

Many researchers have based at least some of their research on Samuels’ principle that repeated reading does improve reading fluency and comprehension. Allington (1983) and Rasinski (1989) both concluded that one helpful strategy to improve fluency was to incorporate repeated reading into daily classroom activities. Martin and Roser (1985) and Yaden (1988) believed that repeated read-alouds improved comprehension. Dowhower (1987) and Herman (1979) integrated parts of Samuels findings into their own studies. This leads to the hypotheses stated below.

#### Hypotheses

Based on the studies relating to repeated reading, fluency, and comprehension, the following two hypotheses guided this study: There will be a difference between reading fluency (time and accuracy) among children who were instructed using the repeated reading method and children instructed using the traditional reading method. Furthermore, there will be a difference between reading comprehension among children who were instructed using the repeated reading method and children instructed using the traditional method.

## CHAPTER III

### METHODOLOGY

This chapter describes the methodology that was used in the study. The following areas are detailed: subjects/setting; instrumentation; design; procedure; data analysis; and limitations. Based on the studies relating to repeated reading, fluency, and comprehension, this hypothesis guided this study: There will be a difference between reading fluency (time and accuracy) among children who were instructed using the repeated reading method and children instructed using the traditional reading method. There will be a difference between reading comprehension among children who were instructed using the repeated reading method and children instructed using the traditional method.

#### Subject/Setting

The sample for this study is one classroom of first graders with 24 students from a lower-to-middle-income background. No children with identified learning disabilities are in the classroom. The class is comprised of 11 boys and 13 girls. The classroom is in a school with approximately 500 students. The school has two kindergarten classrooms, three first-grade classrooms, four second-grade classrooms, three third-grade classrooms, two fourth-grade classrooms, one fourth/fifth-grade split classroom, two fifth-grade classrooms, and three sixth-grade classrooms. The classroom is in a school in a mid-western town of approximately 40,000 people. The school district consists of 3,539 elementary students and 2,935 high school students. There are

nine elementary schools, two junior high schools, one freshman school, one high school, and one vocational school. The ethnic composition of this school district is: 97.7% White/Caucasian; .7% Black/Negro; .6% Multi-racial; .5% Hispanic/Latino; .4% Asian/Pacific Islander; and, .1% American Indian/Alaskan Native. The researcher is the teacher of the first grade students participating in the study.

### Instrumentation

Fluency is defined in Chapter I as accuracy and speed. Accuracy will be measured by running records (Fountas & Pinnell, 1996, See description in Appendix I). Speed will be measured using a stop watch to record time it takes to read a story. This recorded time will be used to figure words per minute. Words per minute will be referred to as Time in the tables in Chapter IV. Students will be reading first-grade reading books from the Sunshine and Story Box series by The Wright Group. Comprehension will be measured using a comprehension paper (See Appendix I) that will be scored as described in the Procedure.

### Design

The design of this experiment is two groups, randomly assigned to the traditional reading group or the repeated reading group, with matched sub-groups, and a post-test only control group. The independent variable is reading instruction, traditional reading (Group 1) and repeated reading (Group 2). The dependent variables are fluency (time and accuracy) and comprehension.

### Procedure

All children in the classroom have been placed, prior to the study, in one of four reading groups organized homogeneously according to reading ability. Students were randomly assigned to groups according to the independent variable, a traditional reading

method or the repeated reading method (Dowhower, 1987; Samuels, 1979) with a stratified sample and matched sub-group design. Students from each reading group A, B, C, and D were represented in both the control group and the experimental group to insure equivalency of each group. The dependent variable was measured by having students read three different stories (Trial 1, Trial 2, and Trial 3) at their instructional level determined by previous running records. Fluency, accuracy, and comprehension scores were recorded for each of the three trials. Students remained in respective reading groups A, B, C, and D during the introduction and first reading of each story. After the first reading of each story, students in the traditional half of the reading group were tested for fluency and comprehension. Students in the repeated reading half of the group received additional reading time as described in the repeated reading method before they were tested for fluency and comprehension.

The two instructional methods differ in these ways. The traditional method incorporated the following steps: 1) the story was introduced, 2) the story was read as a whole group, and then 3) students read it through once on his/her own. The student then read the story orally for fluency (time and accuracy) and comprehension. Fluency was measured by timing with a stop watch and converting into words per minute. Accuracy was recorded by a running record (Clay, 1979; see Appendix II) of the story. All students were tape recorded to verify time and accuracy rate.

The method of repeated reading consists of several practice readings to build reading speed which in turn builds fluency and comprehension (Samuels, 1979). Comprehension was assessed by having students complete a written story report (see Appendix I). Comprehension was measured with a 4-point scale: 4--comprehension of whole story; 3--comprehension of some important parts; 2--comprehension of one

part; 1--no real comprehension (maybe some pictures and words.) Fluency and comprehension scores were recorded.

The major difference between the traditional reading group (Group 1) and the repeated reading group (Group 2) was that the repeated reading group received more practice time (at least four practice readings) for each story during each trial.

Interrater reliability on the comprehension score rating was ensured by the following procedure: The researcher scored each story report. A second observer was asked to score each report without knowing the previous score. If scores on the comprehension story report did not agree, the researcher and second observer discussed each paper and agreed upon a score.

#### Data Analysis

The three dependent measures were time, accuracy (fluency), and comprehension. The mean time, accuracy, and comprehension scores of the traditional group (Group 1) and the repeated reading group (Group 2) were compared using a *t*-test to determine any difference in scores between the two groups. The hypotheses were tested at a .05 level of significance.

#### Hypotheses

Based on the studies relating to repeated reading, fluency and comprehension this null hypothesis guided this study: There will be no difference between reading fluency (time and accuracy) among children who were instructed using the repeated reading method and children instructed using the traditional reading method. There will be no difference between reading comprehension among children who were instructed using the repeated reading method and children instructed using the traditional method.

### Limitations

First, if the students in the control group have access to the story books and an opportunity for repeated reading of these books, it would affect the study. Second, students in Reading Recovery and Chapter I Reading Groups have the opportunity for practice of repeated reading of stories--although their practice is not of the books used in this study. Third, other students may request repeated readings of, or repeatedly read, favorite stories at home or school. However, it is unlikely these would be the same stories used in this research. Fourth, the comprehension score is based upon a written retelling, some students may have achieved more competence at oral retelling prior to this study. Fifth, first grade students' performance for comprehension is text related. Comprehension is based on background knowledge to aid in understanding of the text that is currently being read. One limitation may be the different stories used to test fluency (time and accuracy) and comprehension. Students may not have sufficient background to build comprehension.

## CHAPTER IV

### RESULTS

The purpose of this chapter is to discuss the findings of the study. Based on the studies relating to repeated reading, fluency and comprehension this null hypothesis guided this study: There will be no difference between reading fluency (time and accuracy) among children who were instructed using the repeated reading method and children instructed using the traditional reading method. There will be no difference between reading comprehension among children who were instructed using the repeated reading method and children instructed using the traditional method.

The data were analyzed by performing a *t*-test using SPSS (SPSS Inc., 1995). These analyses indicated significant differences in several areas. The results are found below.



Table 1

Means and Standard Deviations of Time for Trial 1, 2, and 3 for the Control Group 1 and the Experimental Group 2.

(n=22)

---

	<u>Time</u>		
	Trial 1	Trial 2	Trial 3
<b>Group 1</b>			
M	60.50	56.66	63.58
SD	26.25	25.81	21.72
<b>Group 2</b>			
M	82.50	85.16	73.25
SD	42.03	22.48	19.29

Time was calculated as words per minute. The mean score for time for the repeated reading group (Group 2) was higher than the mean score for time of the traditional reading group (Group 1) in Trial 1. The mean score for time for the repeated reading group (Group 2) was higher than the mean score for time of the traditional reading group (Group 2) in Trial 2. The mean score for time for the repeated reading group (Group 1) was higher than the mean score for time of the traditional reading group (Group 1) in Trial 3. Time across trials did not improve.

Table 2

Means and Standard Deviations of Accuracy for Trial 1, 2, and 3 for the Control Group 1 and the Experimental Group 2  
(n=22)

---

	<u>Accuracy</u>		
	Trial 1	Trial 2	Trial 3
Group 1			
M	93.75	92.08	94.25
SD	6.26	3.63	3.36
Group 2			
M	97.25	97.50	96.58
SD	3.49	2.74	3.05

Accuracy was calculated as percentage of correctly read words. The mean score for accuracy for the repeated reading group (Group 2) was higher than the mean score for accuracy of the traditional reading group (Group 1) in Trial 1. The mean score for accuracy for the repeated reading group (Group 2) was higher than the mean score for accuracy of the traditional reading group (Group 1) in Trial 2. The mean score for accuracy for the repeated reading group (Group 2) was higher than the mean score for accuracy for the traditional reading group (Group1) in Trial 3. Accuracy across trials did not improve.

Table 3

Means and Standard Deviations of Comprehension for Trial 1, 2, and 3 for the Control Group 1 and the Experimental Group 2  
(n=22)

---

	<u>Comprehension</u>		
	Trial 1	Trial 2	Trial 3
Group 1			
M	2.41	2.75	2.66
SD	.90	.86	.98
Group 2			
M	2.83	3.00	2.83
SD	1.11	.95	.83

Comprehension was calculated by assigning a rating of 1-4 on a retelling. The mean score for comprehension for the repeated reading group (Group 2) was higher than the mean score for comprehension of the traditional reading group (Group 1) in Trial 1. The mean score for comprehension for the repeated reading group (Group 2) was higher than the mean score for comprehension of the traditional reading group (Group 1) in Trial 2. The mean score for comprehension for the repeated reading group (Group 2) was higher than the mean score for comprehension of the traditional reading group (Group 1) in Trial 3. Comprehension across trials did not improve.

The *t*-test for independent means were performed to examine whether or not repeated reading had any effect on students' reading performance as indicated by fluency (time and accuracy) and comprehension are reported below in Tables 4-6.

Table 4

Means, Standard Deviations and *t*-test for Time for the Control Group 1 and the Experimental Group 2.

---

		<u>Time</u>		
	Group 1	Group 2		<i>t</i> value
Trial 1				
M	60.50	82.50		-1.54
SD	26.25	42.03		
Trial 2				
M	56.66	85.16		-2.88*
SD	25.81	22.48		
Trial 3				
M	63.58	73.25		-1.15
SD	21.72	19.29		

---

\* $p < .05$

The results of the *t*-test for time (measured by words per minute) appear in Table 4. These data indicate that a significant difference occurred in the area of time for

Trial 2 only. The null hypotheses can be rejected in Trial 2, but we are unable to reject the null hypotheses in Trial 1 and 2.

Table 5

Means, Standard Deviations and *t*-test for Accuracy for the Control Group 1 and the Experimental Group 2.

---

	<u>Accuracy</u>		
	Group1	Group 2	<i>t</i> value
Trial 1			
M	93.75	97.25	-1.69
SD	6.26	3.49	
Trial 2			
M	92.08	97.50	-4.12*
SD	3.63	2.74	
Trial 3			
M	94.25	96.58	-1.78*
SD	3.36	3.05	

---

\* $p < .05$

The results from the *t*-test on accuracy appear in Table 5. These data indicate that significant differences occurred in the area of accuracy for Trial 2 and 3 only. The null hypothesis for Trial 2 and 3 can be rejected, but we are unable to reject the null hypotheses for Trial 1.

Table 6

Means, Standard Deviations and *t*-test for Comprehension for the Control Group 1 and the

Experimental Group 2.

---

		<u>Comprehension</u>		
	Group 1	Group 2	<i>t</i> value	
<b>Trial 1</b>				
M	2.41	2.83	-1.01	
SD	.90	1.11		
<b>Trial 2</b>				
M	2.75	3.00	-.67	
SD	.86	.95		
<b>Trial 3</b>				
M	2.66	2.83	-.45	
SD	.98	.83		

The results from the *t*-test on comprehension appear in Table 6. These data indicate that no significant differences occurred in the area of comprehension for Trial 1, Trial 2 and 3. The null hypothesis in the area of comprehension cannot be rejected.

## CHAPTER V

### DISCUSSION, IMPLICATIONS, AND CONCLUSIONS

This chapter will discuss the results and implications of the study. Conclusions will be drawn. Suggestions for further research will be offered.

Reading is a very important part of the education process. There are many components of this process including accuracy, comprehension, and speed/fluency. In the literature review, a wide variety of opinions on these areas were explored. This study was based on Samuels' belief that reading speed/fluency increases comprehension.

This study focused on the examination of speed/fluency training through the repeated reading method and its effects on fluency (time and accuracy) and comprehension. The purpose of this study was to analyze the differences in first grade fluency (time and accuracy) and comprehension among first grade students who have participated in the repeated reading method or the traditional reading method. This experimental study was conducted over five weeks with twenty-four first graders.

Several *t*-tests for independent means for the dependent variables fluency (time and accuracy) and comprehension were calculated. The differences in means between the two groups failed to reach significance in one out of three trials for accuracy, all trials for comprehension, and two out of three trials for time.

The researcher concluded that the results are inconclusive in the areas of accuracy and time. The results indicate that in the areas of comprehension repeated reading as in instructional method had no effect.

The fact that the study was only five weeks long may not have been enough time for the students to show improvement. The comprehension instrument may not have been sensitive enough to detect differences. The assumption made in Chapter I that first grade students' performance is text related may have affected the result of comprehension if comprehension depended on whether students liked one book better than another.

It has been established that time and accuracy are related and can be referred to as fluency. The significant differences found in Trial 2 of Time and Trial 2 and 3 of Accuracy indicate that the repeated reading method did have an impact on time and accuracy and therefore does impact fluency. In some cases, however, the results were varied. This would indicate that further research needs to be completed in the area of fluency (time and accuracy).

This researcher was surprised that comprehension was not affected by that repeated reading method as indicated in the research completed by Samuels (1979) and Dowhower (1987 and 1989). However, Rashotte and Torgesen (1985) found through their research that gains in reading speed (fluency) were affected by the degree of word commonality among stories. They found that the lack of significant findings on the comprehension measure reflected the fact that there was little room for improvement. It may be the case in this study, as in Rashotte and Torgesen, that the first grade students tested started out with a good level of understanding.



This researcher was surprised that scores of the repeated reading group did not improve over time. This researcher recommends that further research of the repeated reading method should be conducted.

## Bibliography

Allington, R. L. (1983). Fluency: The neglected reading goal. The Reading Teacher, 36, 556-561.

Biemiller, A. (1977-78). Relationship between oral reading rates for letters, words, and simple text in the development of reading achievement. Reading Research Quarterly, XIII, 223-253.

Clay, M. M. (1979). The early detection of reading difficulties. Auckland, New Zealand: Heinemann Education.

Dowhower, S. L. (1987). Effects of repeated reading on second-grade transitional readers' fluency and comprehension. Reading Research Quarterly, XXII, 389-405.

Dowhower, S. L. (1989). Repeated reading: Research into practice. The Reading Teacher, 502-507.

Ekwall, E. E., & Shanker, J. L. (1993). Locating and correcting reading difficulties (6th ed.). Upper Saddle River, New Jersey: Prentice Hall.

Fielding, L. G. & Pearson, P. D. (1994). Reading comprehension: What works. Educational Leadership, 62-68.

Fountas, I. C. & Pinnell, G. S. (1996). Guided Reading: Good first teaching for all children. Portsmouth, N.H.: Heinemann Educational Books, Inc.

Herman, P. A. (1985). The effect of repeated readings on reading rate, speech pauses, and word recognition accuracy. Reading Research Quarterly, XX, 553-565.

Martinez, M. & Roser, N. (1985). Read it again: The value of repeated readings during storytime. The Reading Teacher, 782-786.

Rasinski, T. V. (1989). Fluency for everyone: Incorporating fluency instruction in the classroom. The Reading Teacher, 690-693.

Rashotte, C. A. & Torgesen, J. K. (1985). Repeated reading and reading fluency in learning disabled children. Reading Research Quarterly, XX, 180-188.

Reutzel, D. R. & Hollingsworth, P. M. (1993). Effects of fluency training on second graders' reading comprehension. Journal of Education Research, 86, 325-331.

Routman, R. (1988). Transitions from literature to literacy. Melbourne, Australia and Chicago, Illinois: Rigby; and Portsmouth, N. H.: Heinemann Educational Books, Inc.

Samuels, S. J. (1976). Automatic decoding and reading comprehension. Language Arts, 323-325.

Samuels, S. J. (1979). The method of repeated readings. The Reading Teacher, 32, 403-408.

SPSS, Inc. (1995). SPSS 6.1 for the Macintosh. Chicago, IL.

Yaden, D. (1988). Understanding stories through repeated read-alouds: How many does it take? The Reading Teacher, 556-560.

Appendix I


Form to measure comprehension

Skill: Writing a Summary

Name \_\_\_\_\_

**My Story Report**

Story \_\_\_\_\_



Write what the story was about. Draw a picture to go with your sentences.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Appendix II

### Information on How to Take a Running Record

Marie M. Clay states that:

Running records of text reading have face and content validity. You cannot get closer to the valid measure of oral reading than to be able to say the child can read the book you want him to be reading at this or that level with this or that kind of processing behavior. Little or nothing is inferred. You can count the number of correct words to get an accuracy score. The record does not give a measure of comprehension but you can tell from studying the error and self-correction behaviour whether the child works for meaning. You do not get score on letters known, but you can see whether the child uses letter knowledge on the run in his reading (p. 3).

For further information on how to conduct a running record a detailed account can be found in Marie M. Clay's book The Early Detection of Reading Difficulties pp. 17-22.