The Effects of Guided Reading Instruction on Students'

Fluency, Accuracy, and Comprehension at

Woodview Elementary School

by

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Abstract

The purpose of this study was to determine if the implementation of the Fountas and Pinnell Guided Reading System would have an effect on student levels of fluency, accuracy, and comprehension. A total of 40 second and fourth grade students were tested prior to the implementation in March, and after the implementation in June. Results were gathered, compared, and totaled to determine if there was an overall increase, decrease, or if student scores remained the same after implementing the Fountas and Pinnell Guided Reading System. While there was an increase in student scores in all three areas, the areas of accuracy and comprehension had the largest number of students show an increase in their scores, making the implementation successful.

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Chapter I: Introduction

"In a truly balanced literacy program, *how* you teach is as important as *what* you teach" (Iaquinta, 2006, p. 417). Guided reading instruction is a necessity in the elementary classroom. Through such instruction educators can meet the diverse needs of their readers as such programs allow for differentiated reading lessons. Schools who implement a guided reading program produce more confident readers. Overall, they are more fluent, accurate, and can effectively answer comprehension questions related to a piece of reading.

Studies which have already been conducted in the area of guided reading indicated educators needed to first understand what guided reading instruction was and how it looked in a classroom before they could effectively implement such a program. Ford and Opitz (2001) wrote, "True, guided reading...is increasingly perceived as an integral part of a balanced reading program designed to help all children become independent readers" (p. xv). Woodview Elementary School recently implemented such a program called the Fountas and Pinnell Guided Reading System. Implementing this system has allowed staff members to test and teach their students based on each of their individual needs.

The Fountas and Pinnell Guided Reading System consists of leveled books from A to Z which teachers use to find guided reading levels for each of their students. This is useful because it allows teachers to group students together based on their reading levels, and gives students the opportunity to read books which are a good fit for them based on their guided reading level. As the student is reading, the teacher marks his/her errors, self-corrections, fluency, and follows the story with a series of questions to check the student's comprehension. Teachers are utilizing the Fountas and Pinnell Guided Reading System in hopes of seeing increased fluency, accuracy, and comprehension among their students.

Statement of the Problem

There is a great deal of information supporting the implementation of guided reading instruction as a way to increase student reading skills, however a problem lies in the fact that little is known on the exact increase students experience over the course of a school year in the areas of fluency, accuracy, and comprehension. This study took place with second and fourth grade students at Woodview Elementary School in Grafton, Wisconsin. Research which has already been conducted on guided reading instruction and the success of similar programs in other schools was utilized. Since Woodview teachers have access to the Fountas and Pinnell Guided Reading System, it was the tool used to assess students.

Purpose of the Study

The purpose of this study was to determine the amount of student growth in the areas of fluency, accuracy, and comprehension through the use of guided reading instruction.

Understanding the instruction method being used increases student's fluency, accuracy, and comprehension makes clear the benefits of guided reading instruction for teachers to use within the classroom. Fluency, accuracy, and comprehension levels contribute to student reading success as a whole, but often growth in student reading levels is the only indicator looked at to determine growth in reading. Recognizing growth in the areas of student levels of fluency, accuracy, and comprehension is important to ensure students are making total gains in reading.

Assumptions of the Study

The assumption made in this study was that implementing the Fountas and Pinnell Guided Reading Program would result in the increase of fluency, accuracy, and comprehension in student's reading abilities. This assumption is examined in this study through the questions that follow.

Questions Addressed by this Study

This research study addressed three questions. The purpose behind each question was to keep the study narrowed and focused. Each question addressed a specific area of the study.

The first focused on reading fluency. This question specifically asked: What effect does guided reading have on reading fluency?

The second question focused on reading accuracy. This question specifically asked: What effect does guided reading have on reading accuracy?

The third and final question focused on reading comprehension. This question specifically asked: What effect does guided reading have on reading comprehension?

Definition of Terms

There are six terms which needed to be defined to provide clarity. The terms are as follows:

Accuracy. A student's ability to read a passage with minimal errors determines his/her accuracy. Accuracy is measured by dividing the number of errors a student makes while reading by the number of words in the passage. This yields a percentage.

Comprehension. A student's understanding of what he/she has read. Comprehension is measured based on how effectively a student can answer questions related to the reading and can recall details. Prompts are given and the student's answers are scored on a 0 to 3 point scale based on the completeness of his/her answer.

Differentiate. A method used by classroom teachers to make instruction a meaningful fit for all learners. Educators differentiate to make lessons which meet the needs of their student's varying abilities.

Fluency. A student's ability to accurately read a passage at an acceptable rate without pausing unnecessarily. Notes taken while the student reads aloud are used to determine where the student falls on a 0 to 3 point scale to determine fluency.

Guided reading instruction. A form of instruction used to help students utilize reading strategies at each of their own individual levels in order to become better independent readers. Guided reading is a form of small group instruction. Students at the same reading level are grouped together for instruction. Groups are determined through observation and assessment of each student.

Running record. A short reading passage used in assessing student reading levels. The student reads the passage as the teacher marks errors and self-corrections on the running record. Once the reading is complete the teacher asks the student to recall details and answer questions related to what he/she just read.

Limitations of the Study

There was one limitation to this study. Parents were asked to sign and return a consent form in order for their child to participate in the study. The limitation was the number of parents who did or did not do so.

Methodology

The purpose of this study was to determine the effect of guided reading instruction on student levels of fluency, accuracy, and comprehension. Each variable was addressed separately to determine if there was an increase, a decrease, or if student levels stayed the same in each area. The study was completed using the Fountas and Pinnell Guided Reading System in one second grade and one fourth grade classroom at Woodview Elementary School. Notes were

taken on each student and their levels of fluency, accuracy, and comprehension were recorded at the beginning and end of the study.

Chapter II: Literature Review

The purpose of this study was to determine the effects of guided reading on student levels of fluency, accuracy, and comprehension. Examining research which has already been conducted in each of these areas helped inform this study. Studies related to similar reading programs were reviewed. More specifically, the topics which the Review of Literature addresses are guided reading as a whole, fluency, accuracy, and comprehension.

Guided Reading

Reading is a complex aspect of instruction for many educators. Due to this fact, so many educators are easily overwhelmed by the wide variety of student needs which should be addressed. In the process of trying to reach each student at his/her level, educators often become frustrated at their inability to do so effectively. One rational for diminishing this frustration is the implementation of a guided reading program. Fawson and Reutzel (2000) noted, "Teachers we have worked with are typically excited about the possibilities of providing the necessary scaffolding and instructional support to their students that guided reading offers" (p. 84).

This process begins with educators first assessing their students' reading abilities. This is done using running records. Educators need to assess students in order to group them appropriately. Data in the areas of reading fluency, accuracy, and comprehension need to be gathered on each individual student to allow educators to first discover the needs of each learner, and to then develop approaches and instruction to ultimately improve student performance (Fountas & Pinnell, 1996). Assessing fluency, accuracy, and comprehension will often provide insight as to if a text is too easy or too difficult. Recognizing such factors aids educators in discovering when to reassess and move a student to a different group where his/her needs will be better met.

Utilizing guided reading within the classroom provides educators with an effective way to differentiate reading instruction, allowing them to meet the needs of their students. The success of students and their ability to begin using the strategies they learn on their own is a goal of educators who implement guided reading. Students receive ample support to encourage an eventual outcome of successful, independent silent reading (Ford & Opitz, 2008). A study conducted at Woodland Intermediate School in Illinois concluded such findings as Harris (2004) stated, "These pragmatic educators sensed that frequent small group instruction and assessment components, inherent in guided reading, were an outstanding vehicle for achieving individualized instruction" (p. 24).

Such individualized instruction begins with forming guided reading groups based on the data gathered from assessing. A survey of 3,000 educators who implemented guided reading conducted by Ford and Opitz (2008) found these groups may consist of up to six students, meeting about three times a week for a duration of about 20 minutes each time. During this small group instruction, elementary educators from kindergarten through fifth grade guide students through a selected text which meets the reading needs of the group. Creating guided reading groups makes it easier for elementary educators to diversify lessons and allows students to learn in a way which is best for them, increasing their fluency, accuracy, and comprehension.

Guided reading offers small-group support and explicit teaching to help students take on more challenging texts. As they read texts that are organized along a gradient of difficulty, students expand their systems of strategic actions by meeting the demands of increasingly complex texts. They provide evidence of their thinking through oral reading, talk, and extension through writing. (Fountas & Pinnell, 2007, p. 3)

Students benefit greatly from the implementation of guided reading instruction. Reading is everywhere, which is why it is such an important and necessary skill for children to be able to do. So often, students who feel they cannot read just give up. By providing students with texts at their own guided reading level, they begin to realize exactly what they are capable of and eventually develop an excitement for reading. "When difficulty of text matches a student's capabilities, interest in and love of reading is more likely to be fostered" (Harris, 2004, p. 25). Making reading fun and enjoyable encourages students to take part in reading activities more often.

Lyons (2003) expressed just how important motivation is in relation to reading when she wrote the following, "Motivation is arguably the most critical ingredient for long-term success in learning to read and write" (p. 84). Lyons discussed this further in her text through explaining the learning experiences of Matthew, an unmotivated first grader. Matthew struggled with reading and writing and was put into the Reading Recovery program where he was able to succeed and became excited about reading. Reading Recovery is strictly used with "low-achieving first graders" (Reading Recovery Council of North America, 2010). Despite this difference, Reading Recovery is much like guided reading. Both programs are used to aid each individual student in succeeding in reading at a pace and reading level appropriate for him/her. "Through the work of Marie Clay's Reading Recovery, the guided reading framework became a prevalent instructional practice in the primary grades" (Ferguson & Wilson, 2009, p. 293).

Through the use of both individualized instruction and guided reading groups, students are able to move at a pace comfortable for them. "If young children are to learn to read, they must encounter material that supports their development" (Fountas & Pinnell, 1996, p. 98).

Students are engaged and can feel comfortable and confident as they read aloud and are asked to

recall details. Lyons (2003) suggested teachers "create learning situations and activities in which children are interested and can meet with success" (p. 92). Students develop an understanding of important reading strategies and begin to internalize the strategies and self-monitor while they are reading. Guided reading instruction takes the stress off the students who do not feel successful. Lyons suggestion to "provide opportunities for children to take risks without the fear of failure" (p. 92) allows them to read with others knowing the environment they are in is free from judgment and is set up for their specific learning needs. Each of these factors promotes fluency, accuracy, comprehension, and perhaps most important of all, mastery in reading. "The ultimate goal is to foster independent readers, and guided reading is a means to this end rather than the end itself" (Ford & Opitz, 2001, p. 2).

Fluency

Fountas and Pinnell (2006) defined fluent reading as "using smoothly integrated operations to process the meaning, language, and print" (p. 62). Implementing guided reading is a way to build fluency in young readers. Fluency is an aspect of guided reading and is used to aid teachers in finding each student's guided reading level. Studies have shown reading fluency increases when students read at their own specific level. "Curriculum-based measurement of oral reading fluency (ORF) is especially useful because it accurately predicts later reading success" (Coulter, Shavin, & Gichuru, 2009, p. 71). One study which further examined the impact of guided reading instruction on student fluency was conducted by Nes-Ferarra (2005) who wrote, "Fluency is a skill that develops with practice and observation, and permits the reader to grasp larger units and even phrases with immediate recognition" (p. 215).

Nes-Feraira (2005) found implementing reading in a one-on-one manner improved student fluency. Her study focused on one student, Sally, who struggled with fluency, especially

when reading in a whole group setting. Nes-Ferarra actively took notes and held discussions with her subject. She also provided her subject with texts that were at her reading level to enhance fluency. While working with this student individually, Nes-Ferarra found "she made substantial progress in reading fluency over the course of the study. By the end of the study, Sally read faster, smoother, and with more phrasing and emphasis" (p. 227). The success of individualized instruction and guided reading implementation with one child can be a sign additional children may benefit as well.

"In the primary grades, guided reading increases students' oral reading fluency, phonetic understanding, as well as their overall reading level" (Ferguson & Wilson, 2009, p. 294). In a study conducted by McCurdy, Daly, Gartmaker, Bonfiglio, and Persampieri third grade guided reading instruction and the results of the instruction were examined.

There were three administered conditions. The instructional condition consisted of small group reading instruction and rereading. The second group obtained a tangible reward as their performance increased, and the control group was used for comparison. The instructional condition showed the greatest increase in fluent reading performance. (Ferguson & Wilson, 2009, p. 294)

Their study illustrated the growth in fluency among the third grade students in the instructional condition which was described in a way that mimics guided reading instruction with the use of small groups and rereading strategies.

Another study (Bonfiglio, Daly, Persampieri & Anderson, 2006) investigated which type of small group instruction would show the most growth. Their strategies included passage previewing, choral reading, error correction, and tangible rewards. These strategies were provided to the students in a variety of combinations and over time to

determine which would offer the most gains when used in guided reading. Fourth graders in the instructional, small group that included passage previewing, error correction and choral reading increased their fluency (correctly read words) and decreased their errors per minute. (Ferguson & Wilson, 2009, p. 294)

The strategies used in the instructional small group are also strategies used during guided reading instruction indicating the importance of guided reading instruction and its relationship to an increase in reading fluency among students.

Accuracy

"Word accuracy is measured by the percentage of words read correctly in a passage" (Mesmer, 2010, p. 21). Accuracy is an indicator of whether or not students are reading books at an appropriate level. "The accuracy rate lets the teacher know whether she is selecting the right books. The books should be neither too easy nor too hard" (Fountas & Pinnell, 1996, p. 90). The target accuracy level for students in second grade is 90% or better and the target accuracy level for students in fourth grade is 95% or better. Students in either grade who obtain an accuracy level below their target level are likely reading texts which are too challenging. If the books are too difficult, student accuracy will be poor. "Stretches of accurate reading mean there are appropriate cues that allow the child to problem-solve unfamiliar aspects of the text" (Fountas & Pinnell, 1996, p. 90). When the teacher implements guided reading groups he or she must be sure the books chosen are at an appropriate level for each of the readers in the group.

A study conducted by Nes (1997) illustrated the benefits of small group reading on student accuracy. Although Nes did not implement guided reading, she did implement paired reading which is still conducted in a small group setting with focus on increasing student fluency, accuracy, and comprehension. The main difference between paired reading and guided

reading is paired reading can be done with any book, not necessarily a leveled guided reading book. Nes reported, "All four of the less-skilled readers in the study demonstrated improvement in fluency, with individual differences in the amount of improvement; demonstrated and maintained very high accuracy percentages; and had high scores on the maze comprehension measures" (p. 41).

An additional study in the area of accuracy conducted by Mesmer had inconclusive results. Mesmer compared decodable text accuracy levels to qualitatively leveled text accuracy levels of 74 first grade students. Decodable texts are books which encourage students to utilize and apply knowledge they have on letter sounds within words and word families. Phonics is the driving emphasis behind such texts. Decodable texts focus largely on long vowel or short vowel patterns. For example, if short a is the vowel pattern in the decodable text, then each sentence would have one or more short a words in it to reiterate the short a pattern. Qualitatively leveled texts are the types of books used during guided reading instruction, which "should support readers in using multiple sources of information to recognize words" (Mesmer, 2010, p. 22). Mesmer conducted her study over the course of the school year and compared the data she collected to make her conclusions regarding whether or not decodable texts or qualitatively leveled texts (those used in guided reading instruction) made a difference in each student's accuracy level. Mesmer found, "The analysis of accuracy across the first-grade year showed uniform growth regardless of text and inconclusive results for texts" (2010, p. 30).

Comprehension

Comprehension is a fundamental aspect of reading. "Comprehension is the vital, central core of the broader and more complex ability to reason" (Fountas & Pinnell, 2006, p. 4).

Students benefit greatly from understanding what they have read. Difficulty in answering

comprehension questions indicate a text is too difficult for a student and he/she is not retaining the information from the text being read. Baier (2005) conducted a study on reading comprehension and reading strategies and found, "after using reading comprehension strategy, the sixth grade students received higher test scores than before using the reading comprehension strategy" (p. 38).

"The principles underpinning the practice of guided reading are concerned with the teaching of comprehension strategies and the development of critical literacy" (Fisher, 2008, p. 20). Guided reading instruction provides students with such strategies when it comes to comprehension as well as providing students with a comfortable place to participate and answer comprehension questions. Fisher (2008) wrote, "A guided reading group offers a supportive environment in which to promote such active participation in meaning making" (p. 20). In this way, students have higher chances of understanding texts they read. Iaquinta (2006) took the importance of guided reading instruction and its impact on students' comprehension into consideration when she wrote,

A framework for guided reading lessons (Fountas & Pinnell, 2001) provides for different kinds of learning in different ways; each element has a function related to students' ability to construct meaning. These components work together to form a unified whole and create a solid base from which to build comprehension. (p. 417)

Both fluency and accuracy can impact comprehension in reading. Fountas and Pinnell reported, "A study of over one thousand fourth graders' oral reading fluency found that rate, fluency, and accuracy were all highly related to comprehension" (1996, p. 150). When a student's reading is not fluent and accurate, it is more difficult for the student to comprehend

what he/she has read due to the amount of time taken to decode words and make it to the end of the reading selection. Bashir and Hook (2009) wrote,

The relationship between the development of fluency as a key link between word recognition and comprehension is only now being considered (Hook & Haynes, 2008; Katzir et al., 2006; Meyer & Felton, 1999; National Reading Panel, 2000). We know that fluency and comprehension are linked (Fuchs, Fuchs, & Maxwell, 1988) because efficient fluent word recognition frees up processing resources to focus on comprehension (Adams, 1990; Perfetti, 1985). In addition, slow word recognition may place demands on remembering what is read and therefore interfere with effective comprehension (Carlisle & Rice, 2002). (p. 198)

Conclusion

Fluency, accuracy, and comprehension are all aspects involved with guided reading instruction. The purpose of including and examining each of these aspects in guided reading is to "meet the varying instructional needs of all the students in the classroom...to teach students to read increasingly difficult texts with understanding and fluency; to construct meaning while using problem solving strategies..., and understand concepts or ideas not previously encountered" (Iaquinta, 2006, p. 414). Implementing a program such as guided reading provides students with focused instruction at their specified level increasing each student's overall reading ability.

Chapter III: Methodology

The purpose of this study was to determine the effect of guided reading instruction on student levels of fluency, accuracy, and comprehension. Each variable was addressed separately to determine if there was an increase, a decrease, or if student levels stayed the same in each area.

Research Design

The research design for this study was descriptive and an experimental methodology was used to gather data on the variables. The independent variable, which was chosen because it was unchanged by the other variables in the study, was the Fountas and Pinnell Guided Reading System. The dependent variables were student levels of fluency, accuracy, and comprehension in reading and were chosen to be the dependent variables because of the anticipated change which would occur once the independent variable was put into place. The control variable was original student levels of fluency, accuracy, and comprehension prior to the Fountas and Pinnell Guided Reading System being implemented. As the control variable, each student's original levels went unchanged and were used to compare the collected data to at the conclusion of the study.

Subject Selection and Description

The subjects for this study were 24 second grade students between the ages of seven and eight and 16 fourth grade students between the ages of nine and ten at Woodview Elementary School. There were 13 second grade girls, 8 fourth grade girls, 11 second grade boys, and 8 fourth grade boys yielding a total of 21 girls and 19 boys, or 40 subjects total assessed for this study. Second grade students were assessed in their second grade classroom by their teacher, and fourth grade students were assessed in their fourth grade classroom by their teacher. Parent permission was obtained for students to participate in the study (See Appendix

A). Parents were assured their child could not be identified in any way. All 24 second grade students returned their signed permission slips and 16 out of 20 fourth grade students returned their signed permission slips. Students who did not return a student permission form were not included in this study.

Instrumentation

A running record was used to gather data on student fluency, accuracy, and comprehension in reading (See Appendix B). The running record came from the Fountas and Pinnell Guided Reading System. The assessment was administered to each student individually in the same room as, but at a table away from their classmates who were working quietly at their desks. The assessment began with the teacher introducing a book and proceeded with the student reading the book. While the student read aloud to the teacher, the teacher marked errors and self-corrections in the provided columns on the running record to later determine the student's reading accuracy. All students were aware the teacher would take notes on their reading performance and were unbothered and not distracted by this.

The teacher also made note on the running record of how the student sounded when reading and used the information to determine the student's fluency on a 0 to 3 scale. On the fluency scale, a student who scored zero typically read word-by-word with awkward pausing and no expression; a student who scored a one read in two-word phrases slowly, but not smoothly; a two was given to a student who read mostly smooth and expressive in three- or four-word groups; and a three was given when the student read smoothly with expression in large meaningful phrases and at an appropriate rate.

The test concluded with a series of comprehension questions for the student to answer in order to check his/her understanding of the text just read. Student responses were scored on a 0

to 7 scale. The scoring for this portion of the test was somewhat subjective. The running record listed the questions asked and also provided examples of acceptable answers to guide the teacher's scoring decision. In the end, the score was decided upon at the teacher's discretion. Students who earned zero to three points demonstrated unsatisfactory comprehension, a four showed limited comprehension, a five showed satisfactory comprehension, and a six or seven indicated the student had excellent comprehension.

Data Collection Procedures

The test was implemented during small group reading time in the second grade and fourth grade classrooms during the months of March and June. Administering the tests in March and June allowed enough time between tests to be able to distinguish if the implementation was successful. Both the second and fourth grade classrooms utilized in the study were chosen because the teachers in each classroom were familiar with the procedure to correctly implement the Fountas and Pinnell Guided Reading System.

Students were called to the back table in each of their classrooms to work one-on-one with the classroom teacher where the reading test was administered. Students in second grade read with their second grade teacher and students in fourth grade read with their fourth grade teacher. Students were asked to read aloud to the teacher and then answer a series of questions based on what they read. Test time varied from student to student in a range from 15 to 30 minutes, but there was no time limit. Each classroom teacher kept track of student levels of fluency, accuracy, and comprehension on a table designed for this study. The researcher gathered test results after initial student testing was completed and after students were retested in order to compare the two sets of data to one another.

Data analysis. The test data was analyzed using a table to illustrate growth, non-growth, or if students stayed the same in the areas of fluency, accuracy, and comprehension (See Appendix C and Appendix D). The results were compared to original student levels of fluency, accuracy, and comprehension which were obtained prior to the implementation of the Fountas and Pinnell Guided Reading System.

Limitations

There was one procedural weakness to this study. The test was implemented by two different teachers within their classrooms. Both received the same training, but due to the somewhat subjective scoring for the comprehension portion of the test, overall comprehension scores may be skewed based on each individual teacher's perception of student answers.

Chapter IV: Results

The purpose of this study was to determine if student levels of fluency, accuracy, and comprehension increased with the implementation of guided reading instruction. The research design was descriptive and an experimental methodology was used to gather data on the variables. The subjects for this study were second grade students between the ages of seven and eight, and fourth grade students between the ages of nine and ten at Woodview Elementary School in Grafton, Wisconsin. A total of 40 students participated in the study, 19 of which were male and 21 of which were female.

Item Analysis

Fluency. The first research question in this study addressed the effect of guided reading instruction on fluency. Fluency was assessed using the Fountas and Pinnell Guided Reading System. The students read a passage aloud and notes were taken on each individual's fluency level. Fluency was scored on a 0 to 3 scale with a score of zero indicating little to no fluency and a score of three indicating the student was fluent.

Table 1 illustrates the results gathered while assessing student fluency in the form of the number and percentage of students who increased, decreased, or stayed the same.

Table 1
Student Fluency

Fluency Level	Number of Students (N=40)	Percentage of Students
Increased	12	30%
Stayed the Same	25	63%
Decreased	3	7%

The table illustrating student fluency shows there was little decrease in this area. About one-third of students showed an increase in fluency, and more than half of the students who participated in this study neither increased or decreased in the area of fluency.

Accuracy. The second research question in this study addressed the effect of guided reading on accuracy. Students were assessed while reading a designated passage from the Fountas and Pinnell Guided Reading System. Accuracy was determined by the number of errors a student made while reading. The formula used to yield a percentage of accuracy was the number of errors made while reading, subtracted from the number of words in the passage, multiplied by 100.

Table 2 illustrates the results gathered while assessing student accuracy in the form of the number and percentage of students who increased, decreased, or stayed the same.

Table 2

Student Accuracy

Accuracy Level	Number of Students (N=40)	Percentage of Students
Increased	20	50%
Stayed the Same	16	40%
Decreased	4	10%

As with fluency, the data gathered in the area of accuracy showed little decrease. Half of the students showed an overall increase in accuracy. A little less than half of the students tested in this area showed neither an increase or a decrease in accuracy. Instead, they stayed the same. Comprehension. The third research question in this study addressed the effect of guided reading on comprehension. Students were assessed on comprehension after they read a designated passage aloud. Questions were based on the reading passage. Student responses were scored on a 0 to 7 scale with a score of zero indicating little to no comprehension and a score of seven indicating the student had outstanding comprehension. More specifically, students who earned zero to three points had unsatisfactory comprehension, a four demonstrated limited comprehension, a five showed satisfactory comprehension, and a six or seven indicated the student had excellent comprehension.

Table 3 illustrates the results gathered while assessing student comprehension in the form of the number and percentage of students who increased, decreased, or stayed the same.

Table 3
Student Comprehension

Comprehension Level	Number of Students (N=40)	Percentage of Students
Increased	19	48%
Stayed the Same	12	30%
Decreased	9	22%

Nearly 50% of students demonstrated an increase in comprehension, making it the most common result of this study. Almost one-third of students showed neither an increase nor a decrease in comprehension while reading and about one-fifth of students showed a decrease.

Chapter V: Discussion

The purpose of this study was to determine the effects of guided reading instruction on student levels of fluency, accuracy, and comprehension. The underlying theme of each research question addressed by this study was to determine if the implementation of guided reading instruction would produce readers who became more fluent, more accurate, and who developed better comprehension skills throughout the process.

The basic design for this study was descriptive and an experimental methodology was used to gather data on each of the three variables. The subjects for this study were 24 second graders and 16 fourth graders at Woodview Elementary School in Grafton, Wisconsin. Fluency, accuracy, and comprehension were chosen as variables since they are crucial components which contribute to the development of young readers. Each variable was examined individually to determine if there was an increase, decrease, or if students stayed the same in any of the tested areas. Performing the research in this way provided an in depth insight into each variable.

A test from the Fountas and Pinnell Guided Reading System was used to gather data on student fluency, accuracy, and comprehension in reading. The test was administered to each student individually. The test was administered two times per student, once in March at the beginning of the study and once in June at the end of the study to determine the results of the implementation. Students read a selection aloud. Notes were taken on fluency to determine where each student fell on a 0 to 3 scale. Errors and self-corrections were tallied to later determine accuracy. Finally, comprehension questions were asked after the student read aloud. Each question was scored using a 0 to 7 scale depending on the detail and correctness of each response. The results were used to identify an increase or decrease in fluency, accuracy, and

comprehension, or if students stayed the same and showed neither an increase nor a decrease in these areas.

Limitations

There were two limitations involved with this study. The first was dependent on parents signing and returning student permission forms allowing students to participate in this study. The second was a procedural weakness where two different teachers conducted the study within their own classroom and were subjective in grading the comprehension portion of the tests utilized in the study.

Conclusions

The first question of this study asked what the effect of guided reading has on reading fluency. The results of this study indicated the implementation of guided reading instruction was beneficial to students in this area when placing students into three categories of increasing, decreasing, or staying the same in the area of fluency. One-third of students showed an increase in fluency. However, this indicates almost two-thirds of students did not show an increase in fluency with this implementation when combining the number of students who stayed the same with the number of students who decreased. Due to the fact that more than half of the students stayed the same in the area of fluency does indicate the implementation of guided reading was beneficial, which coincides with the study conducted by Nes-Ferarra (2005) who found working with students individually gave them more confidence and allowed them to read more fluently.

Does implementing guided reading increase student reading accuracy levels? The study indicated 50% of students showed an increase in accuracy. There was little decrease (10%) in student accuracy scores. The remaining 40% of student scores neither increased nor decreased. Therefore, almost all students (90%) either increased or maintained their scores rather than

earning a decreased accuracy score. Combining the number of students who increased in accuracy or stayed the same would replicate what Nes (1997) found in her study of paired reading. The most common trend in her study was student accuracy either increased or stayed the same.

Will student comprehension increase after implementing guided reading instruction? Student levels of comprehension did increase with the implementation. Nearly 50% of students who were included in the study demonstrated an increase in comprehension scores. The results of this study correlate with the results found by Baier (2005) in her study where students performed better when asked to answer comprehension questions after a program supporting them in doing so was implemented. Given a greater number of students increased versus decreased is evidence that implementing guided reading was successful in the area of comprehension.

Given this information, the following conclusions can be made based on the results of this study:

- 1. Fluency levels may have been affected by the increased difficulty of the second test administered. Tests are given at a higher level to determine if students are ready to change reading levels. Given the nature of the text and the more difficult words, this may have affected results.
- 2. Exactly half of the students in the study demonstrated increased accuracy levels, indicating the implementation of guided reading was positive and beneficial to students.
- 3. Providing students with texts to read at their individual level proved to be a positive implementation in the area of comprehension. Nearly half of the students tested showed

an increase in this area illustrating guided reading had a positive impact on their comprehension.

Recommendations

Based on the findings and conclusions of this study, the following recommendations were drawn:

- 1. Implementing guided reading instruction results in students who are more efficient and capable readers. Finding a tool to measure student efficiency and capability would yield results which do not rely solely on guided reading tests, but could include data gathered from the implementation of guided reading groups and student levels of performance in such groups.
- 2. Testing whether or not student exposure to reading has an effect on fluency, accuracy, and comprehension would be beneficial. Determining how much time students spend reading outside of school may be an indicator of their successes or struggles with reading in school.
- 3. Taking student guided reading levels into consideration as well as their levels of fluency, accuracy, and comprehension would more effectively illustrate the true impact of guided reading on student reading skills. If student reading levels are increasing, then their skills are increasing as well.
- 4. Seeing if there is a trend between scores in fluency, accuracy, and comprehension would specify which variable has the largest impact on student success when reading. For example, finding whether or not students who are fluent are also more accurate and comprehend what they have read better would signify that fluency plays a large

- role in the success of student reading capabilities. Each variable would need to be examined in this way.
- 5. The tests utilized in this study were administered over the course of a short time frame.

 Had student levels of fluency, accuracy, and comprehension been looked at from the beginning of the year to the end of the year, the results may have been quite different.

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Appendix A: Parent Permission Letter Consent to Participate In UW-Stout Approved Research

Title: The Effects of Guided Reading Instruction on Students' Fluency, Accuracy, and Comprehension at Woodview Elementary School

Investigator:

Kristi Heston Woodview Elementary School Grafton, WI 262-376-5777 kheston@grafton.k12.wi.us

Description:

The students in one fourth grade class and one second grade class will be asked to participate in a research project conducted by Mrs. Heston. Each student will be tested individually. Students will be asked to read a book from the Fountas and Pinnell Guided Reading System. While the student is reading, notes will be taken on how the student sounds while reading. In addition the number of errors and self-corrections the student makes will also be recorded. After the student finishes reading, he/she will be asked a series of comprehension questions related to the story. There will be an initial test given to verify each student's baseline. A follow-up test will be administered near the end of third trimester to determine student levels of growth in the areas of fluency, accuracy, and comprehension.

Risks and Benefits:

I do not foresee any risks involved with this study. However, I do foresee numerous benefits. Your child will be involved in developing his/her reading skills through the use of the Fountas and Pinnell Guided Reading System. Students will be assessed in the areas of fluency, accuracy, and comprehension and will receive instruction based on their individual need. Such individualized instruction will aid your child in developing his/her reading skills at an appropriate pace.

Special Populations:

This study will involve one second grade class and one forth grade class from Woodview Elementary School in Grafton, Wisconsin.

Time Commitment:

The participants are asked to participate in this study for a period of twelve to fifteen weeks during Spring of the 2009-2010 school year.

Confidentiality:

Your child's name will not be included on any documents. We do not believe that your child can be identified from any of this information. This informed consent will not be kept with any of the other documents completed with this project.

Right to Withdraw:

Your decision to allow your child's participation in this study is entirely voluntary. You may choose not to allow your child to participate without any adverse consequences to him/her. Should you choose to allow your child to participate and later wish to withdraw him/her from the study, you may discontinue his/her participation at this time without incurring adverse consequences.

IRB Approval:

This study has been reviewed and approved by The University of Wisconsin-Stout's Institutional Review Board (IRB). The IRB has determined that this study meets the ethical obligations required by federal law and University policies. If you have questions or concerns regarding this study please contact the Investigator or Advisor. If you have any questions, concerns, or reports regarding your rights as a research subject, please contact the IRB Administrator.

Investigator:

Kristi Heston 262-376-5777 kheston@grafton.k12.wi.us

Advisor:

Dr. Jim Lehmann University of Wisconsin-Stout lehmannja@uwstout.edu (509) 240-5029

IRB Administrator:

Sue Foxwell, Director, Research Services 152 Vocational Rehabilitation Bldg. UW-Stout Menomonie, WI 54751 715-232-2477 foxwells@uwstout.edu

Statement of Consent:

By signing this consent form you agree to allow your child to participate in the project entitled, "The Effects of Guided Reading Instruction on Student's Fluency, Accuracy, and Comprehension at Woodview Elementary School"

·	
Signature of parent or guardian	Date

Appendix B: Tool Used to Assess Student Fluency, Accuracy, and Comprehension

	.?ecord	ing Form Our New /	leigi	hbor	2 •	LEVI	ELJ	• Fl	CTIOI	N
<i></i>	Studen	t Grade 2 Date 2) ~ <u></u>	2	-k	2				_
ضنظيفة فضلتاه	Teache	School WDV								_
	Part C	trding Form One: Oral Reading the book in front of the student. Read the title and introduction. Sen's family and the other families on the street got a note from their new neighbors. In the new neighbors invited them to see their surprise horses. Read to find out what kind of horse								
			т		Sour	ces o	it Info	rmati	on Us	ed
	Page	Start Time min sec. Our New Neighbors Level J, RW: 224	E	sc	M	S	V	м	5 C	у
	2	On Saturday morning, Ben saw an envelope on the front steps. "Mom, Dad, Polly!" he called. "Look what I found!"	1							
	3	Dad read the note that was inside. Hello Neighbors, We just moved into the big house on the corner. Please come to a party next Saturday at 10								

Subtotal

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o'clock. 'Ne want to				.M	S	٧	:VI	S	y
meet you <u>and</u> we want									
you to meet our horses.									
Max and Flo									
"Horses?" Everyone looked at spections. one another. No inflections. one another.		1							
"Horses on our street?" asked Dad.									
"I hope they're ponies," said Ben.						-			
"When we have birthday parties, we									
can have pony rides."									
"I hope they're big white horses," said									
Polly. "Maybe they'll give us a ride."									
	"Horses?" Everyone looked at checkion so where one another. "Horses on our street?" asked Dad. "I hope they're ponies," said Ben. "When we have birthday parties, we can have pony rides." "I hope they're big white horses," said Polly. "Maybe they'll give us a ride."	"Horses?" Everyone looked at checkion of her one another. "Horses on our street?" asked Dad. "I hope they're ponies," said Ben. "When we have birthday parties, we can have pony rides." "I hope they're big white horses," said Polly. "Maybe they'll give us a ride."	"Horses?" Everyone looked at rections. one another. "Horses on our street?" asked Dad. "I hope they're ponies," said Ben. "When we have birthday parties, we can have pony rides." "I hope they're big white horses," said	"Horses?" Everyone looked at flections one another. "Horses on our street?" asked Dad. "I hope they're ponies," said Ben. "When we have birthday parties, we can have pony rides." "I hope they're big white horses," said Polly. "Maybe they'll give us a ride."	"Horses?" Everyone looked at flections. one another. "Horses on our street?" asked Dad. "I hope they're ponies," said Ben. "When we have birthday parties, we can have pony rides." "I hope they're big white horses," said Polly. "Maybe they'll give us a ride."	"Horses?" Everyone looked at inflection one another. "Horses on our street?" asked Dad. "I hope they're ponies," said Ben. "When we have birthday parties, we can have pony rides." "I hope they're big white horses," said Polly. "Maybe they'll give us a ride."	"Horses?" Everyone looked at inclection one another. "Horses on our street?" asked Dad. "I hope they're ponies," said Ben. "When we have birthday parties, we can have pony rides." "I hope they're big white horses," said Polly. "Maybe they'll give us a ride."	"Horses?" Everyone looked at Mechions. Other one another. "Horses on our street?" asked Dad. "I hope they're ponies," said Ben. "When we have birthday parties, we can have pony rides." "I hope they're big white horses," said Polly. "Maybe they'll give us a ride."	"Horses?" Everyone looked at Clechions. one another. "Horses on our street?" asked Dad. "I hope they're ponies," said Ben. "When we have birthday parties, we can have pony rides." "I hope they're big white horses," said Polly. "Maybe they'll give us a ride."

				20m	ces o	I Info	rmalı	on ()	sec
age	Text	Έ	sc	.yı	E S	٧		SC S	١,
6	"Well," said Mom, "that house on the corner is just right for horses. It has a big yard. And there's that								
7	"Look," said Ben. "The neighbors are reading a note, too!"								
	Mom and Dad called across the street.								
	"Did you get the note about the horses?" Dad asked.								
3	"What do you think it's all about?" Mom asked the neighbor.								
	Subtota	C	C)	-	-	+	-	1

Part One: Oral Reading continued

Sources of Information Used.

2200	Text	E	SC		٤			SC	
Page	TEXT	-	ж,	341	5	٧	М	5	٧
 3 cont.	"I don't know," he said. "I don't								
'	think that barn is big enough			ić.					ļ
	for horses."								
9	Another neighbor popped her head	\							
	over the fence. "I can tell you								
	something else," she said. "Every day								
	when I pass that house, I hear loud								
	when I pass that house, I hear loud noises, like someone is hammering." not always Does end pauseuse. All the neighbors were excited about the mystery.								
	All the neighbors were excited about								
	the mystery.								
	Subtotal	$\overline{}$	0	\dagger		_			-
	End Time min sec. Totals	3	0						

Have the student finish reading the book silently.

5,000

Accuracy	Errors	24 or more	22-23	20-21	17-19	15-16	13-14	11-12	3-10	6-7	1-5 /	1-3	0
Rate	½	3elow 30%	90%	91%	92%	93%	94%	95%	96%	97%	98%	99%	100%

Self-Correction Ratio

(E + SC) ÷ SC = 1:____

Huency	Scara
UMCHEA	Troic



Fluency Scoring Key

- Reads primarily word-by-word with occasional but infrequent or inappropriate phrasing; no smooth or expressive interpretation, irregular pausing, and no attention to author's meaning or punctuation; no stress or inappropriate stress, and slow rate.
- Reads primarily in two-word phrases with some three and four word groups and some word-by-word reading; almost no smooth, expressive interpretation or pausing guided by author's meaning and punctuation; almost no stress or inappropriate stress, with slow rate most of the time.
- Reads primarily in three- or four-word phrase groups; some smooth, expressive interpretation and pausing guided by author's meaning and punctuation; mostly appropriate stress and rate with some slowdowns.
- 5 Reads primarily in larger, meaningful phrases or word groups; mostly smooth, expressive interpretation and pausing guided by author's meaning and punctuation; appropriate stress and rate with only a few slowdowns.

÷	Dooding	Onto
, .	Reading	nate

(Optional)

End Time ____ min. ___ sec.

Start Time ______ min. ____ sec.
Total Time _____ min. ____ sec.

Total Seconds

 $(RW \times 60) \div Total Seconds = Words Per Minute (WPM)$

13,440 ÷ _____ = ____ WPM

The sand Cay Su Physical Ports Then with Manner of the same series of

Part Two: Comprehension Conversation

Have a conversation with the student, noting the key understandings the student expresses. Use prompts as needed to stimulate discussion of understandings the student does not express. Score for evidence of all understandings expressed—with or without a prompt. Circle the number in the score column that reflects the level of understanding demonstrated.

feucher: Talk about what happened in this story.

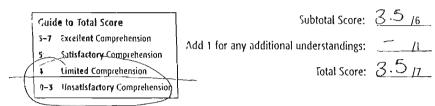
Comprehension Scoring Xey

- Reflects no understanding of the text. Either does not respond or talks off the topic.
- Reflects very limited understanding of the text. Mentions a few facts or ideas but does not express the important information or ideas.
- Reflects partial understanding of the text. Includes important information and ideas but neglects other key understandings.
- 5 Reflects excellent understanding of the text, includes almost all important information and main ideas.

Key Understandings	Prompts	Score
Recounts most of the important events such as: the new neighbors invited everyone to see their horses; everyone was asking what kind of horses the neighbors had; the horses turned out to be a merry-go-round (or carousel). Note any additional understandings:	What was the mystery in the story? "What the horses were" What did the new neighbors do to get everyone interested in their horses? They had a party to meet the What happened when people got the note? "Come & see the horses" What happened at the end?	0 1 2 3 ir horses ^r
The new neighbors wanted to surprise everyone so they kept the horses a secret. Everyone was wondering about the horses and imagining the kinds of horses they were. Clues before the last page are: "loud hammering noises," "music playing," "two horses going up and two going down," "four horses going around and around". Note any additional understandings:	Why did the new neighbors keep the horses a secret? What were the people in the neighborhood thinking about the horses? 'Ponies or by horses.' There were a few clues that might have helped you guess what kind of horses were in the barn. Can you think of any? We extra prompting	0 (1/2) 3

Continued on next page.

Part Two: Comprehension Conversation continued



Part Three: Writing About Reading (optional)

Read the writing/drawing prompt on the next page to the student. Specify the amount of time for the student to complete the task. (See Assessment Guide for more information.)

Writing About Reading Scoring Key

- O Reflects no understanding of the text.
- I Reflects very limited understanding of the text.
- 2 Reflects partial understanding of the text.
- 3 Reflects excellent understanding of the text.

Appendix C: Second Grade Fluency, Accuracy, and Comprehension Scores

Pre and Post Guided Reading Implementation

2 nd Gr			nplementation	2 nd Grade		er Implementation
March 2010				June 2010		
Student	Fluency	Accuracy	Comprehension	Fluency	Accuracy	Comprehension
1	3	97%	6/7	3	99%	5/7
2	1	>90%	3/7	1	95%	4/7
3	1	95%	4/7	2	97%	6/7
4	3	99%	5/7	3	100%	5/7
5	3	99%	3/7	3	99%	6/7
6	0 .	92%	5/7	1	95%	4/7
7	3	99%	4/7	2	99%	5/7
8	3	94%	4/7	3	99%	4/7
9	2	98%	6/7	3	98%	5/7
10	2	97%	7/7	2	98%	7/7
11	3	99%	6/7	3	99%	5/7
12	3	99%	6/7	3	99%	6/7
13	1	96%	2/7	2	97%	5/7
14	2	99%	5/7	2	100%	5/7
15	3	99%	5/7	3	100%	4/7
16	2	99%	5/7	3	100%	6/7
17	2	97%	4/7	2	99%	5/7
18	3	96%	5/7	3	100%	5/7
19	1	95%	5/7	1	99%	3/7
20	3	99%	7/7	3	99%	7/7
21	2	99%	3/7	3	99%	7/7
22	2	99%	5/7	3	99%	6/7
23	2	99%	3/7	2	97%	4/7
24	2	99%	5/7	3	98%	5/7

Appendix D: Fourth Grade Fluency, Accuracy, and Comprehension Scores

Pre and Post Guided Reading Implementation

4 th Grade Scores Prior to Implementation March 2010			4 th Grade Scores After Implementation June 2010			
Student	Fluency	Accuracy	Comprehension	Fluency	Accuracy	Comprehension
1	_ 3	98%	4/7	3	99%	5/7
2	3	99%	5/7	3	99%	5/7
3	3	99%	4/7	3	99%	5/7
4	2	98%	5/7	3	98%	7/7
5	2	95%	5/7	2	97%	5/7
6	2	97%	6/7	3	99%	5/7
7	2	98%	4/7	3	97%	6/7
8	2	96%	4/7	2	96%	5/7
9	3	97%	4/7	2	97%	5/7
10	2	98%	6/7	3	99%	5/7
11	3	100%	7/7	3	99%	7/7
12	3	99%	5/7	2	99%	6/7
13	3	99%	5/7	3	99%	7/7
14	3	99%	4/7	3	99%	5/7
15	2	96%	5/7	2	97%	5/7
16	3	98%	5/7	3	99%	4/7