THE EFFECTS OF READING COMPREHENSION WITH INDIVIDUALIZING VOCABULARY AND FLUENCY STRATEGIES TO THIRD GRADE STUDENTS SCORING BELOW THE FIRST QUARTILE

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DEDICATION

To my husband and children for all their patience and support…thank you. To my team of third grade teachers and building administrators…your support means so much! To students everywhere…keep on reading.
Never Stop Learning
ACKNOWLEDGEMENTS

I would like to thank Dr. Carroll, my professor and advisor, for the guidance the past two years during my graduate program. Thank you also to Kim McDowell for chairing my thesis committee and her encouragement. Thank you also to Kate Bohn and Jennifer Kern for their service on my committee and words of wisdom!
ABSTRACT

After pre-assessing students in a third grade classroom, the researcher noted four students, scoring below the 20th Percentile on the reading portion of the Northwest Evaluation Association (NWEA) exam, fall, 2008, in a pilot study. As the researcher further assessed these students, it was noted that these students lacked fluency and vocabulary skills. Focusing on fluency combined with individual, vocabulary instruction, the researcher individualized each of the students’ reading program within the regular education classroom. Each of the four students was working at their current level of reading, entering the third grade and progressing throughout the school year. The researcher used a combination of the Power Reading program and coupled it with individual, vocabulary strategies to assist readers with fluency and comprehension. As their reading progressed, students were challenged to next levels. Data was analyzed using the NWEA assessment, Houghton Mifflin Leveled Reading Assessment and Kansas State Reading Assessments during the course of the school year to mark progress. All four students in year one exited the bottom quartile of the NWEA, gained two reading levels according the Houghton Mifflin Leveled Reading Assessments and scored in the top twelve percent of the Kansas State Reading Assessments. The pilot study was replicated in the school year, 2009-2010, Year Two, with ten students with similar needs.
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CHAPTER ONE

INTRODUCTION

The past decade has brought remarkable changes and discoveries and developments in the field of education. Never before have there been so many changes in technology, assessments, curriculum, schedules, and student achievement. Educators are asking themselves daily "What does research say is best for student learning and achievement?" Teachers are constantly seeking ways to help students reach their fullest potential. Educators evaluate learners, diagnose the missing concepts or holes of learning and assess students to find best strategies to reach each individual.

As educators our job is to make sure each student receives a quality education. Included in that requires a strong literacy program, rich in all components of reading. After all, reading comprehension is the foundation of their future. The five elements of reading, as stated by the National Reading Panel (NRP) (2000) include phonemic awareness, phonics, fluency, vocabulary and comprehension. By the time students reach third grade most children are comfortable and familiar with their phonics rules and are applying them to decoding unknown words. Creating readers, who can also comprehend what they are reading, regardless of what text they are reading, graduate from high school and continue their education is not just our job, it's our mission, our aim and our passion, as elementary educators. In order to direct students to comprehend text, we must make certain they are proficient in the five areas of reading comprehension. The only way to achieve knowledge each year is to know precisely where students' reading abilities are the first weeks they begin a new school year. With triangulation of data, an educator can decipher "holes" in students' learning to diagnose problem areas. Depending on the areas of deficiencies for students, educators are able to prescribe the
appropriate-plan for each learner’s level. It is necessary that all learners, especially the lowest learners be diagnosed in the areas of reading with which they need assistance and given a plan of action to help guide them to becoming the best readers possible. This sounds like an Individualized Education Plan one would find in the area of special education. What would happen if all educators created individualized educational plans for each of their students? That seems like an enormous requirement for an educator, but is necessary in order for a teacher to reach each student in their classroom. The educator must know where a student is and how to continue their education making continuous progress. To differentiate instruction, the starting point is as important to know as the end point. Pre-assessing students is necessary to reach every learner where they are currently and where they should continue to go in the future. With this act in place every child will succeed in the classroom. Furthermore, the goal in education is to reach 100 percent of the student population at “Proficient” or above on state mandated testing by 2012.

If a student is not achieving in the area of phonics, for example, review of where students have achieved, and instruction of new phonics skills must take place. According to the NRP (2000), there is no one best phonics program. Different types of phonics instruction did not differ statistically from one another in studies. Therefore, phonics may be taught explicitly utilizing a variety of resources available to the educator and necessary to the learner.

If the student is not achieving in the area of fluency, educators should look into explicitly teach fluency to students in order for them to read smoothly, comprehending what they read more efficiently. (Herron, 2008) states "Students who are not at least moderately fluent in reading by third grade are unlikely to graduate from high school" (¶ 1). NRP (2000) suggests that fluency instruction should be taught explicitly.
Vocabulary, the fourth component of reading is one that is easily forgotten in the classroom and not as often explicitly taught, as students get older. As students continue developing in their reading capabilities, the more words students learn. With this increase of vocabulary it is obvious that unless the students know the meanings of the words they are reading, comprehension of text will not be significant. Vaughn and Thompson (2004) state "Oral and written vocabulary instruction is a valuable component of beginning reading because student understanding of word meanings and how words are used in text contributes significantly to general reading comprehension" (p. 74). Students must be given new vocabulary words before reading new or different text. These vocabulary words can be predetermined by the teacher or can be determined as the reader begins his/her reading of text and then reviewed followed by another reading. If students cannot understand the words they are reading, they will not understand the text they are reading.

Finally, comprehension is the piece that shows how students have understood what they have read. Vaughn and Thompson (2004) define comprehension as "the active process of understanding text involving previous knowledge and understanding vocabulary, as well as interpreting concepts, inferring and linking ideas" (p. 98). Student learning will take place when all five components of reading are mastered. "What appears to be relatively effortless reading actually involves a series of sophisticated practices in which skills and abilities are well integrated" (p. 101). These five components (phonemic awareness, phonics, fluency, vocabulary and comprehension) are the necessary elements to help students become comprehending readers of texts. That is the goal educators want to achieve in students...effortless reading with comprehension of texts.
In the previous year, when pre-assessing students at the start of the third grade year, the researcher noted several students who struggled with reading comprehension, and more specifically with reading fluency. The students who struggled the most also scored in the bottom quartile of the NWEA, or Northwest Evaluation Assessment. As the year progressed, the researcher noted that decoding new vocabulary words was a constant struggle. It is in this grade level vocabulary that takes a giant leap, especially when preparing for state assessments. These students' knowledge of vocabulary was limited. During reading of passages the teacher needed to allow students to record any vocabulary words they mispronounced or didn’t know the meanings of in addition to the standard vocabulary provided by reading programs. It was a constant necessity to always question these lower scoring students to point out any words that were difficult for them. Creating a nonthreatening classroom environment was a key factor to this success, as students felt free to express what was truly challenging to them. This discovery led the researcher to examine the question "Does individualized vocabulary instruction combined with fluency instruction increase comprehension results with below quartile readers, compared to fluency instruction alone?" The researcher added explicit vocabulary and fluency instruction to the bottom quartile learners and the results were significant for most students on post assessments that were administered in the spring semester.

During this school year (2009-2010) after pre-assessing students at the start of the third grade year, the researcher again noted students in particular who struggled with reading comprehension and more specifically with reading fluency. The researcher added in her notes again this school year that decoding new vocabulary words was a constant struggle and these students had a limited amount of vocabulary recognition.
The 2008-2009 school year pilot study found the most gains were made after the teacher added individual, vocabulary instruction WITH fluency practice. Students working with the teacher using these practices rose above the bottom quartile in May with the NWEA. These students also increased their leveled reading comprehension level by 1.5 to at least the 3.0 grade level. Finally, all students using the explicit vocabulary and fluency scored within the top twelfth percentile on the Kansas State Assessments. Because the needs of the bottom quartile readers in the current year's class (2009-10) were similar to the needs of the bottom quartile readers of the pilot study, the researcher opted to examine whether or not the research in the past year would be effective during a second year with twice as many candidates. The researcher chose to examine the same question once again, forming a replicated study examining - "Does vocabulary instruction combined with fluency instruction increase comprehension results with third grade students scoring below the 25th percentile?"
CHAPTER 2
LITERATURE REVIEW

The No Child Left Behind Act of 2001 (NCLB) replaced the Elementary and Secondary Education Act. The NCLB became a law in January, 2002. The purpose of NCLB is to close the gap in student learning. With this act in place every child will eventually succeed in the classroom. The goal is to reach 100 percent of the student population at “Proficient” or above on state mandated testing by 2012. Of course, the results will not be immediate.

Schools funded by the state government will be required to submit a detailed report of the results of student achievement. Depending on the percentage requirement for that year (of students needing to reach “Proficient” or above) will result in a school earning AYP, or Academic Yearly Progress. Hence the word “progress” in this title, to eventually see 100 percent of the student population scoring at the expected outcome.

NCLB is based on four parts: more parental choice, greater local control, stronger accountability and discovering what is successful for students’ learning, based on scientific research. Parents will be offered the freedom to choose their child’s school if the present school is not meeting the needs of their student. Parents will be offered increased help for their child’s education, regardless of what may inhibit the student’s learning. Under parental choice, parents will be offered the choice to send their child to a charter school and receive the same learning expectations for their child. With greater, local control; faith based and community efforts are an option. The recently mandated Bully Prevention Program in schools is an effort to offering safer schools for students to attend. Individual states are given the local control and flexibility to meet their state’s assessment needs. Stronger accountability is the backbone to this program. As stated above, with the implementation, schools will be quick to close the gap in student
achievement. Schools will be put “on stage” as their achievement results will be posted to the public in the form of a Building Report Card.

Finally, what will glue NCLB all together is finding out what works in the classroom to achieve 100 percent of our student population performing in subject areas at a proficient or above level. Competent teachers will be necessary to reach the expected outcomes in reading, math, science, social studies and writing. These teachers will constantly be searching for research based strategies that will help EACH ONE of their students succeed. With the implementation of these factors no child will be left behind.

The elementary school participating in this research is a district located in a large metropolitan area in the mid west. The targeted areas for School Improvement for this school include (1) reading comprehension, (2) math problem solving and (3) writing (KSDE, 2006-2007). The strategies implemented and assessments used are as follows:

- **Reading comprehension strategies** include graphic organizers and predict/infer, question, monitor/clarify, summarize, evaluate, phonics/decoding. Reading Comprehension: NWEA, State Reading Assessment and HM Leveled Reading Passages.

- **Math problem solving strategies** include six-step model to problem solving and "Problem Solving Strategies", a resource for teachers. Assessments for math include: NWEA and State Math Assessments.

- **Strategies used to teach writing** include the writing process and graphic organizers. To assess these areas Pray-Woodman uses the following. The state writing assessment will be used in the area of writing.
For this research project, the focus is on individualized vocabulary combined with fluency. Does this focus help increase reading comprehension in students? The term "reading comprehension" can be defined several ways. Scholastic defines reading comprehension as: “the capacity of the mind to perceive and understand” (Scholastic, 2008). A second definition of the term reading comprehension includes “the process of using prior knowledge and thinking processes to construct meanings from written text” (Pearson, 2008). These definitions conclude that reading comprehension requires understanding, processing, thinking and prior knowledge. Within each of these areas are many skills, concepts and applications for a learner. Because all students learn differently and all students learn at a different pace, educators are relying on the practice of differentiated instruction to help them achieve positive results with student learning.

2.1 Differentiated Instruction

Focusing on student achievement must also come with changes within the classroom in order to achieve success. To think of the traditional classroom setting is no longer an option. Teachers must rethink the structure of their classrooms, the management system of their classrooms and the expectations of themselves and the students within in their classroom. In order to give students one on one or small group instruction educators will need to rethink how they teach. There are times to teach and there are times to facilitate learning. If a child is in a regular education classroom and not working at grade level it offers a challenge to educators. It's only common sense to work with each student at their individual level and pace, to continue them progressing. This seems to propose a problem for educators. If a percentage of students in the regular classroom are not working at the current grade level, how do we decrease the gap in student learning? Differentiated Instruction is the answer to this equation. Tomlinson (2008) indicates that
Differentiated instruction is student-aware teaching. It is guided by the premise that schools should maximize student potential, not simply bring students to an externally established norm on a test. To grow as much and as rapidly as possible, students must not only learn essential content, but also increasingly take charge of their own lives as learners. (¶. 3)

When educators work with students to help them achieve gains in their deficient areas, educators must also be teaching students how to think for themselves and how to take the strategies they are using and apply them to their own, personal lifelong learning. That is what all students should be taught to do in school - work to learn and learn to teach themselves how to think. Educators are their facilitators that help them make this possible. If struggling students are taught early on where their weaknesses are, they can be taught how to help themselves improve their learning.

Hewson and Adrian (2008) state, "By focusing on individual student progress, we have put excellence within reach of us all" (¶. 24). The key to student achievement, regardless of the subject matter, is just that - focusing on individual needs. When educators begin to see their students as a physician sees his/her patients, individually, each a separate case, an individual in need of a variety of techniques to instruction, then the educator will gain individualize a student learning program, educators must find where each student is achieving at currently success with each student. How does an educator explore individual student weaknesses? When an educator has learned to read and interpret data, a variety of data, then the educator can find the learning holes and work towards achievement. With these holes in student learning, teachers are required to form learning prescriptions for each skill he/she is not mastering. With Responsiveness-to-Intervention (RTI) educators are finding ways to reach all students, especially the students who
2.2 Responsiveness-to-Intervention

RTI, or Response to Intervention, is a model that uses scientifically sound practices to intervene with students who are experiencing academic difficulties (Stecker, 2007). Through RTI, three tiers of intervention exist. Through all three tiers progress monitoring tools are used to indicate levels of risk. In some tiers progress monitoring occurs more frequently.

Tier 1 serves as “preventative instruction conducted in general education classrooms” (Stecker, 2007. ¶. 4) and is usually implemented by the classroom teacher. Students in this tier of instruction are occasionally progress monitored, such as five to ten weeks, depending on the student and the skills being focused on. Progress monitoring is also a good tool to determine whether the type of instruction being implemented is effective. Tier 2 instruction is considered more intensive than Tier 1 instruction and can be implemented by the regular classroom teacher, trained paraprofessional, reading specialist and/or school psychologist (Stecker, ¶. 5). Tier 2 is often presented in a small group format, such as four to six students. Skills and strategies not mastered within Tier 1 instruction are often implemented at the Tier 2 level. Progress monitoring is performed with these students more often than the Tier 1 group. Tier groups are fluid. If a teacher feels the student has progressed the student may return to the Tier 1 group. If the teacher feels students need even more intervention that Tier 2 allows, students are able to move to the Tier 3 intervention. Tier 3 requires instruction that is much more intensive and in yet a smaller group setting, such as two or three students and in some cases individual instruction. The intervention may also be implemented for a longer time period, focusing on one skill at a time. Students in this tier have previously shown poor performance and “academic unresponsiveness to high-quality instruction” (¶. 6). More often than not, students in Tier 3 are
students in special education programs, with an individualized education plan. Tier 3 focuses on student need and is a highly intense form of instruction that focuses on individual, student goals.

In some school districts the RTI model has been adopted and fully implemented with some or all of the student population. Different states have adopted different models, with the same principles. If a district has not adopted a model for student intervention, it is still up to the classroom teacher to meet the goals of the students. In some cases support systems are available, such as in the case of an inclusion classroom and/or with the support of reading specialists and trained paraprofessionals. Even if these supports are available, they should not replace Tier Instruction Models. It is possible within a classroom to implement tiers of instruction even if the school has not adopted a model on its own. Lyon, Fletcher, Torgesen, Shaywitz and Chhabra, 2004, state “Evidence from many successful schools and from multiple research studies shows that a multi-tiered approach involving high-quality classroom instruction alone and in combination with targeted, small group interventions can substantially reduce the proportion of students who struggle to read” (¶. 5). In order to help students achieve gains and to decrease gaps in learning we must look closely at offering students as many small group and/or one-on-one opportunities to learn skills in isolation as possible. Arllington (2004, as cited in Lyon et al., 2004) states “The goal of all students reading on grade level will only be achieved with an expansion of expert tutoring, which has been repeatedly shown to be the best intervention” (¶. 5). For students requiring Tier 2 and Tier 3 instruction small group sizes and in some cases, one on one instruction must be implemented in order to achieve progress in student learning. As Torgesen (2010) states “Many older struggling readers are victims of poor early reading instruction. They were not taught or insufficiently taught the basic skills necessary for fluent reading and deep processing of text” (¶. 2). Effective instruction is a key factor to student
reading success. Within that effective instruction a teacher knows his/her students’ strengths and weaknesses. The teacher then screens and diagnoses skills in which the student is struggling and focuses on those skills as individually and explicitly as possible.

### 2.3 Fluency

Within the past decade the focus on reading fluency has gained much attention. Penner-Wilger (2008), state "Reading fluency is the ability to decode and comprehend text simultaneously. Thus, reading fluency forms a bridge from decoding skills to comprehension" (¶. 25). These two researchers offered 40 minutes of independent reading per day, over a six month period, for third through fifth graders. Results indicated that independent reading did improve these grade levels fluency and reading achievement for higher skilled reading students but not for lower skilled readers. Thus, fluency for lower skilled students must be taught explicitly in order to achieve gains in reading comprehension. When a student's reading is not automatic, they must spend more time processing words individually by decoding the vocabulary, putting it into a sentence, combining that sentence with more sentences and finally at the end of a passage or book, understand what was read. Until this becomes an automatic process, students are unable to comprehend effectively. Penner-Wilger (2008) lists the three component skills of reading fluency as "accuracy of word decoding, automaticity of word recognition, and prosody of oral text reading" (¶. 3). Automaticity is defined as "the ability to quickly recognize words automatically, with little cognitive effort or attention" (¶. 4). For students with little exposure to quality literature, vocabulary becomes a struggle to decode and read with no effort. It is further noted in Penner-Wilger's research that "When decoding is automatic, additional resources are available for comprehension and meta cognition" (¶. 10).
Sewanenflugel, Kuhn, Morris and Bradley (2006) investigated a program which incorporated three different fluency programs. The approach required 20 minutes of scaffold oral reading each day using a variety of grade level texts. Not only did the use of the strategy increase fluency overall, it also more specifically increased students’ pitch, stress and juncture (prosody) when reading. An increase of reading comprehension was noted as well (¶. 1). "It appears that, as children become fluent and automatic readers, they use their freed attention resources to produce prosodic reading and improved comprehension" (¶. 3). In Roundy & Roundy's research (2009) repeated reading was the strategy focused on for seventh grade struggling readers. Following sessions, student scores on fluency, comprehension and self-esteem were so high that Roundy and Roundy implemented repeated readings with all their students. As quoted "...the effects of repeated reading are so strong that it should be woven into the very fabric of daily literacy instruction" (¶. 24). Another study that proved beneficial included the Renzulli Learning. Field's (2007) researched the Renzulli Learning with 383 underachieving third through eighth grade students. Renzulli Learning is defined as "an on-line educational profile and matching database geared to provide enrichment resources, creative productivity and high-end learning that matches student interests, learning styles and expression styles with a vast array of educational activities and resources designed to enrich the learning process" (¶. 1). This sixteen week intervention was used with students for two to three hours per week. Differentiation of instruction was provided through this computer-based program. "Renzulli Learning demonstrated significantly higher growth in reading comprehension and significantly higher growth in oral reading fluency" (¶. 3).

Shaywitz and Shaywitz (2004) offer findings in differences of the brain of struggling readers and non-struggling readers. First off, they define fluency as "rapid, automatic reading that does
not require attention or effort" (¶. 16). They further explain that fluent reading develops as the reader builds brain connections that are able to represent words in text. Once a child reads words over and over the student's brain has actually constructed an exact representation of the word. As readers continue to read and apply new words over and over it's found that the brain begins to recognize the word(s) instantly and effortlessly. Knowing this helps educators realize the importance of repeated readings among struggling readers to aid in their reading fluency.

Shaywitz and Shaywitz conducted a study on 144 second and third grade struggling readers. They offered individual tutoring for 50 minutes daily that was systematic and explicit. Significant gains in reading comprehension and fluency were noted. The major findings indicated that "all children must be taught phonics, fluency, and vocabulary and comprehension strategies systematically, comprehensively and explicitly" (¶. 24). The most impressive and validating quote taken from this study states "Good evidence now indicates that we can teach reading fluency by means of repeated oral reading with feedback and guidance. Using these methods we can teach almost every child to read" (¶. 25). That is exciting news for educators!

Some studies showing increases in reading fluency did not show gains in reading comprehension. For example, Dyad Reading, coupling a lead reader reading with a reader who needs assistance, a strategy used with 40 ELL students and compared with a control group of 40 students not paired, showed a significant increase in the area of reading fluency (Almaguer, 2005). This same research using the dyad intervention, however, did not offer significant results in the area of reading comprehension. Another intervention, QuickReads, researched by Elfrieda and Fisher (n.d.), with second through fourth grade students showed that reading fluency made a significant increase; however reading accuracy and comprehension remained the same after a nine-week time frame. Osborn (2007) researched the usage of word walls and silent reading
with a group of second graders. These interventions were implemented for twelve weeks. The research showed that word walls and silent reading alone did not significantly increase reading fluency or comprehension in these second grade students. Osborn stated "continued research into identifying effective teaching strategies for the development of other sub skills that contribute to reading fluency development are necessary as early as kindergarten to promote fluency in reading" (p. 145). In other words, these strategies should begin in kindergarten WITH an isolated fluency program. Finally, Martens (1997) performed research on one, seven year old student, using the idea of repeated readings with miscue analysis. In the end, repeated reading did help the student "improve fluency scores and recognize words more quickly and accurately"(¶. 32). However, even though the student's fluency increased, the scores did not indicate "an equally steady, controlled and proficient understanding of the story the student was reading (¶. 33).

Vaughn and Thompson (2004) suggest that "students who do not make progress learning to read will need supplemental instruction that allows them to practice and master foundational skills and concepts before they get too far behind their peers" (p. 129). In order to achieve this time with the teacher, students are going to require an increase in instructional time and a smaller group, or one-on-one, for learning. Systematic and explicit instruction is the most effective ways to achieve results. To help increase fluency in grades two and three, Vaughn and Thompson suggest partner reading, choral reading, tape-assisted reading and fluency building at the word or phrase level. These opportunities need to offer a good model and provide students with the opportunities to reread text. Just as with the area of vocabulary when students need to have words taught with extended meanings in a systematic approach, students need to be given opportunities to explicitly instruct fluency. Teachers need to model and teach the use of the
vocabulary and provide multiple opportunities to apply the vocabulary (p. 132), as well as model reading aloud, teaching how our words should flow as we read.

In one study of 91 ELL students, the researcher offered students 50 minutes of intense, daily instruction in the areas of phonological awareness, word attack, word reading and spelling. The materials also contained an emphasis on fluency and comprehension (Huebner, 2009). These 91 participants all scored below the 25th percentile in English reading before the reading intervention began. This intervention group was compared to another group in overall reading achievement. Following the eight month period of this study, results showed improvement. The group with the intervention for 50 minutes each day increased their overall reading comprehension. Huebner reports that this research shows that "this strategy can help students perform at or above grade level and sustain high performance" (¶ 8). Thus, small group reading intervention is an effective, research-based strategy that can address needs of low achieving second language learners in the area of reading comprehension.

Fluency is a probable indicator of student success in reading comprehension if it is focused on with other skills as well and used, ultimately to help students learn to think while they read. Assessing a student one-on-one can offer more valuable knowledge about his/her reading abilities than other forms of testing (Davidson & Myhre, 2000). Throughout her research, Davidson (n.d.) defines reading fluency, describes how students acquire reading fluency skills, explains research-based interventions, and finally evaluates and presents Read Naturally, another effective scientifically-based reading fluency intervention. Research has shown that Read Naturally and Power Reading are both successful reading interventions for the area of reading fluency, which in turn is a bridge to reading comprehension success. Read Naturally and Power Reading are programs designed specifically for fluency instruction to increase comprehension.
Power Reading is part of Carbo's (2008) Reading Styles Program. Both programs offer explicit lessons for students to gain reading fluency.

Using strategies within this program have shown significant results in the areas of: effectiveness in improving student academic achievement; widespread replication with organizational capacity to continue gearing up; high-quality implementation assistance to schools; and comprehensiveness. (¶. 1)

The idea behind Read Natural and Power Reading is that students reread the passage several times until he/she is comfortable and showing significant fluency. It's this fluency that allows gains in comprehension. With Read Natural, students are given specific vocabulary to focus on. With Power Reading no vocabulary is offered, however the comprehension questions are based on similar standards required by the Kansas State Assessments and National Reading Assessments and include comprehension questions dealing with cause/effect; problem/solution, chronological order, context clues, sequencing, inference, predictions and drawing conclusions, for example.

2.4 Vocabulary

Roberts, Torgesen, Boardman and Scammacca (2010), tell of older students with learning disabilities tend to struggle more with the fluency component of reading due to the difficulties they encounter with identifying new and unfamiliar words. The authors suggest that students who struggle with learning new words focus on learning skills of how to break apart difficult words into familiar units and use known meanings of smaller parts of the word to learn new vocabulary words. Once words can become more familiar to students, they can begin skills necessary in increasing their fluency.

As the researcher examined the facts of each of the learners who did not reach the 25th percentile in her classroom, obvious factors came to play. The first of these factors was fluency
but the second factor was a lack of vocabulary. In a few of the students, decoding deficiencies were also evident. Liben and Liben (2004) discovered that many of the words students decoded, they still did not comprehend. The authors went on to say "We were misleading ourselves in naming this a vocabulary problem. If you don't know what a porch is, you do not have a vocabulary problem; you have a knowledge problem" (¶. 24). As this points out, students should be allowed to think about the words they are reading in text, identify these words as they read them, record them and then be given time to learn them and apply them with repeated readings. If educators limit themselves to only the "standard based" vocabulary required, or the vocabulary traditionally limited to text, then educators are assuming students are able to understand vocabulary as long as they can decode vocabulary. Teaching students to record words they do not know the meanings of, in addition to a standard vocabulary list provided, individualizes student learning and empowers students to become their own teachers. As educators begin to individualize student work and programs to achieve higher test results one factor must remain...working towards achieving life-long learners as well as standard-based test achievers. As Tomlinson (2008) states

Certainly one of its [differentiated instruction] goals is increased student mastery of essential content and skills. But few students will become dedicated learners because their standardized test scores increase. Differentiation, fully understood, is concerned with developing not only content mastery but also student efficacy and ownership of learning. (¶. 30)

Like Pransky (2009) states "Too often, we try to fit all underachieving culturally and linguistically diverse learners into familiar models that work well for most other students. We think these models are based on 'best' ways of thinking, problem solving and using language" (¶. 3). Pransky further indicates that no matter what their language development, these students fall into two groups: "those from literacy-oriented communities and those from non-literacy-oriented
communities" (¶. 5) where the literacy-oriented learners have parents that are typically well-educated and can offer their child a vast array of learning experiences and opportunities whereas non-literacy-oriented learners parents have less formal education and generally have spent less time interacting with their child, which contribute to a lack of complex thinking and language skills. Students from literacy-oriented communities were taught early to achieve at school, where as students from non-literacy communities come to school lacking the very skills their peers have already had access to since birth. Students from non-literacy communities, as research shows, contain a huge vocabulary gap compared to their peers. The demand for educators to increase test scores and continue to close the gap makes it challenging to also focus student learning on the actual learning process itself. Educators must strive to "Coach students to focus on the processes of their own thinking" (¶. 29). When students key in on vocabulary words they do not know the meaning of and/or cannot decode individually, then individual vocabulary instruction is available.

Repeated readings are not only effective for reading fluency but repeated readings will also assist learners in developing their vocabulary. To teach fluency without teaching meanings of unknown words seems very isolated. When the brain takes words, processes them and makes a permanent stamp to memory, the brain is better able to comprehend these words if they have pictorial reference. It's obvious to say that when a student is reading text with new and different vocabulary within, shouldn't they be given many opportunities to reread the text to assist the brain in creating permanent vocabulary imprints? Juel and Deffres (2004) offered explanation of struggling readers and the concept of "word poverty". In their research they explained how linguistically advantaged students know approximately 20,000 words in first grade, compared to linguistically disadvantaged students who only know 5,000. With repeated readings, students are
going to be able to build their vocabulary base and keep it in their brains permanently, thus increasing their overall reading comprehension. Students must continue to be exposed to new vocabulary and repeatedly utilize the new vocabulary in order to make permanency in their brains. To support this notion, Lubliner and Scott (2008) offer four basic principles of the nature of word learning. Within chapter two these four principles are listed: word learning is multidimensional, words come in different types of packages, word learning is incremental and students need to develop problem-solving strategies for figuring out unknown words. As quoted under principle number three

As a word is encountered repeatedly over time, information about it builds up and the word moves up the continuum toward known. Repeating a word supports students' understanding of its meaning as well as how it can be used in various contexts. (p. 10)

As principle number four states, students need to develop their own problem-solving strategies to figuring out unknown words. As adults, we know that unknown words to not disappear once we discontinue school. Students need to practice explicitly and learn how to apply the use of dictionaries and other resources, the use of context clues, the use of dissecting words and recognizing the meanings of the base word with and without the affix.

2.5 Vocabulary Combined with Fluency

It goes without saying that past research shows fluency alone is not the best strategy when attempting to increase overall reading comprehension, the ultimate outcome of reading. Consequently, the question in this research focuses on the combining of vocabulary instruction to words students struggle along WITH working on students' reading fluency, at each learner's level. As new readers are learning to read they are being given words repetitively every day. By third grade, decoding is an assumed skill and often times it is not emphasized. Non-fluent readers need continued support in decoding and vocabulary instruction to make their reading
more fluent. As stated by Curtis and Longo (2008, ¶. 1), "Providing vocabulary instruction is one of the most significant ways in which teachers can improve students' reading and listening comprehension". For under achieving readers it is necessary to find skills that help them create their own personal, mental dictionaries. Fluency instruction requires repetition, as does learning new vocabulary. While learning vocabulary during repeated readings, students are able to apply their vocabulary skills, instead of only memorize by rote. Herron (2008) states "Phonemes are not processed by the auditory system alone; they are articulated sounds" (¶. 7). She continues to explain how pronunciation relates to reading. "The sight of a word triggers its pronunciation, and it is this pronunciation that has been stored in memory for convenient access along with the meaning of the word" (¶. 8). Herron refers to this idea as speech memory.

In the 2008-2009 school year pilot study, the research of this author showed that a variety of vocabulary strategies, such as context clues, affixes, journaling, multiple meanings, and identifying base words all significantly increased student vocabulary and its correct usage. Learning the vocabulary words correctly, including them into a student's speech memory and then reading the same vocabulary words within a passage, help students to read more fluently and thus, hopefully increase comprehension.

As Watkins (2000) states "Without fluent decoding, there is little opportunity for the child to understand the passage" (¶. 5). She continues to state later in her research "The National Reading Panel did find clear evidence that practices encouraging repeated oral reading produce positive effects on word recognition, fluency, and comprehension" (¶. 13). Coupling that with Hastrouck and Tindal (2006) who state "fluency is only one of the essential skills involved in reading" (¶. 8), this current research focused on the fact that it is necessary students learn to decode words they are having a difficult time pronouncing and learn the meanings of those same
words. It is logical to say that if a student cannot pronounce a word clearly he/she most likely
does not understand the word's definition; thus losing out on comprehension of the text. As
Davidson (n.d.) states "Good readers can decode text and comprehend meaning all at the same
time. When decoding is automatic, readers can focus on the meaning of what they are reading-
which is, after all, the goal of learning"(¶ 4). Roberts, Torgesen, Boardman and Scammacca
(2010) state

This much is certain: for students identified as having LD, wide reading or
repeated reading by itself should never substitute for systematic, explicit
instruction in word study and comprehension strategy use. Indeed, fluency
instruction and practice may be most effective when combined with instruction on
word-level reading skills and comprehension. (¶ 16).

Throughout the remainder of this paper the term "vocabulary" will refer to decoding and defining
words accurately.

Focusing on students as individuals does put excellence in our reach. Following
successful results in the 2008-2009 school year, pilot study, the researcher examined the question
a second time in the 2009-2010 school year. “Does individualized vocabulary instruction
combined with fluency instruction help to increase comprehension results in bottom quartile,
third grade students?”
CHAPTER 3
METHODOLOGY

3.1 Participants

It was in 2008-2009 pilot study, when the researcher began to question whether individualized vocabulary instruction combined with fluency would be effective for four, third grade, elementary-school students (three girls and one boy). All four participants tested below the 20th percentile in September, 2008, pilot study, on the NWEA (Northwest Evaluation Association). At this level all four students qualified for reading lab services while enrolled in the third grade, general education classroom (see Table 1).

<table>
<thead>
<tr>
<th>Student</th>
<th>Birth</th>
<th>NWEA (Sept. &amp; May %)</th>
<th>Reading Level (Sept. &amp; May)</th>
<th>KS Read. Assess</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>June '99</td>
<td>15% 69%</td>
<td>Early 2nd 5th Grade</td>
<td>93%</td>
</tr>
<tr>
<td>B</td>
<td>Mar. '00</td>
<td>19% 48%</td>
<td>Early 2nd Late 3rd</td>
<td>88%</td>
</tr>
<tr>
<td>C</td>
<td>Apr., 00</td>
<td>9% 39%</td>
<td>Early 2nd 5th Grade</td>
<td>89%</td>
</tr>
<tr>
<td>D</td>
<td>Dec., '00</td>
<td>4% 20%</td>
<td>Early 1st Late 2nd</td>
<td>93% (KAMM)</td>
</tr>
</tbody>
</table>

These classrooms had been in session for seven months. During the course of this research one of the girls qualified for learning disabilities and began services, in late February. She was still a part of this action research. All four students had been identified by the classroom teacher as students experiencing significant reading difficulties. Of the reading difficulties, fluency and comprehension ranked at the top of the concerns for all four students. Classroom-based instruction included modified curricular materials and the Houghton Mifflin Reading Basal. Beginning the action research the students were ranging from a 1.0 to a 2.5 reading level, according to the Houghton Mifflin Reading Program. Because of the success of this intervention, the same strategies were selected for use in this research project.
Participants for this current (2009-2010) study were ten third grade elementary-school students (nine boys and one girl). Two of the ten students were identified and placed in a complete, pull out special education program. The teaching day of these students was different so these two participants were discontinued from this research because of their pull out special education services that began soon after the research began. All eight participants (seven boys and one girl) tested below the 25th percentile in September, 2009, on the NWEA (Northwest Evaluation Association) (see Table 1 and Table 2).

At the time of the research, five of the eight students were identified as learning disabilities; with one of these second language learners. These five participated in the regular classroom with inclusion services. The other three students were not identified learning disabled. Of the five not identified with learning disabilities, two qualified for reading lab services and two qualified for no outside services (see Table 2).
TABLE 2

EXPERIMENTAL GROUP PARTICIPANTS AND THEIR SERVICES

<table>
<thead>
<tr>
<th>Student</th>
<th>Inclusion¹</th>
<th>Pull Out²</th>
<th>Reading Lab³</th>
<th>ELL⁴</th>
<th>Speech⁵</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>B</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>C</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>D</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>E</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>F</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>G</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>H</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

¹*Inclusion* refers to “A paraprofessional assists students, on an individualized education plan, in the regular classroom”

²*Pull Out* refers to “The student is pulled out for special education services during reading instruction, according to their individualized education plan”

³*Reading Lab* refers to “The student receives 30 minutes of instruction in a small group setting but does not quality for inclusion or pull out services”

⁴*ELL* refers to “The student receives 30 minutes of English Language Learner services”

⁵*Speech* refers to “The student receives speech services through an individualized education plan”

The classrooms had been in session for nine weeks when the research began. All students had been noted, following evaluations using Houghton Mifflin Reading Passages and NWEA as “students experiencing significant reading difficulty.” Of the reading difficulties, fluency and comprehension ranked at the top of the concerns for all eight students. Classroom-based instruction included modified curricular materials and the Houghton Mifflin Reading Basal. At the beginning of the project the students were ranging from a 1.0 to a 3.0 reading level, according to the Houghton Mifflin Reading Program’s Assessment. As in the previous year, a paraprofessional was trained to work with these students one on one to and implement the strategies. The classroom teacher, as well as a trained high school, community assistant and a trained college student were also participants guiding students with their individual practices and strategies. The researcher met with the assistant(s) one on one to explain the procedure to them thoroughly. The researcher modeled the procedures for both assistants.
To offer a control group to this, the researcher chose eight participants in the third grade that had similar scores on the NWEA in fall of 2009. This control group is in a third grade classroom of the same elementary school as the experimental group. The results of their individual growth or scores will be displayed as well to show if any differences exist between the reading interventions given in the experimental group (see Table 3)

### TABLE 3

**CONTROL GROUP PARTICIPANTS AND THEIR SERVICES**

<table>
<thead>
<tr>
<th>Student</th>
<th>Inclusion(^1)</th>
<th>Pull Out(^2)</th>
<th>Reading Lab(^3)</th>
<th>ELL(^4)</th>
<th>Speech(^5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>4</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>5</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>6</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>7</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>8</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

\(^1\) *Inclusion* refers to “A paraprofessional assists students, on an individualized education plan, in the regular classroom”

\(^2\) *Pull Out* refers to “The student is pulled out for special education services during reading instruction, according to their individualized education plan”

\(^3\) *Reading Lab* refers to “The student receives 30 minutes of instruction in a small group setting but does not qualify for inclusion or pull out services”

\(^4\) *ELL* refers to “The student receives 30 minutes of English Language Learner services”

\(^5\) *Speech* refers to “The student receives speech services through an individualized education plan”

Both the control and experimental participants receive similar reading instruction during their school days. Students receive a 90-minute block of reading instruction time during the school day. During this 90-minute block students participate in whole group reading as well as guided reading groups. The curriculum provided to these classrooms is the Houghton Mifflin Reading Program. Students are also instructed with the use of novels and trade books throughout the school year. Local, state and national standards are the focus in all reading classrooms, regardless of the text the participants were utilizing. In the experimental group, however;
another twenty minutes of daily intervention was provided for the eight experimental participants. This twenty minute slot of time was allocated specifically for individualized vocabulary building and fluency instruction provided with the intervention in this research.

All participants attended school in a district located in a large metropolitan area in the mid west. As of the census of 2010, there were 1,868 people with 668 households (U.S. Census Bureau, 2010). The racial makeup of the city was 94.44% White, 0.96% African American, 1.23% Native American, 0.32% Asian, 0.91% from other races, and 3.10% from two or more races. Hispanic or Latino makes up 2.62% of the population. This district houses four elementary schools, through grades five; two middle schools through grades eight; and currently one traditional high school and one alternative high school. The elementary school where the research took place consists of eight classrooms each of grades two through five. The student population for the years 2006-2007 was 698. Of these 698 students, 18 were African-American (2.58%); 33 were Hispanic (4.73%); 81 were Other (11.60%) and 566 were White (81.09%) (KSDE 2006-2007). The minority population of the school was higher than that of the community itself. Since the beginning of NCLB this elementary school has made Adequate Yearly Progress (AYP).

3.2 Instruments

The instruments used in the 2008-2009 pilot study remained the same for the 2009-2010 study. To measure the effects of fluency instruction combined with individual vocabulary instruction, the articles from the Power Reading Program were implemented. For teaching vocabulary using the research-based method in this research, the teacher used a spiral notebook for each child, to help individualize each student's vocabulary. Each student made note of their mispronounced words from their first reading. The students predicted these meanings and
discussed with the teacher. From teacher-student discussion and guidance, students created pictures or symbols of the meanings of unknown words and recorded them in their notebooks to discuss, prior to rereading each day. Daily, the student and the teacher reread the missed vocabulary words, defined them and then used them in context in sentences. The teacher read the sentence aloud within the week's passage, to the student, that used the mispronounced vocabulary word and the student redefined what the word meant within the context of the passage. Much one on one dialogue took place daily with the teacher and the student.

3.3 Methodology

Because Read Naturally is sometimes utilized in the Reading Lab and Special Education Classrooms, the researcher chose to use the passages from Power Reading for this research. Unlike Read Naturally, Power Reading does not incorporate a vocabulary section so the researcher added individualized vocabulary combined with fluency practices to these passages.

Students were given a Power Reading passage. Students read the passage out loud. While reading, the teacher marked words on a separate copy of the same passage. The teacher highlighted or underlined words mispronounced, words added and words deleted. The teacher also marked incorrect prosody the student may have used in his/her reading. While the student read, the teacher timed this read, known as a “first read”. The time was labeled and recorded. Following the first reading of the passage, the student wrote words he/she did not know the meanings of into his/her journal. The teacher pronounced the word correctly and the student repeated the word. The teacher gave the student a sentence, using the word in context to help the student decipher the meaning of the word. The student listened to the word again in the passage and created the meaning of the word in their journal with a picture/symbol. Students repeated each of these words orally to the teacher before and after the reading of the passage.
The following day the teacher and student began their time together discussing the meaning of the mispronounced word from the first day’s reading. Students reviewed the picture/symbol they created in their journals. If the word had a prefix or suffix, the word was dissected and the base word and the affix defined separately and then taught together as one word. Students read the vocabulary mispronounced or misunderstood. Students reread the same passage to the teacher using the Power Reading passage.

For the third day the teacher assisted students in creating sentences for the vocabulary words in journals, attempting to use the word in context. Students read the vocabulary mispronounced or misunderstood orally. Students received individual instruction on any missed end marks. Students reread the passage out loud.

The teacher repeated this procedure for a fourth day. On the fifth day the student reread and reviewed missed vocabulary with the teacher. On this day the teacher timed the student as he/she read the passage out loud. The student marked the final read on the bar graph with a red marker or the teacher recorded the time it took for the student to read the passage. A comprehension quiz was given following the reading. If students were noted with accommodations for state assessments, the researcher used accommodations for this research. The student completed a comprehension quiz on the passage following the second, timed read. The first read, second read and comprehension results were recorded.
CHAPTER 4

RESULTS

The results in this research are two-fold. First, the results show the progress made for each, individual student through their third grade year through their gains on various assessments. Secondly, the results show if a difference in gains exists between the experimental group and the control group. To keep the data as objective as possible, the Houghton Mifflin Leveled Reading Passage was administered both times (pre and post) by a person other than the researcher. Results of comprehension were based on Houghton Mifflin Leveled Reading Passage Scores, NWEA Results and Kansas Reading Assessments. To show how individualized vocabulary knowledge can affect comprehension, results of the experimental group and their comprehension results were compared to results of the control group with no interventions regarding individualized vocabulary.

Table 4 shows the birth month, the local, national, and state assessments in scores and percentiles.

<table>
<thead>
<tr>
<th>Student</th>
<th>Birth Mon.</th>
<th>NWEA (Sept &amp; Apr.)</th>
<th>HMLRP (Sept. &amp; Apr.)</th>
<th>KS Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>June, 2000</td>
<td>23% &amp; 39%</td>
<td>KL (late 2&lt;sup&gt;nd&lt;/sup&gt;) &amp; MN (early 3&lt;sup&gt;rd&lt;/sup&gt;)</td>
<td>72%</td>
</tr>
<tr>
<td>B</td>
<td>July, 2000</td>
<td>8% &amp; 54%</td>
<td>KL (late 2&lt;sup&gt;nd&lt;/sup&gt;) &amp; MN (early 3&lt;sup&gt;rd&lt;/sup&gt;)</td>
<td>86%</td>
</tr>
<tr>
<td>C</td>
<td>June, 2001</td>
<td>17% &amp; 51%</td>
<td>J (early 2&lt;sup&gt;nd&lt;/sup&gt;) &amp; QRS (4&lt;sup&gt;th&lt;/sup&gt;)</td>
<td>72%</td>
</tr>
<tr>
<td>D</td>
<td>April, 2001</td>
<td>17% &amp; 60%</td>
<td>KL (late 2&lt;sup&gt;nd&lt;/sup&gt;) &amp; OP (late 3&lt;sup&gt;rd&lt;/sup&gt;)</td>
<td>83%</td>
</tr>
<tr>
<td>E</td>
<td>July, 2000</td>
<td>13% &amp; 77%</td>
<td>J (early 2&lt;sup&gt;nd&lt;/sup&gt;) &amp; OP (late 3&lt;sup&gt;rd&lt;/sup&gt;)</td>
<td>88%</td>
</tr>
<tr>
<td>F</td>
<td>Dec., 2000</td>
<td>9% &amp; 34%</td>
<td>KL (late 2&lt;sup&gt;nd&lt;/sup&gt;) &amp; QRS (4&lt;sup&gt;th&lt;/sup&gt;)</td>
<td>80%</td>
</tr>
<tr>
<td>G</td>
<td>Nov., 2000</td>
<td>21% &amp; 36%</td>
<td>MN (early 3&lt;sup&gt;rd&lt;/sup&gt;) &amp; QRS (4&lt;sup&gt;th&lt;/sup&gt;)</td>
<td>84%</td>
</tr>
<tr>
<td>H</td>
<td>July, 2001</td>
<td>19% &amp; 16%</td>
<td>MN (early 3&lt;sup&gt;rd&lt;/sup&gt;) &amp; QRS (4&lt;sup&gt;th&lt;/sup&gt;)</td>
<td>65%</td>
</tr>
</tbody>
</table>

The birth months for the experimental group ranged from June, 2000 to July, 2001, a range of 13 months. In September the NWEA range was 8%-23% and in April the NWEA range was 16%-
77%. Seven students made gains. The HMLRP range in September was late 2\textsuperscript{nd} to early 3\textsuperscript{rd}. The April range for HMLRP was from early 3\textsuperscript{rd} to 4\textsuperscript{th}. Seven out of eight students passed the Kansas State Assessment, according to NCLB requirements.

Table 5 shows the birth month, the local, national, and state assessments in scores and percentiles.

TABLE 5

SCORES OF CONTROL GROUP: LOCAL, STATE, NATIONAL SCORES/PERCENTAGES

<table>
<thead>
<tr>
<th>Student</th>
<th>Birth Mon.</th>
<th>NWEA (Sept &amp; April)</th>
<th>HMLRP (Sept. &amp; April)</th>
<th>KS Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>June, 2001</td>
<td>10% &amp; 29%</td>
<td>HI (Late 1\textsuperscript{st}) &amp; OP (late 3\textsuperscript{rd})</td>
<td>63%</td>
</tr>
<tr>
<td>2</td>
<td>May, 2001</td>
<td>17% &amp; NA</td>
<td>KL (Late 2\textsuperscript{nd}) &amp; OP (late 3\textsuperscript{rd})</td>
<td>72%</td>
</tr>
<tr>
<td>3</td>
<td>Nov., 2000</td>
<td>19% &amp; 45%</td>
<td>KL (Late 2\textsuperscript{nd}) &amp; OP (late 3\textsuperscript{rd})</td>
<td>73%</td>
</tr>
<tr>
<td>4</td>
<td>Mar., 2000</td>
<td>15% &amp; 29%</td>
<td>KL (Late 2\textsuperscript{nd}) &amp; MN (early 3\textsuperscript{rd})</td>
<td>59%</td>
</tr>
<tr>
<td>5</td>
<td>July, 2001</td>
<td>10% &amp; 27%</td>
<td>KL (Late 2\textsuperscript{nd}) &amp; MN (early 3\textsuperscript{rd})</td>
<td>60%</td>
</tr>
<tr>
<td>6</td>
<td>Apr., 2000</td>
<td>12% &amp; 12%</td>
<td>J(Early 2\textsuperscript{nd}) &amp; MN (early 3\textsuperscript{rd})</td>
<td>55%</td>
</tr>
<tr>
<td>7</td>
<td>Aug., 2000</td>
<td>15% &amp; NA</td>
<td>J(Early 2\textsuperscript{nd}) &amp; MN (early 3\textsuperscript{rd})</td>
<td>30%</td>
</tr>
<tr>
<td>8</td>
<td>Apr., 2001</td>
<td>10% &amp; 17%</td>
<td>MN(Early 3\textsuperscript{rd}) &amp; MN (early 3\textsuperscript{rd})</td>
<td>72%</td>
</tr>
</tbody>
</table>

Birth dates for the control group ranged from March, 200 to July, 2001, a range of 16 months.

The range of September NWEA scores was from 10%-19%. The range of April NWEA scores was from a 12% -45%, with two students not testing in April and one student making no gains. The HMLRP range in September was from late 1\textsuperscript{st} to early 3\textsuperscript{rd}. In April, the HMLRP range was from early 3\textsuperscript{rd} to late 3\textsuperscript{rd}. Kansas State Assessment results revealed three students passing, according to requirements by NCLB and five students not passing.

Table 6 shows the average scores of national and state assessments for the experimental and control groups.
TABLE 6

AVERAGE SCORES OF NWEA (SEPT. & APRIL) AND KANSAS STATE ASSESSMENTS

<table>
<thead>
<tr>
<th>Group</th>
<th>Average Fall NWEA</th>
<th>Average Spring NWEA</th>
<th>Average State Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>15.8%</td>
<td>41.4%</td>
<td>78.8%</td>
</tr>
<tr>
<td>Control</td>
<td>13.5%</td>
<td>26.5%</td>
<td>60.5%</td>
</tr>
</tbody>
</table>

Students in the experimental group averaged a 15.8% in September with the NWEA. In spring the average NWEA score for the experimental group was 41.4%. The average for the Kansas State Assessments for the experimental group was 78.8%. The control group averaged 13.5% in September on the NWEA and in spring averaged a 26.5%. The average Kansas State Assessment for the control group was 60.5%.

When a student scores an 89%-100% on the Kansas State Assessments in reading, the student has scored in the “Exemplary” category. A score of 80-88% shows “Exceeds Standards”; a score of 67-79% shows the student has “Met Standards” and a score of 55-66% tells the child is “Approaching Standards”. A score of 54% and below puts the child at “Academic Warning”. It is the goal of NCLB that every child meets a score of 67% or above in reading in the third grade when administered the Kansas State Assessments.

Statistical analyses were completed within groups for the NWEA Fall/Spring scores as well as between groups for NWEA scores and the State Assessment score. Analyses indicated that for within group differences, both the experimental and the control group made statistically significant gains on the NWEA from Fall to Spring. For the experimental group, \( t = 4.02 \text{ df (14), } p=.002 \). For the control group, \( t = 2.82 \text{ df (10), } p=.02 \). For between group differences in NWEA scores, the groups did not differ significantly at Fall testing \( (t=1.04 \text{ df (14), } p=.32) \). At Spring administration, the groups’ performance did differ significantly \( (t=3.00 \text{ df (12), } p=.01) \) with the experimental group scoring higher than the control group. Finally, comparing scores on the
Kansas State Assessment, between group differences were noted ($t=3.17$ df (14), $p=.007$) with the experimental group outperforming the control group.

Table 7 shows the comparisons of the experimental and control groups.

<table>
<thead>
<tr>
<th>TABLE 7</th>
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</thead>
</table>

**COMPARISONS OF RESULTS OF CONTROL GROUP AND EXPERIMENTAL GROUP**

<table>
<thead>
<tr>
<th>CONTROL GROUP</th>
<th>EXPERIMENTAL GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>*8 participants (gender unknown)</td>
<td>*8 participants (seven boys; one girl)</td>
</tr>
<tr>
<td>*Age range is 16 months (Mar., 2000 – July, 2001)</td>
<td>* Age range is 13 months (June, 2000 to July, 2001)</td>
</tr>
<tr>
<td>*Four participants made gains on NWEA (two did not take post assessment)</td>
<td>*Seven participants made gains on NWEA</td>
</tr>
<tr>
<td>*Averaged together NWEA scores increased from 13.5%-26.5%</td>
<td>*Averaged together NWEA scores increased from 15.8% - 41.4%</td>
</tr>
<tr>
<td>*Three students passed the Kansas State Assessments according to NCLB</td>
<td>*Seven students passed the Kansas State Assessments according to NCLB</td>
</tr>
<tr>
<td>*Average Kansas State Assessment was 78.8%</td>
<td>*Average Kansas State Assessment was 60.5%</td>
</tr>
<tr>
<td>*Six students increased AT LEAST one grade level in reading according to HMLRP</td>
<td>*All students increased AT LEAST one reading according to HMLRP</td>
</tr>
<tr>
<td>* Three students reading at “late third grade” level in April</td>
<td>*All students reading at “late third grade” or “fourth grade” level in April</td>
</tr>
</tbody>
</table>

Looking at the results of the two groups, first, it is noted that in the experimental group two out of eight were considered to be reading “on grade level” or “early 3rd grade”, according to the Houghton Mifflin Leveled Reading Passage. According to the NWEA; however, all students scored in the bottom quartile, or 25% and below. For post assessments, in April, all students in the experimental group were considered reading on grade level or above. All students but one made gains on the NWEA from September to April. Finally seven out of eight
students passed the Kansas State Assessment with a score that qualified them for “Met Standards” or above. The one student in the experimental group who did not meet standards on the Kansas State Assessment, missed the mark by 2% but was shown to be reading and comprehending at a 4th grade level in April, 2010, orally. However, this same student also showed no gains when administered the NWEA assessment. Both the Kansas State Assessment and the NWEA are administered through a computer where the Houghton Mifflin Leveled Passage is an oral, teacher administered assessment.

All students administered the NWEA made gains with the exception of one student who remained with the same percentile. Two students did not complete the NWEA in spring, due to no parent consent form being returned. In the control group three out of eight students were considered to be reading and comprehending “on grade level” or “late third grade” when administered the Houghton Mifflin Leveled Reading Passage in April by their classroom teacher. In the control group three out of eight students passed the Kansas State Assessments by a score for the “Met Standards” category.

Comparing the experimental group and the control group at the start of the 2009-2010 school year, the average results of the fall, NWEA scores were similar. The control group averaged a 13.5%, while the experimental group averaged a 15.8%. In April, however, the averages were different. The average NWEA score for eight students in the experimental group totaled 41.4% in spring, 2010 compared to the average NWEA score for the six participants in the control group, which totaled a 26.5%, as shown in Table 6. Comparing the results of the spring the Kansas State Assessments; however, the results were different when averaged together, as with the NWEA. As shown again in Table 6, the control group averaged a 60.5% on the Kansas State Assessments, while the experimental group averaged a 78.8%.
Observing solely the HMLRP section of the tables, it is clear that the control group entered the school year lower than the experimental group with their levels of reading. This could be due to human error on the testers’ part. The students were not administered their HMLRP assessments by the same test administrator. The experimental group did have the same test administrator for both fall and spring.
CHAPTER 5
CONCLUSIONS

The goal of this research was to determine whether individualized vocabulary instruction combined with fluency instruction effect comprehension results among third grade students scoring below the 25th percentile on a nationally standardized test, in this case the Northwest Evaluation Assessment. With the addition of a control group, the results were able to show if the intervention of vocabulary instruction with fluency instruction made a direct impact compared with the experimental group. Results were also able to demonstrate individual student achievement among students when these strategies were implemented. As noted by the tables, birth months of students were provided as to factor in the age of each participant.

McMaster, Fuchs, Fuchs and Compton (2005) examined whether “non-responders”, or students who consistently scored low in the area of reading comprehension, responded to one of three individualized treatments. These treatments included (1) a program called PALS, developed at Vanderbilt University and includes instruction in phonological awareness, decoding and fluency; (2) the Modified PALS which was conducted in the classroom for 35 minutes, 3 times a week and included a peer tutor or coach and was performed at a slower, less intensive rate; and finally, (3) tutoring, which also took place three times a week for 35 minutes a session but more closely resembled a pull-out scenario like in special education, presented to the student by a trained tutor. With the tutor, the activities were in small groups or one-to-one instruction. Following this field trial it was found that “Tutoring may be the most promising for reducing unresponsiveness” (p. 459). The authors suggest that “For those students for whom modifications [in general education classroom settings] are ineffective, it is important that options such as one-to-one or small group tutorials are available” (p. 460).
Coupling that field study with the research gathered in this study, below quartile learners are the learners requiring small group instruction, at the very least, or one-on-one instruction to further eliminate their gaps in their learning. As four of the participants in this research are identified with learning disabilities and one in the process of being evaluated, it clearly shows that small group instruction or one-to-one interventions are necessary to meet the needs of their learning in addition to an additional one-on-one or small group tutoring session each day. The three participants who were not identified with learning disabilities made significant gains in their reading comprehension overall. This research modeled the philosophy of the all, some, few RTI model (Strecker, 2007). The bottom quartile of students researched all fell within the “few” category. These few required the additional one on one intervention in addition to the small group interventions provided to them through current services such as special education services and/or remedial reading services and/or inclusion services and the regular classroom setting. Differentiated instruction and Response to Intervention are both models that allow students to work at where they are currently achieving and build skills beyond their current level(s).

Within a differentiated instruction classroom teachers are able to focus on student weaknesses and strengths and progress students to their fullest potential while focusing on lifelong learning skills. (Tomlinson, 2008) When educators evaluate where every learner is in their classroom from the moment they arrive into their classrooms, educators will be better equipped to make changes within their current curriculum to meet the needs of every learner. As students achieve skills more skills can be added and/or applied to what students are working toward, in this case reading comprehension. With reading comprehension it is imperative teachers recognize “The Reading Big 5” (NRP, 2000) with every learner and find where holes in these areas may lie. Evaluating every readers’ phonemic awareness level, phonics level,
vocabulary, fluency and comprehension levels prior to preparing curriculum at the start of the school year, teachers will find precisely where to begin with each learner. Once teachers fully implement “The Reading Big 5”, Differentiated Instruction (Tomlinson, 2008), Response to Intervention (Strecker, 2007); all within a positive classroom environment, students will achieve skills necessary to successful reading comprehension of all texts.

Does vocabulary instruction combined with fluency instruction increase overall reading comprehension? As Penner-Wilger (2008) say the three component skills of reading fluency include "accuracy of word decoding, automaticity of word recognition, and prosody of oral text reading" (¶. 3). Vocabulary knowledge and fluency seem to parallel one another when seeking to make gains in reading comprehension. When students can decode words automatically and create mental pictures in their minds with automaticity then students are able to visually comprehend text more effectively. However, if students are not aware of the words they are reading, no mental pictures are created or the student creates the wrong mental picture.

As Lubliner and Scott (2008) state “Repeating a word supports students' understanding of its meaning as well as how it can be used in various contexts” (p. 10). When we repeat vocabulary to students within the text they are reading, students will better comprehend the meaning of the word and the text the word is in. As students repeat their readings with new vocabulary words within, the brain is better equipped to create mental pictures with the repetition provided.

More research combining individualized vocabulary instruction combined with fluency instruction needs to be provided. However, given the one-to-one intervention this research provided, along with individualizing the vocabulary for each of the students, it can be suggested that all eight students increased their comprehension through individualized vocabulary
instruction combined with fluency practices. With the one-to-one interventions more direct student to teacher time was allowed for these students to further their lifelong learning skills as they learned to apply the skills of context clues, decoding and processing skills to learn the meanings of unknown words and ultimately increase comprehension.

Since the two participants who are not identified and received no remedial reading services made such significant gains overall (students C and G in the experimental group), this research could be examined using students scoring in the second quartile, or 25\textsuperscript{th}-50\textsuperscript{th} % of the NWEA for future school years.

As teachers begin to examine the practices in the regular education classroom, it is necessary to look at resources surrounding them in order to make interventions like this one successful. The availability of extra hands is not always close by in every school setting. This intervention is one that can be implemented to all levels of reading and be utilized with students who fall in the “some” and “few” and “all” categories of RTI (Strecker, 2007) even within the regular classroom setting. As teachers seek this small group, or one on one time, other literature based activities and programs can be occurring throughout the classroom setting such as literature circles, graphic organization of text with buddies, fluency practicing with a partner or even silent, independent reading time. Upon the completion of the pilot study year, 2008-2009 the researcher reflected and realized Response to Intervention was taking place within the regular classroom setting. With this realization the 2009-2010 school year came; with double the amount of participants. Making the realization that more time was going to be necessary to meet the reading needs of the eight participants falling below the first quartile, the researcher revamped the day’s schedule and sought out additional aids within the classroom each for an hour a day to help implement the intervention. To meet the needs of all learners required time
and commitment reflecting on the school day’s schedule and the quality of instructional practices of the other students in the classroom while small group and one-on-one interventions were taking place.

Examining the effects of individualized vocabulary instruction combined with fluency instruction is necessary for further investigation, especially at mid to upper elementary grade levels when vocabulary takes a turn and becomes more challenging for students. More importantly than learning the new vocabulary within context, is the fact that all students are learning lifelong skills they can apply in other reading situations when new vocabulary arises.

With the tier intervention model of instruction seen forming more often in schools across the nation, vocabulary instruction combined with fluency instruction is an intervention to be closely examined within the regular classroom or the response to intervention model. Small groups of students may benefit greatly from this intervention, if their decoding skills and phonics skills are starting to become mastered. All students can benefit from this intervention across the curriculum and subject areas when learning new vocabulary. Giving students more interventions at the right time of their learning is paramount to their reading success. As we begin to focus more on individual instruction, students will be likely to make more gains. More studies such as this one are soon to be informative to educators as schools begin to individualize learning for all students. When students are reading they need to be allowed ample time to examine the text, recognize, record and study vocabulary that is unfamiliar to them. Given time, students can then learn the vocabulary effectively, implement it into their reading, repeat their reading until fluency is achieved and then finally comprehend. When students are given strategies to implement to help them learn, educators are teaching students skills and teaching students how to engage in their own learning. All at the same time while closing gaps and increasing test scores.
among bottom quartile learners. Teaching students to engage in their own learning, in this case, furthering individual vocabulary and repeated readings until fluency existed, is teaching students how to comprehend text and become independent readers.
REFERENCES
LIST OF REFERENCES


