Using Small Group Instruction

in Reading Fluency to Improve

Reading Comprehension

A Special Project

Presented to

Dr. Mel Mangum

Heritage University

In Partial Fulfillment

of the Requirement for the Degree of

Masters of Education

in Professional Learning and Studies

April Knight

Spring 2008

FACULTY APPROVAL

Using Small Group Instruction

in Reading Fluency to

Improve Reading Comprehension

Approved for the Faculty

_____, Faculty Advisor

ABSTRACT

The purpose of this project was to examine the effects of small group fluency instruction using repeated reading. Six students were offered reading intervention daily before school. Students were instructed in repeated reading, and built fluency skills through daily practice of short timed passages. Intervention results were reported back to classroom teacher and students' Measurement of Academic Progress assessment results were reviewed for growth in reading fluency and comprehension. The results showed repeated reading was an effective method to build reading fluency and comprehension. The researcher concluded that repeated reading has a place in classroom reading instruction. Repeated reading was an effective method of intervention for struggling readers and improved reading comprehension.

PERMISSION TO STORE

I, April Knight, do hereby irrevocably consent and authorize Heritage University Library to file the attached Special Project entitled, <u>Using Small Group Instruction in</u> <u>Reading Fluency to Improve Reading Comprehension</u>, and make such paper available for the use, circulation and/or reproduction by the Library. The paper may be used at Heritage University Library and all site locations.

I state at this time the contents of this paper are my work and completely original unless properly attributed and/or used with permission.

I understand that after three years the paper will be retired from the Heritage University Library. If I choose, it is my responsibility to retrieve the paper at that time. If the paper is not retrieved, Heritage University may dispose of it.

_____, Author

_____, Date

TABLE OF CONTENTS

FACULTY APPROVAL i
ABSTRACTii
PERMISSION TO STOREiii
TABLE OF CONTENTS iv
LIST OF TABLES
LIST OF FIGURES viii
CHAPTER 11
Introduction1
Background for the Project1
Statement of the Problem
Purpose of the Project
Delimitations4
Assumptions5
Research Questions
Significance of the Project6
Procedure
Definition of Terms7
Acronyms
CHAPTER 2
Review of Selected Literature9

	Introduction9
	Definition of Reading Fluency9
	Fluency and Comprehension10
	Measurement of Academic Progress11
	Repeated Reading
	The Six-Minute Solution: A Reading Fluency Program14
	Summary14
CHAPTER 3.	
Metho	dology and Treatment of Data15
	Introduction15
	Methodology16
	Participants16
	Instruments16
	Design17
	Procedure
	Treatment of the Data
	Summary
CHAPTER 4.	
	Introduction
	Description of the Environment
	Research Questions
	Results of the Study
	Findings21

	Discussion	22
	Summary	22
CHAPTER 5		25
	Summary	25
	Conclusions	27
	Recommendations	27
REFERENCE	S	28
APPENDIX		31
LIST OF TAB	LES	
Table 1, Table	Top RIT Guide	33

LISTS OF TABLES

	Page
Table 1, Table Top RIT Guide	.33

CHAPTER 1

Introduction

Background for the Project

Since the federal passage of the No Child Left Behind Act in 2001, states, districts, and schools have been under pressure to reform what education looked like for students. No Child Left Behind was passed in an attempt to have every child receive a quality education. According to No Child Left Behind, if schools failed to show student progress in core academic areas, schools in Washington were placed on a program of school assistance from the Office of Superintendent of Public Instruction. To measure for student achievement and at the heart of No Child Left Behind's accountability system was the requirement that states test nearly every public school student in grades 3-8 and administer one assessment during high school in the subjects of reading and mathematics. Washington State ensured the implementation of No Child Left Behind by instating state standards, known as Essential Academic Learning Requirements. Each Essential Academic Learning Requirement was broken down into Grade Level Expectations, which explicitly stated what each child was to know and do at assigned grade levels. More specifically, Washington State's accountability test was known as the Washington Assessment of Student Learning. According to State Superintendent of Public Instruction, Terry Bergeson, "Eighty-seven percent of the students in the class of 2008 who have taken the reading WASL have already passed it. Eighty-

six percent have passed the writing test. Those results mark tremendous success for Washington's education reform efforts over the last decade" (Bergeson, 2007 C 1).

Despite high remarks by the Superintendent of Public Instruction, Terry Bergeson, Washington schools increased standards and worked to get all students to grade level standards no matter what deficiency the student had acquired. Del Stover, senior editor of the *American School Board Journal*, stated, "no longer do principals and teachers boast of their school's high performance while ignoring the fate of a few dozen students who are quietly floundering academically (Stover, 2007 p4).

The elementary school in this researcher's study was an elementary school proud of academic achievements. The elementary school had a history of high test scores and student achievement. As a result, when a group of low performing third graders graduated to fourth grade, the researcher sought to intervene and provided specific interventions for students most at risk in the area of reading.

Specifically, the researcher sought to provide a remedial reading group that offered support in the areas of fluency and comprehension. The student intervention group met four days a week Monday through Thursday from 8:00-8:30AM. The rationale for offering a reading intervention focused on fluency and comprehension was to give at-risk students in the area of reading extra practice, thereby all students achieved and reached grade level standards in reading.

Furthermore, the researcher thought offering a program focused on fluency and comprehension by a trained educational assistant would be an effective intervention.

Statement of the Problem

The experiences of the elementary school staff in previous years identified the majority of the researcher's current class as struggling readers. The researcher teaching the current group of students verified the view of a large group of students in the fourth grade class of 2006-2007 not meeting grade level expectations in the area of reading as measured by the *Measurement of Academic Progress* assessment. Furthermore, the researcher noted the elementary school only had six spaces for students to receive reading intervention in the Learning Assistance Program. Additional fourth grade students needed reading intervention beyond what the Learning Assistance Program was able to provide. Purpose of the Project

The purpose of this project was to improve the reading scores of fourth grade students while offering reading intervention focused on fluency and comprehension in a small group setting using repeated reading. The researcher wanted to see if small group repeated reading intervention was effective in raising reading scores of struggling readers.

Delimitations

This study was limited to a small number of fourth grade students in an elementary school located in southeast Washington. The elementary school was located in a mid to high-level socioeconomic suburb of a larger town. Main industries in the surrounding areas included agriculture, vineyards, nuclear and health sciences.

The elementary school was a K-5 building composed of 706 students. Fiftyone percent of students were males, and forty-nine percent of students were females. The student population was composed of eighty-four percent white students, seven percent Hispanic students, two percent Black students, and seven percent Asian students. Fourteen percent of students qualified for free and reduced-priced meals. Eight percent of the student population was identified as Special Education (OSPI, 2007).

The reading intervention study was done with a small group of six students who participated in a before school reading intervention program Monday through Thursday from 8:00-8:30AM. Students invited to participate in the intervention program were six months or more below grade level as indicated by the Measurement of Academic Progress assessment. Parents were responsible for transporting students to the elementary school building.

The morning reading intervention program was overseen by a highly qualified teacher and educational assistant. The teacher and educational assistant were

trained in small group instruction and reading fluency intervention. Specifically, the teacher and educational assistant were trained in how to implement the *Six-Minute Solution: A Reading Fluency Program*, running record notations and cooperative learning techniques.

Assumptions

The researcher used a researched based reading program demonstrated to increase student reading fluency. The program was called *The Six-Minute Solution: A Reading Fluency Program*. The researcher trained and supervised the educational assistant who led students in instruction of the *Six-Minute Solution* program. The *Six-Minute Solution: A Reading Fluency Program* provided guidance for the researcher. The researcher used the teaching strategies and materials in the *Six-Minute Solution* as a source for reading passages and instructional methods.

Research Questions

A primary question of the study was: Would intentional teaching of reading fluency using repeated reading increase struggling readers reading comprehension skills?

Significance of the Project

With more local, state and national attention being given to increased student performance, educators were increasingly held accountable for student performance in core academic areas, including reading. With increased teacher

accountability, came the need to intervene with struggling students. The researcher understood closing the reading gap was crucial for continued success in intermediate grades and beyond.

Procedure

The researcher first reviewed the results of the fall 2006 Measurement of Academic Progress test and determined students below grade level as defined by grade level benchmarks. After a discussion with the elementary building principal and school staff, a decision was made to hire an educational assistant with a background in reading instruction. The researcher further trained the educational assistant in use of the *The Six-Minute Solution: A Reading Fluency Program.*

A letter sent home invited identified struggling readers to attend a before school reading group, referred to as a morning reading group (see Appendix 1). Students attended the morning reading group Monday through Thursday from 8:00 to 8:30AM. Students were given a short reading passage, asked to skim and scan for unknown or interesting words, and then asked to write two questions from words that sparked interest. The educational assistant read the passage aloud and modeled fluency while students listened. Next, students read the passage silently, and were given a chance to ask questions about the passage. Afterwards, students paired up and listened to classmates read. One student read the passage while a peer classmate timed the partner reading and listened for

mistakes. Students repeated this procedure two times. After practicing reading with fluency, the educational assistant timed students on the same passage for one minute and recorded results in a binder to share with classroom teachers. At the end of the intervention session, students wrote a summary of the article and what was learned.

Definition of Terms

<u>benchmark.</u> Grade level benchmarks were a predetermined set point of which a typical student was able to perform.

fluency. Fluency was reading smoothly, easily, and quickly.

<u>fluency goal.</u> The fluency goal was the desired number of words read correctly per minute.

repeated reading. Repeated reading was reading the same passage more than once.

<u>The Six-Minute Solution: A Reading fluency program.</u> The Six-Minute Solution: A Reading fluency program was a research based instructional procedure for grades three through eight.

Acronyms

<u>AYP.</u> Adequate Yearly Progress<u>EA.</u> Educational Assistant<u>EALRs.</u> Essential Academic Learning Requirements

- GLE. Grade Level Expectations
- LAP. Learning Assistance Program
- MAP. Measurement of Academic Progress Assessment
- NCLB. No Child Left Behind
- NTICHD. National Institute of Child Health and Human Development
- RIT. Rash Unit
- WASL. Washington Assessment of Student Learning
- wcpm. words correct per minute.

CHAPTER 2

Review of Selected Literature

Introduction

Literature selections for the study dealt with the aspect of reading fluency and reading comprehension. The focus of the literature primarily came from educational periodicals. The review of literature provided the historical and specific content necessary for conducting a study in relevance of including reading fluency in classroom instruction. Reading research focused on fluency definitions, fluency and comprehension, Measurement of Academic Progress, and repeated reading instruction.

Definition of Reading Fluency

The literature on reading fluency focused primarily on young school age children enrolled in public schools. Many educators defined reading fluency as a student's ability to read quickly and free of errors. The National Reading Panel defined reading fluency as the ability to read text quickly, accurately, and with proper expression (NTICHD, 2000). Timothy Rasindi, a leading researcher in the area of reading, defined fluency as the ability to read accurately, quickly, effortlessly and with appropriate expression and meaning (Ransinski, 2003). The researcher agreed with the reading fluency definition as efficient, effective word recognition skills, which permitted readers to construct meaning of text. Fluency was manifested by accurate, rapid expressive oral reading (Pikulski, Chard, 2005).

Fluency and Comprehension

Research showed a link between reading fluency and reading comprehension. The National Reading Panel identified reading fluency as a key ingredient in successful reading instruction (NICHHD, 2000). Reading fluency was important because fluency affected students reading efficiency and comprehension. According to Griffith and Rasinski,

Readers had a limited amount of attention devoted to cognitive tasks such as reading. Reading required readers to accomplish two critical tasks-decoding words and comprehending text. Given the limited amount of attentional resources available to any reader, attention given to decoding requirements cannot be used for comprehension. Thus, readers who spent considerable cognitive effort to decode words compromised reading comprehension because the reader was not able to devote sufficient amount of attention to making sense of the text (Griffith and Rasinski, 2004, p.126).

When decoding and other surface level aspects of reading were automatic, readers were able to devote maximal amounts of attention to deeper levels of reading comprehension (Griffith, Rasinski, 2004). Furthermore, Dudly and Matter's research determined fluency required automatic word recognition at a rate that freed a reader's cognitive resources and allowed the reader to focus on meaning of text. Therefore, readers decoded automatically, and shifted cognitive energies away from decoding and derived meaning from the text (Dudley, Mather, 2005).

Research concluded the more words correct per minute a student scored on oral reading passages indicated an overall reading competence, and correlated strongly with reading comprehension (Fushs, Fuchs, Hosp and Jenkins, 2001).

Measurement of Academic Progress

The literature reviewed on the Measurement of Academic Progress test explained the text design and addressed reliability and validity of the test instrument. Measurement of Academic Progress assessment used the same measurement scale based on modern test theory that informed well known tests such as the *Graduate Record Exam* and the *Law School Admission Test* (NWEA, 2007). The MAP scale was divided into equal parts called Rash Unit or RIT. Rash units were reliable and accurate indicators of growth over time because the units of measurement did not change (NWEA, 2007). Each rash unit was assigned a numeric value, or RIT score. Students took the MAP and were presented with test items of varying RIT's or levels of difficulty. The MAP system determined the difficulty level the student preformed at and collected data to report the student's abilities. Results were reported as an overall RIT score and as RIT ranges for strand components in reading.

In 2004 the Northwest Evaluation Association published a critical evaluation of the MAP assessment. The Northwest Association research found the MAP test reliable and valid (NWEA, 2004). Pearson product-moment correlation coefficient used by NWEA researchers found the test-retest reliability of the MAP

test. An acceptable correlation of .90 was demonstrated in the fall at fourth grade in the area of reading (NWEA, 2004).

In addition, the Northwest Evaluation Association examined internal consistency of the MAP test. The marginal reliability coefficient showed a correlation of .95 at fourth grade in the area of reading (NWEA, 2004).

Furthermore, NWEA researched the validity of the MAP test. According to the Northwest Evaluation Association,

Content validity of NWEA tests was assured by carefully mapped content standards from a district or state onto a test blueprint. Test items were selected from a specific test based on the test items match to the content standards as well as on the difficulty level of the test being created. In addition, every effort was made within a goal area or strand to select items with a uniform distribution of difficulty (NWEA, 2004 p. 4).

Validity evidence for NWEA tests came in the form of concurrent validity. Concurrent validity was expressed in the form of a Pearson correlation coefficient. Measured against the Stanford Achievement Test, 9th Edition, the MAP received a correlation of .87. Measured against the Washington Assessment of Student Learning, the MAP received a correlation of .81.

Repeated Reading

One instructional approach used to teach fluency was repeated reading. Repeated reading represented an educational strategy for building reading fluency. Students reread a passage until a criterion level was met (Dahl, 1977, Samuels, 1979).

Repeated reading was effectively implemented and successful when conducted by teachers (Dowhower, 1987, O'Shea et al., 1987) paraprofessionals (Merer et al., 2000) and peer tutors (Rasinski et al. 1994, Stoddard, Valcank, Sindelar, O'Shea, and Algozzine, 1993). A meta-analysis (Therrien, 2004) found repeated reading interventions conducted by well-trained adults and peer tutors averaged three times more effective then when conducted by adults and peer tutors not trained in repeated reading intervention. Repeated reading provided corrective performance feedback on word errors and reading speed to students. Performance feedback motivated students to monitor and adjust reading accuracy and speed until a performance criterion goal was reached at the student's instructional reading level (Therrien, Kubina, 2006). Rereading was recognized as an effective procedure to build reading fluency (Adams, Brown, 2004).

<u>The Six-Minute Solution: A Reading Fluency Program</u> *The Six-Minute Solution: A reading fluency program* was an instructional model based on repeated reading research. Research supported the fact students' reading skills

improved when instruction included structured reading activities done with peers (Rosenshine, and Meister, 1994).

Students were placed in fluency partnerships. Partners took turns reading to each other and recorded errors made while listening to one another read for one minute. In order to read fluently, the reader decoded the vast majority of words automatically at approximately 95 percent accuracy.

<u>Summary</u>

Literature reviewed on reading fluency determined that reading fluency was effective when included as part of reading instruction in the classroom. Reading fluency and reading comprehension were connected. Students fluent in decoding were able to comprehend text better because less energy was spent decoding words and instead used to make meaning of text. The instructional approach of rereading was effective and increased students' fluency and comprehension rates. The Measurement of Academic Progress assessment was reliable and indicated a student's strengths and weaknesses in reading.

CHAPTER 3

Methodology and Treatment of Data

Introduction

In the fall of 2006 and spring of 2007, a reading intervention program was implemented to answer the question of whether a fluency based reading intervention program would affect students reading comprehension scores as measured by the Measurement of Academic Progress assessment.

The reading intervention study was done with a small group of six students who participated in a before school reading intervention program Monday through Thursday from 8:00-8:30AM. Students invited to participate in the intervention program were six months or more below grade level as indicated by the Measurement of Academic Progress assessment. Parents were responsible for transporting students to the elementary school building. Students were given a short reading passage, asked to skim and scan for unknown or interesting words, and then asked to write two questions from words that sparked interest. The educational assistant read the passage aloud and modeled fluency while students listened. Next, students read the passage silently, and were given a chance to ask questions about the passage. Afterwards, students paired up and listened to classmates read. One student read the passage while a peer classmate timed the partner reading and listened for mistakes. Students repeated this procedure two times. After practicing reading with fluency, the educational assistant timed the

students on the same passage for one minute and recorded results in a binder to share with classroom teachers. At the end of the intervention session, students wrote a summary of the article and what was learned.

Methodology

To measure the effectiveness of The Six-Minute Solution: A Reading fluency program, qualitative research was implemented. Qualitative sampling allowed the researcher to select a small number of students for a study in such a way that the individuals chosen were able to help the researcher understand the relationship between reading fluency intervention and increased reading comprehension scores (Airasian, Gay, & Mills, 2006, p. 600).

Participants

Fourth grade students invited to participate in the reading intervention program were six months or more below grade level in reading as indicated by the Measurement of Academic Progress assessment. The reading intervention program was overseen by a highly qualified teacher and educational assistant. The teacher and educational assistant were trained in small group instruction and reading fluency intervention.

Instruments

Students were given a pre and post test assessment in the area of reading using the Measurement of Academic Progress assessment in the fall of 2006 and the spring of 2007. This assessment scored students in multiple areas of reading and included fluency and comprehension.

In between these two tests an EA worked with students on a daily basis. The EA used short leveled reading passages provide by the textbook The Six-Minute Solution: A Reading Fluency Program. In addition to the leveled reading passages, the educational assistant used a timer and pen as data gathering devices. Students read timed passages out loud a minimum of twice a week to the EA. The educational assistant recorded student's running records, scored the passages, charted scores and bound student's results in a three ring binder.

According to Airasian, Gay, and Mills (2006), validity was defined as "the degree to which a test measures what it is suppose to measure." Reliability was the degree to which a test consistently measured what the test proposed as being measured. The fluency test data validity and reliability for the author's research was further improved by the relationships and trust developed between the educational assistant and the students.

<u>Design</u>

The researcher used the 2006 fall MAP test and the 2007 spring MAP test as a pre-test/post-test of reading fluency and comprehension growth as demonstrated by students as a result of reading fluency intervention. This experimental study allowed the researcher to examine data on the affects of fluency as related to reading comprehension.

Procedure

A letter sent home invited identified struggling readers to attend a before school reading group, referred to as a morning reading group (see Appendix 1). Students attended the morning reading group Monday through Thursday from 8:00 to 8:30AM. Students were given a short reading passage, asked to skim and scan for unknown or interesting words, and then asked to write two questions from words that sparked interest. The educational assistant read the passage aloud and modeled fluency while students listened. Next, students read the passage silently, and were given a chance to ask questions about the passage. Afterwards, students paired up and listened to classmates read. One student read the passage while a peer classmate timed the partner reading and listened for mistakes. Students repeated this procedure two times. After practicing reading with fluency, the educational assistant timed the students on the same passage for one minute, recorded the student's running record, and graphed results in a binder to share with classroom teachers. At the end of the intervention session, students wrote a summary of the article and what was learned.

Treatment of the Data

The data from timed readings and the 2007 spring MAP test was analyzed and commonalities were noted. The data was interpreted by the researcher and shared to the students' teachers in relation to the research question.

Summary

To answer the question of whether reading fluency affects reading comprehension, an experimental study was put into action. Six students below grade level in reading as identified by the 2006 fall MAP assessment participated in a fluency intervention program. Students were tested a minimum of two times per week on timed reading passages, and results were recorded. Students were given a reading post test in the spring of 2007 on the MAP assessment. The data was then interpreted and results were shared to classroom teachers in relation to the research question.

CHAPTER 4

Analysis of the Data

Introduction

Fourth grade students were involved with the reading intervention study. The parameters were the qualifications of the educational assistant, materials implemented in the intervention and time allotted for instruction and learning. The researcher analyzed the data from the small group reading intervention and interpreted results in relation to the research question.

Description of the Environment

The research involved six fourth grade students from the elementary school. The research was conducted between October 2006 and June 2007.

One of the parameters for the research was the qualifications of the classroom teacher and paraprofessional. The reading intervention program was overseen by a highly qualified teacher and educational assistant. The teacher and educational assistant were trained in small group instruction and reading intervention.

A parameter for the research included materials provided from the elementary school. The elementary school supplied the textbook The Six-Minute Solution: A Reading Fluency Program for the reading intervention program. Additional materials included paper, pencils, graph paper and a stop watch.

An additional parameter was the time allotted for instruction and learning. Students who participated in the reading intervention program received instruction Monday through Thursday from 8:00-8:30AM before the start of the school day. Students were driven to school by parents for reading intervention.

Hypothesis/Research Question

A primary question of the study was: Would intentional teaching of reading fluency using repeated reading increase struggling readers reading comprehension skills?

Results of the Study

Table one displays student achievement in reading as measured by the Measurement of Academic Progress Assessment for Fall 2006 and Spring 2007. Table 1

Student	Fall MAP Assessment	Spring MAP Assessment
1	196	200
2	193	213
3	186	196
4	186	205
5	187	203
6	182	201

Findings

The analysis and interpretation of student performance strongly indicated that a repeated reading fluency program was an effective means of improving student reading comprehension scores. Students demonstrated one year growth in reading comprehension when the student's reading score, as measured by the MAP assessment, rose by four points. One student made exactly one year growth in reading comprehension, while five students made more than two years growth in reading comprehension as measured by the MAP assessment. Reading fluency intervention increased students' reading comprehension scores and supported the researcher's research question.

Discussion

With heightened federal accountability, public schools were under pressure to ensure every student met state and federal standards in core academic areas, including reading. High-stakes tests prompted the need for teachers and students to exceed meritocracy and excel to a higher level of learning. To accomplish greater levels of achievement teachers and students implemented new programs and worked effectively with each other to meet tougher standards. This research has shown the potential value of a reading intervention program based in fluency and its effects on student's gains in reading comprehension.

Summary

The researcher discussed the parameters of the number of students in the reading intervention program, the qualifications of the educational assistant, the materials, and time allotted for instruction. The researcher concluded reading intervention in fluency instruction had a positive affect on student comprehension. According to Griffith and Rasinski,

Reading required readers to accomplish two critical tasks-decoding words and comprehending text. Given the limited amount of attentional resources available to any reader, attention given to decoding requirements cannot be used for comprehension. Thus, readers who spent considerable cognitive effort to decode words compromised reading comprehension because the reader was not able to devote sufficient amount of attention to making sense of the text (Griffith and Rasinski, 2004, p.126).

When decoding and other surface level aspects of reading were automatic, readers were able to devote maximal amounts of attention to deeper levels of reading comprehension (Griffith, Rasinski, 2004). Furthermore, Dudly and Matter's research determined fluency required automatic word recognition at a rate that freed a reader's cognitive resources and allowed the reader to focus on meaning of text. Therefore, readers decoded automatically, and shifted cognitive energies away from decoding and derived meaning from the text (Dudley, Mather, 2005).

The researcher and classroom teachers observed an increase in fluency in students who participated in the morning reading intervention program. The repeated reading strategy seemed to be an effective method at increasing a student's fluency and comprehension scores. While results were noted in the context of a small setting of six students, the researcher recommends the results as preliminary findings until a larger study can be conducted and results analyzed for similar trends.

CHAPTER 5

Summary, Conclusions and Recommendations

Introduction

The importance of proficient reading intervention in public schools has increased significantly over the years. While educational standards and responsibilities has changed dramatically, the number of students who struggle with reading deficiencies has remained steady. As a result federal and local mandates have been passed to target the number of students reading at proficient levels in any given school.

<u>Summary</u>

Educators have generally been left alone to improve reading scores of students in general education classrooms. The need for accurate, efficient, and productive curriculum and strategies has become more and more important with the push for more accountability. Traditional reading intervention methods have not been well accepted by classroom teachers because of the amount of time traditional reading intervention methods take to implement.

Repeated reading was one solution offered for ease of convenience given the small amount of time classroom teachers have to devote to remedial instruction. The researcher wanted to test the effectiveness of repeated reading and repeated reading's impact on student's comprehension skills. A primary question of

research was: Would intentional teaching of reading fluency using repeated reading increase struggling readers reading comprehension skills?

Repeated reading was implemented to answer the above research question. Six students participated in a morning reading group Monday through Thursday from 8:00 to 8:30AM. Students were given a short reading passage, asked to skim and scan for unknown or interesting words, and then asked to write two questions from words that sparked interest. The educational assistant read the passage aloud and modeled fluency while students listened. Next, students read the passage silently, and were given a chance to ask questions about the passage. Afterwards, students paired up and listened to classmates read. One student read the passage while a peer classmate timed the partner reading and listened for mistakes. Students repeated this procedure two times alternating practicing reading and listening to a partner. After practicing reading with fluency, the educational assistant timed the students on the same passage for one minute and recorded results in a binder to share with classroom teachers. At the end of the intervention session, students wrote a summary of the article and what was learned. The results were transcribed, analyzed and interpreted by classroom teachers and the educational assistant. Results were shared with student and parents. Research data allowed the researcher to answer the research question.

Conclusions

The study outcomes demonstrate that repeated reading does indeed provide increase reading fluency and improved reading comprehension skills. In addition, participating students showed on average two years growth in reading while participating in a repeated reading intervention based program.

Recommendations

Based on the conclusions from the study, the researcher would suggest a system-wide implementation of repeated reading as a means of supplying efficient and effective reading intervention in intermediate grades. A pilot repeated reading project should be considered by all districts interested in improving reading scores of struggling readers.

To further evaluate the effectiveness of a repeated reading system the researcher would suggest the following adjustment:

First, the author would suggest expanding the number of students and educational assistants who participated in the program. While six participants was sufficient in providing a glimpse of what a repeated reading program could do for struggling readers and comprehension scores, more data would offer an even wider perspective giving further credence to the overall effectiveness of such a program as a means of intervention.

REFERENCES

- Airasian, P., Gay, L., Mills, G. (2005). Educational Research: Competencies for Analysis and Applications. New York: Prentice Hall.
- Adams, G., Brown, S. (2004). The Six-Minute Solution: A reading Fluency Program. Colorado: Sopris West.
- Bergeson, T. (2007) Not letting kids off the hook in math. *Seattle Post Intelligencer*, pp. c1.
- Dowhower, S.L. (1987). Effects of repeated reading on second-grade transitional readers' fluency and comprehension. *Reading Research Quarterly*, 22(4), 389-406. Retrieved September 15, 2007 from ProQuest database.
- Dudley, A.M. and Mather, N. (2005). Getting up to speed on reading fluency. *New England Reading Association Journal*, 22-29.
- Griffith, L.W., and Rasinski, T.V. (2004). A focus on fluency: How one teacher incorporated fluency with her reading curriculum. *The Reading Teacher*, 126-138.
- Fushs, LS., D., Hosp, M.K., Jenkins, J.R. (2001). Oral reading fluency as an indicator or reading competence: A theoretical, empirical, and historical analysis. *Scientific Studies of Reading*, 239-256. Retrieved September 15, 2007 from ProQuest database.
- Mercer, C.D., Campbell, K.U., Miller, M.D., Mercer, K.D., and Lane, H.B. (2000). Effects of a reading fluency intervention for middle schoolers with specific learning disabilities. Learning Disability Research and Practice, 15(4), 179-189.
- National Institute of Child Health and Human Development. (2000). *Report of the National Reading Panel*. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction. Washington, DC: U.S. Government Printing Office. (2004, March). Retrieved September 15, 2007 from ProQuest database.
- Northwest Evaluation Association. (2007). Research-based Accuracy: Scientifically-based NWEA MAP tests provide accurate, reliable, and

valid information about student growth. Retrieved September 15, 2007 from http://www.nwea.org/assessments/reserchbases.asp

- Northwest Evaluation Association. (2004). Reliability and Validity Estimates. Retrieved November 28, 2007 from http://www.nwea.org/assessements/researchbases.asp
- O'Shea, L.J., Sindelar, P.T. and O'Shea, D.J. (1987). The effects of repeated reading and attentional cues on the reading fluency and comprehension of learning disabled readers. *Learning Disabilities Research*, 2(2), 103-109. Retrieved September 15, 2007 from ProQuest database.
- Office of Superintendent of Public Instruction: Washington state report card. Retrieved October 25, 2007 from http://www.k12.wa.us/summary.aspx?schoollId=403&OrgType=4&report Level=School&year=2006-07
- Rasinski, T., Padak, N., Linek, W., & Sturtevant, E. (1994). Effects of fluency development on urban second-grade readers. *The Journal of Educational Research*, 87(3), 158-165. Retrieved September 15, 2007 from ProQuest database.
- Rasinski, T. (2003) The fluent reader. New York: *Scholastic*. Retrieved September 15, 2007 from ProQuest database.
- Reliability and validity estimates. Retrieved September 15, 2007, from Northwest evaluation association Web site: <u>http://www.nwea.org/assets/research/NWEA%20Reliability%20%20Valid</u> <u>ity.pdf</u>
- Rosenshine, B. and Meister, C. (1994). Reciprocal teaching: A review of research. *Review of Educational Research*, 64, 479-530. Retrieved September 15, 2007 from ProQuest database.
- Samuels, S.J. (1979). The method of repeated readings. *The Reading Teacher*, 32, 403-408. Retrieved September 15, 2007 from ProQuest database.
- Stoddare, K., Valcante, G., Sindelar, P.T, O'Shea, E., & Algozzine, B. (1993). Increasing reading rate and comprehension: The effects of repeated readings, sentence segmentations, and intonation training. *Reading*

Research and Instruction, 52(4), 53-65. Retrieved September 15, 2007 from ProQuest database.

- Stover, D. (2007, March). the big fixes now needed for "No Child Left Behind". *The Education Digest*, Volume. 72, Issue. 7. pp. 4-8. Retrieved September 15, 2007 from ProQuest database.
- Therrien, W.J., and Kubina, R.M. (2006). Developing reading fluency with repeated reading. *Intervention in School and Clinic*, 180-184. Retrieved September 15, 2007 from ProQuest database.
- Therrien, W. (2004). Fluency and comprehension gains as a result of repeated reading: A meta-analysis. *Remedial and Special Education*, *25*(*4*), 252-262. Retrieved September 15, 2007 from ProQuest database.

APPENDIX

1. Sample of invitational letter addressed to parents of students who qualified to participate in a before school reading intervention program:

Dear Parents,

Your child is invited to join our morning reading group. This group of children will meet Monday Tuesday, Wednesday and Thursday mornings from 8:00-8:30, in Mrs. _____ room to practice reading skills. Because there is no district transportation available, you will need to insure that your child arrives at school by 8:00 AM if they are to take advantage of this opportunity. There are a limited number of students that can participate in this program so attendance will be important. We will not have the morning reading group on any day there is a late start or we do not have school.

The purpose of the reading group is to give your student time to practice reading skills that we are covering in the classroom. Students will read short passages and work on comprehension skills, fluency, vocabulary and summarizing skills.

The group will start on Wednesday, October 18th and continue until the end of the school year. If you would like your child to participate please sign the permission slip below and return it to school with your child. IF you have any questions you can contact your teacher at school (phone number).

Thank you,

Mrs. (teacher name)

Mrs. (teacher name)

Mrs. (teacher name)

Mrs. (teacher name)

I give my child______permission to participate in the before school reading group. I understand that I am responsible for having them at school by 8:00 every Monday, Tuesday, Wednesday and Thursday.

Parent Signature

levels are estimates. Mathematic 4th WASL:	caution and iness for W.	10	9	. 00	1 0	n (n	4	ω	2MAPK2	A MAPK2	S UKA	~	s -	- 7		Gra			neadiness for WASL Cla in concert with MAP data	caution and	10	6 C		6	5	A (2 ^{maunz}	1 MARK2	KWAPK2		rade	
setimates. Mathematics Percendie Out 4th WASL: 54th	I other asses ASL Classm	≥243	2241	2738	2035	5226	≥219	≥212			NIA	NIA	NIA	NIA		95IF	Orange		ASL Classe VAP data	other asses	-≥261	2257	2/48	≥240	≥233	2200	CHC			95th	Gifted	
ndie Out	sment data to	2230	2226	2004	0002	2211	≥205	≥196			>30 DRA	>24 UKA	26 URA	270	(+8 Mos)	Grade	Above	-all 2006	oom based at	sment data k	≥245	2241	1672	2224	2217	2/08	100			(+6 Mos)	Above	Blue
e sui in dev	make decisi	229-224	225-220	222-217	210-210	210-205	204-198	195-189	184.174	190 120	24-30 DRA	14-24 DRA	2-6 URA	60-69		Pamanfie	On Grade	Fall 2006 Reading	ssessment sh	make decisi	244-235	240-231	122-062	223-216	216-209	207-201	183-177	174-153	157-139	Percentile	42-65th	Blue
er volucen vin invo-r dala. Unive guides are suin in development. I ness uno levels are estimates Manematics Precede Out	Use caulion and other assessment data to make decisions about placement and readiness for WASL. Classnoon based assessment should always he considered	223-216	219-212	216-200	202-607	204-197	197-189	188-179			18-20 DRA	+	-	40-59	Innue I	LA Most	Yellow		nadimess for WASL. Cassroom based assessment should always be considered in concert with MAP data.	Use caution and other assessment data to make decisions about placement and	234-227	230-222	720-214	215-208	208-203	200-195	100 105	100 m		(-6 Mos)	Grade	
ese uka	ament and	\$215	5211	80C>	1075	5196	\$188	s178			<18 DRA		100	855	Contra 1	(SR Mina)	Red		e considered	ement and	s226	5221	5213	\$207	\$202	5104				(>6 Mos)	Grade	
the established levels	Note: K,1,2	10		. 00	10	n (n	4	ω,	2MAPK2	A MAPK2	3 DRA	2				Gra	de		study will be complete the established levels	Note: K,1,2	10	ω ο	- 1	6	σ.	• •	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 MAPK2	K MAPK2	G	rade	
the established levels.	Note: K,1,2 MAP for Primary Grades is for Estimate Purposes Only. The noming	2244	2242	>240	2005	2228	2222	2215			NIA	NIA	NIA	NIA	and the	Sumed	Orange		study will be completed by Fail 2008. These are estimated %illes that agree with the established levels.	MAP for Prima	≥265	≥263	2250	≥249	≥241	1777	100			95th	Gilled	
	ary Grades is fo	2231	2775	>200	0172	2214	≥208	2200			>34 DRA	>28 DRA	>14 DRA	>3 DRA	(+6 Mcs)	Grade	Above	Winter 20	Fall 2008. Th	ary Grades is fi	≥247	2244	2234	≥228	2221	2012	curv			(+6 Mos)	Above	Blue
	or Estimate Pur	230-225	227-222	205.210	212-112	213-208	207-201	199-193	100.121		28-34 DRA	-	-				On Grade	Winter 2007 Reading	ese are estima	yr Estimate Pu	246-237	243-234	233-224	227-219	220-213	211-205	190-183			Percentile	42-65th	Bue Bue
	poses Only. 1	224-216	221-214	2192.211	211-204	207-200	200-192	192-184			20-24 DRA	-	-	+	form n-1	Grade		- Bl	ated %tiles that	rposes Only.	236-229	233-224	223-216	218-211	212-206	001-100 081-081	105 100				Grade	ines.
	'he norming	\$215	513	0175	5205	\$199	\$191	5103			<24 DRA	<14 DRA	<3 DRA	40-59	fermine.	Grades	Red		l agree with	The norming	s228	\$223	S215	s210	\$205	5109				(>6 Mos)	Grade	
/th Grade: 10th Grade	Estimated of	10		» -	10	- cn	4	ω'	2MAPK2	MAPK2	3 DRA	2	1	×		Gra	de		4th Grade: 7th Grade: 10th Grade	Estimated o	10	6 0	7	6	σ.	A 0	2 ^{WAPK2}	1 MAPKZ	K MAPIC2	Gr	ade	
/th Grade: 4bth Percentile (~219 KI), 10th Grade: 42nd Percentile (~225 RT	ut scores for re	≥245	2422	CPUS	>730	2230	≥225	≥218			NIA	NIA	NIA	NIA	inne	Gitted	Orange		55th Percentile 55th Percentile	ut scores for m	≥265	2263	≥255	≥249	2241	1772	1001			95Ih	Orange	de l
(~219 KU)~ le (~225 RIT)	ading (RIT v.)	2231	D605	0375	2002	≥216	≥210	>203		Ī	>38 DRA	>30 DRA	>18 DRA	24 DRA	(+6 Mos)	Grade	Above	pring 20	(~235 RIT)~ (~235 RIT)~ e (~245 RIT)	athematics (R	≥249	2/46	2236	≥231	2225	201			-	(+6 Mbs)	Above	Blue
I'm Grade: 40th Percentile (~219 kt),0%21.exel 3 Protoency 10th Grade: 40th Percentile (~235 RT)79%21.exel 3 Protoency	Estimated out scores for reading (RIT v. WASL) are estimated to be 4th Grader 40 or Persentia (~200 RTT) - 47% 21 and 3 Performance	230-225	222-022	117-727	219-214	215-210	209-204	202-197	105 107		30-38 DRA	20-30 DRA	12-18 DRA	1-3 DRA	L'OINBIINE	42-60th	On Grade	Spring 2007 Readin	This Grade: 55th Percentile (~210 K1),62%±Level 3 Proficiency 7th Grade: 55th Percentile (~235 R1T),62%±Level 3 Proficiency 10th Grade: 55th Percentile (~245 R1T),69%±Level 3 Proficiency	Estimated cut scores for mathematics (RIT v. WASL) are estimated to be:	248-239	245-236	235-226	230-221	224-216	245.200	196-189			Percentile	On Grade 42-65th	Blue Blue
3 Proficiency	mated to be	224-216	212-022	017-017	213-205	209-202	203-195	196-188			24-28 DRA	14-18 DRA	-	+	(count or)	Grade		- Di	Proficiency Proficiency	e estimated to	238-230	235-226	225-217	220-213	215-209	207-202	100 101				Grade	Ē
Reading Percentile Cut		\$215	1170	1074	S204	\$201	\$194	\$187			24 DRA	-	-		ferminar)	Grade	Red			bei	\$229	5225	5216	5212	\$205	2011				(>6 Mos)	Grade	

TABLE

1. Table Top RIT Guide