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## The Effect of Small Group Intervention Activities in an Enrichment Program with Second Grade Students

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The Effect of Small Group Intervention Activities in an Enrichment Program  
with Second Grade Students

An Action Research Project Presented to  
the Graduate Faculty of  
Minnesota State University of Moorhead

By

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In Partial Fulfillment of the  
Requirements for the Degree of  
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### **Abstract**

The purpose of this research was to determine whether the effect of using small group reading intervention activities in an after-school program with Native American second grade students would increase their foundational reading skills and oral reading fluency. The students selected for the study were enrolled in the after-school program. This study was used to determine whether or not small group reading interventions enhanced the students reading foundational skills and overall oral reading fluency. This study evaluated the reading skills of 12 of the 17 second grade students at Circle of Life Academy. The assessments used in this study were the AIMS-web Plus assessment and Assessing Reading Multiple Measures assessments. Each of these assessments were used to assess the student's reading foundational skills and their overall reading fluency level. The assessments were used to determine intervention activities that were practiced during the after-school program three days a week. The students rotated between three activities each session. As students recorded their individual data for fluency rates, they were able to see if there were improvements in scores. The teacher would help the students set goals for the following week. The results of the AIMS-web fluency scores showed that those students who received interventions in reading fluency increased their fluency rate of 18.8% versus the nonintervention group that increased at a rate of 13.7%. The Maze Comprehension scores indicated that the students with an eight-week intervention period increased at an average rate of 33.8% versus the nonintervention group that increased their fluency at an average rate of 20.9%. The San Diego Quick Assessment for Student Reading Levels showed that those students who received after-school interventions increased their word recognition and increased their grade level reading at a rate of .88% versus the nonintervention group that increased their grade level reading at a rate of .85%. After eight weeks of interventions, the results of the assessments

from the after-school students were compared to six of their randomly selected second grade classmates at the beginning of the study and again at the end of the study. Through careful analysis of the initial baseline results to the final assessment results, the goals of the study were validated. The students in the after-school program improved their literacy skills at a greater rate than the students who did not receive interventions. These students gained a greater competitive attitude for improving oral reading fluency than to the students that did not receive interventions.

## **Chapter One: Introduction**

### **General Problem**

Learning to read is a complex task for beginners. They must coordinate many cognitive processes to read accurately and fluently (National Reading Panel, 2000). In today's schools, too many children struggle with learning to read. While there are no easy answers or quick solutions for improving reading achievement, there now exists extensive research about the design of instruction that needs to be given to children so they can learn to read well. High-quality reading instruction based on scientifically based research must include instructional content based on the five essential components of reading instruction, integrated into a coherent instructional design. This coherent design includes the explicit and systematic teaching of beginning reading knowledge and skills within an overall program of purposeful, engaging reading and writing activities (Leading for Reading Success, 2005). Parents and families must understand how instruction in phonemic awareness, phonics, fluency, vocabulary and text comprehension can help meet the goal of having every child be a reader by the end of third grade (National Institute for Literacy, 2001).

Readers must be able to apply their alphabetic knowledge to decode unfamiliar words and to remember how to read words they have read before. When reading connected text, they must construct sentence meanings and retain them in memory as they move on to new sentences. At the same time, they must monitor their word recognition to make sure that the words activated in their minds fit the meaning of the context. In addition, they must link new information to what they have already read, as well as to their background knowledge, and use this to anticipate forthcoming information. When one stops to take stock of all the processes that readers perform

when they read and comprehend text, one is reminded how amazing the act of reading is and how much there is for beginners to learn (NRP, 2006).

Reading fluency involves three components; accuracy of recognition, automaticity of word recognition, and reading orally with appropriate expression. Practice is essential for the acquisition of fluency and providing students with varied opportunities to practice and acquire fluency will enhance their participation and engagement (Nichols, Rupley, & Rasinski, 2009). Comprehension is the reason for reading. If readers can read the words but do not understand what they are reading, they are not really reading. Text comprehension can be improved by instruction that helps readers use specific comprehension strategies (NIL, 2001).

Reading is essential to succeed in our society. The ability to read is highly valued and important for social and economic advancement (Snow, Burns, & Griffin, 2003).

I have taught reading to the first and second graders for the past six years. I have found that as class sizes continue to grow many students do not develop the early literacy skills needed to read and comprehend. I have spent a large portion of my teaching time focusing on the reading fundamentals of phonemic awareness, phonics, and vocabulary. Systematic and explicit instruction supports student learning by presenting new material in small steps, with ample practice opportunities. This type of instruction requires careful attention to lesson design and instructional delivery (LRS, 2005). If students do not obtain these skills, they may have difficulties with reading and comprehension. With time constraints, I haven't been able to properly assess with progress monitoring and fluency assessments. Many of my students are able to develop the skills needed; however, I have found that if the students lack the fundamental skills by the end of the second grade they continue to fall further behind over the years. Our school qualified for a School Improvement Grant (SIG) in the fall of 2015. One of the

requirements for this grant is to teach a balanced literacy program that is researched-based and will meet the needs of all of the students. Teachers are evaluated and expected to teach the curriculum with fidelity to the program. I have received training from CORE consultants in both reading and math. These consultants work with the staff to improve instructional practices and improve student achievement scores.

One of our weakness we continue to have is finding the time to progress monitor and properly assess students on a weekly to biweekly basis. In January, our school implemented the AIMS-web Plus online assessment program to help teachers assess their students in reading skills and oral reading fluency in a matter of a few minutes time. This program created reports that helped the teachers identify students at risk. I used the CORE Assessing Reading Multiple Measure assessments to collect data on each student. This data was used to identify students at risk, direct my teaching instruction, and create intervention lessons that helped build the necessary foundational skills for improving individual student reading skills.

### **Subjects and Settings**

**Description of subjects.** The control group of participants in this study were the six second grade students that were assessed but did not receive after-school interventions. The class has 17 students, a primary teacher, a reading teacher, and a full time paraprofessional. There are three students on Individual Education Plans (IEP) that have exceptionally low reading levels. All of the students are Native American that live within a very poor socioeconomic rural community. The school was a new facility where technology was implemented and used to teach the curriculum. The Journeys reading curriculum was the primary source of daily 90-minute reading core instruction. The Leveled Literacy Intervention (LLI) program was used with students that receive Response to Intervention (RTI) time. All of the students were assessed



using the CORE Assessing Reading Multiple Measures assessment. The assessment categories were oral reading fluency, phoneme deletion, high-frequency words, vocabulary screening, the Maze Comprehension test, and the San Diego Quick Assessment of Reading Ability test.

Participants in the enrichment program: There were six students in the second grade that participate in the after-school enrichment program three days a week. My paraprofessional and I worked with the six students from the second grade class providing them with an additional 60-minutes of small group interventions in phonemic awareness, phonics, word identification, high-frequency words, vocabulary, and fluency. These six participants were in my second grade classroom of 17 students. All of the students qualify for free and reduced lunch. There were three boys and three girls. Three students were eight years old and three students were seven years old. Three of the students were living with single grandparents. One of these students had a deaf grandparent where there wasn't a lot of verbal communication. One student was living in a two grandparent household. One student was living in a two parent household.

**Selection criteria.** Our school offers an after-school enrichment program that was available for all students to attend. The students I selected were not chosen based on their reading assessments or fluency scores. They were selected because they attended the after-school enrichment program. Each student attended the program three days a week from 3:30-5:30. All of these students were in my second grade reading class. In January each of the students were assessed in reading fluency during their regular reading class. Three of the students scored above the 50<sup>th</sup> percentile on their winter benchmark reading fluency assessment and three scored below the 50<sup>th</sup> percentile. The control group of students that were randomly selected had two of the six students were above the 50<sup>th</sup> percentile on their winter benchmark reading fluency assessment and four students scored below the 50<sup>th</sup> percentile.

**Description of setting.** The study took place in my elementary classroom during the after-school enrichment program time. The school was located on an Indian reservation in Minnesota and had 212 currently enrolled students. The school was a K-12 school with 100% Native American students. The students must have had a blood quantum of at least 25% to be eligible for enrollment in the school and each grade is limited to 20 students. The after-school enrichment program had 76 students enrolled. These students were fed supper and then brought home by a bus each evening.

**Informed Consent.** I obtained permission from the Institutional Review Board at Minnesota State University Moorhead and from my school district to conduct this study. I followed the school district's IRB procedure to obtain permission to conduct my research. This involved getting permission from my superintendent and principal at the school where the research took place. Protection of human subjects participating in the research was assured. The grandparents, parents, and foster parents were informed of the purpose of the research and any procedures required by the participant, including disclosure of risks or benefits. Confidentiality was protected through the use of pseudonyms without identifying information. The choice to participate or withdraw at any time was outlined in writing. Grandparents, parents, and foster parents were aware of the study and signed the permission for the students to participate.

### **Review of Literature**

The task of learning the fundamental skills and the complexity of the reading process is challenging for many children. Students with low performance have had multiple risk factors that can influence their education. These risk factors could be any of the following: a girl in mathematics or a boy in reading and science, immigrant background, speaking a different language at home than at school, rural school location, living in a single parent household, lack

of pre-primary education, repeating at least one grade, or enrolled in a vocational track. Each of these can be indicators for low achievement in school performance. By reducing the number of low-performing students is not only a goal in its own right but also an effective way to improve an education system's overall performance (Organization for Economic Co-operation, 2016). Interventions can help students put together the missing pieces to allow them to overcome many challenges. Although there exists an extensive literature on developing reading fluency, it is an often-neglected aspect of reading intervention. After-school enrichment programs can offer additional instruction time to improve readers literacy skills.

### **Definition of Terms**

For the purposes of this study, the following terms were defined:

**Automaticity:** refers to accurate, speedy word recognition, not to reading with expression (NRP, 2000).

**Comprehension Strategies:** are conscious plans—sets of steps that good readers use to make sense of text.

**Decoding:** the ability to apply your knowledge of letter-sound relationships, including knowledge of letter patterns, to correctly pronounce written words (NRP, 2000).

**Phonemic Awareness:** is the ability to hear, identify, and manipulate the individual sounds—phonemes—in spoken words (NIL, 2001).

**Phonics:** is the understanding that there is a predictable relationship between phonemes (the sounds of spoken language) and graphemes (the letters and spellings that represent those sounds in written language) (NIL, 2001).

Phonological Awareness: is a broad term that includes phonemic awareness. In addition to phonemes, phonological awareness activities can involve work with rhymes, words, syllables, and onsets and rimes.

Reading Fluency: is the ability to read a text accurately, quickly, effortlessly, and with appropriate expression and meaning (Griffith & Rasinski, 2004).

Vocabulary: refers to the words we must know to communicate effectively. There are four types of vocabulary; listening vocabulary, speaking vocabulary, reading vocabulary, and writing vocabulary (NRP, 2000).

### **Statement of Purpose**

The purpose of this study was to determine the effect of using small group interventions activities during an after-school enrichment program on Native American second grade students. Following recommendations from the literature, I assessed the students using the following assessments; CORE Reading MAZE Comprehension assessment, the San Diego Quick Assessment, and AIMSweb Plus Reading Curriculum-Based Measurement (R-CBM) to gather data. I used the data to compare the six randomly selected students' assessment results to the six students that attended the after-school enrichment class. At the end of the study I checked to see if the students that received small group interventions improved their literacy skills, word identification, and oral reading fluency at a greater rate than the students that were not attending the after-school program.

### **Understanding the Five Essential Components of Effective Reading Instruction**

Effective reading instruction addresses five critical areas: phonemic awareness, phonics, fluency, vocabulary, and comprehension. There are many approaches to teaching these five essential components; however the most effective approach is called systematic and explicit

instruction. Systematic instruction requires that skills and concepts are taught in a planned progressive sequence. The lessons focus on clearly defined objectives with purposeful activities to practice the skills and opportunity to apply what skill has been taught. Explicit instruction means the teacher states clearly what is being taught and models effectively how it is used by a skilled reader. Explicit instruction also ensures students' attention is drawn to important features of an example or demonstration. An effective reading program will utilize valid and reliable assessments that help teachers know what skills students have acquired, which students are experiencing difficulty, and how much progress students have made. This complex process is accomplished through the use of screening, diagnostics, progress monitoring, and outcome assessments (Snow et al). When a large percentage of a school's students are from disadvantaged homes, it is often the case that median student reading achievements in that school will be low. Research has shown the effectiveness of clearly articulated, well-implemented, school-wide efforts that build from coherent classroom reading instruction (Snow et al).

### **Who Is "At Risk"?**

A student "at risk" is one who is in danger of failing to complete his or her education with an adequate level of skills. Risk factors include low achievement, retention in grade, behavior problems, poor attendance, low socioeconomic status, and attendance at schools with large numbers of poor students. Each of these factors is closely associated with the dropout rate and by the time students are in 3<sup>rd</sup> grade we can use these factors to predict with remarkable accuracy which students will drop out of school and which will stay to complete their education (Slavin & Madden, 1989). The students I worked with live in a very poor socioeconomic community and attended school with large numbers of poor students. These factors may reflect the students educational limitations of not developing an adequate reading proficiency level.

Effective reading instruction is built on a foundation that recognizes that reading outcomes are determined by complex and multifaceted factors. Disruption of any of these factors increases the risk that reading will be delayed or impeded, a phenomenon particularly prevalent in impoverished urban and rural neighborhoods and among disadvantaged minority populations (Snow et al).

### **Small Group Interventions**

Quality instruction with appropriate curricula that is aligned with the state standards is the primary route to prevent most reading difficulties. Supplementary instruction can be a significant and targeted enhancement of classroom instruction. Supplemental interventions reveal a number of common features: 1) Interventions are occurring daily, 2) The length of intervention times. There is an array of activities that generally consist of some reading (and rereading) of continuous text. Each session features some form of word study and specific strategies for decoding words. A writing activity in a systematic manner is an important feature. There should be a focus on finding interesting and engaging texts. Each program should include carefully planned assessments that closely monitor the response of each child to the intervention. Effective intervention programs pay close attention to the preparation and supervision of the teachers or tutors. Several of these intervention strategies recognize the National Reading Panel (2000) findings that effective reading instruction addresses alphabets, fluency, and comprehension (Snow et al).

A self-evaluation to identify an underlying cause of a problem could be done to evaluate the instruction, curriculum, environment, and learner (ICEL). Then reviewing data, interview stakeholders, observe the student and test/assessments (RIOT) should be done on the Matrix worksheet. The information from the ICEL/RIOT evaluation could suggest changes that could

improve the teacher's lessons and improve the learning for the student. If achievement differences among students are to be narrowed or eradicated, teachers must allocate unequal instructional time. Struggling readers are already behind, and they will always be behind unless they receive more instructional time (Allington, 1983). The purpose of providing extra instructional time is to help children achieve levels of literacy that will enable them to be successful through their school careers and beyond. It is not simply to boost early literacy achievement (Snow et al).

### **Connecting Fluency and Comprehension**

A recent large-scale study by the National Assessment of Educational Progress (NAEP) found that 44% of a representative sample of the nation's fourth graders were low in fluency. The study also found a close relationship between fluency and reading comprehension. Students who scored lower on measures of fluency also scored lower on measures of comprehension, suggesting that fluency is a neglected reading skill in many American classrooms, affecting many students' reading comprehension (NIL, 2001).

The National Reading Panel identified reading fluency as a key ingredient in successful reading instruction. Reading fluency is the ability to read accurately, quickly, effortlessly, and with appropriate expression and meaning. Reading fluency is important because it affects students' reading efficiency and comprehension (Griffith & Rasinski, 2004).

While the construct of *fluency* might have been neglected in the past, it is receiving much deserved attention presently. A very strong research and theoretical base indicates that while fluency in and of itself is not sufficient to ensure high levels of reading achievement, fluency is absolutely necessary for that achievement to occur because it depends upon; and typically reflects, comprehension (Pikulski & Chard, 2005). When decoding is poor, or too slow, it

impedes the flow of thought and hampers comprehension. Less fluent readers must focus their attention on figuring out the words, leaving them little attention for understanding the text (NRP, 2000). However, this may not be true for English Language Learner (ELL) students. They may struggle with reading because they are learning to read and comprehend information in English.

Students who read and reread passages orally as they receive guidance and/or feedback become better readers. Repeated oral reading substantially improves word recognition, speed, and accuracy as well as fluency. To a lesser, but still considerable extent, repeated oral reading also improves reading comprehension (NIL, 2001).

For preventing reading difficulties, it is critical to provide excellent reading instruction to all children. Excellent instruction is most effective when children arrive in first grade motivated for literacy and with the necessary linguistic, cognitive, and early literacy skills (Snow et al). Students learn linguistics by understanding that spoken sounds match letters. The student spends the initial learning period of the smallest letters and learns first how to combine consonants and vowels into almost infinite numbers of three and four letter words. The printed symbols (words) are viewed as a code and, according to the linguist, breaking the code involves analyzing the basic speech patterns of our language (Criscuolo, 1970). Cognitive reading strategies should be used to help the reader understand the text. These strategies are making predictions, asking questions, visualizing, monitoring and clarifying, summarizing and synthesizing, analyzing the author's craft, and making connections to the text. Readers must obtain the early literacy skills in phoneme deletion, phonological segmentation, phonics, high-frequency words, vocabulary, and comprehension. Assessments can be given to analyze a students development of the early literacy skills.



### **Assessing Reading**

Today's teachers must understand a great deal about how children develop and learn, what they know, and what they can do. Teachers must know and be able to apply a variety of teaching techniques and comprehensive strategies to meet the individual needs of students. They must be able to monitor and identify students' strengths and weaknesses and plan instructional programs that help students make progress (Snow et al). The Assessing Reading Multiple Measures book provides a series of comprehensive assessments that can assist in guiding instruction for the students' as they progress with their literacy skills (Lencher, Milone, & Mahler, 2008). First, I assessed the students in the phonics survey using letter naming, consonant and vowel sounds, reading and decoding short vowels in cvc words, consonant blends with short vowels, short vowel words with digraphs, r-controlled vowels, long vowel spellings, variant vowels, low frequency vowel and consonant spellings, and multisyllabic words. Then, I used assessments in phoneme deletion, phonological segmentation, phoneme segmentation test, vocabulary screening, and a sight word/high-frequency words to help determine intervention activities that needed to be reviewed. The San Diego Quick Assessment of Reading Ability was given to assist in determining the student's instructional reading level. The AIMS-web was administered bi-weekly to document each students progress.

### **Hypothesis Statement**

Second grade students who participate in a reading enrichment program three days per week for 60-minutes each day will experience greater gains in reading fluency and comprehension scores than students who do not.

## Chapter Two: Data Collection

### Research Questions

As a reading teacher to both the first and second graders, I have seen many students find success with using a balanced literacy program. However, I have seen many struggle with building the foundational skills need to be successful too. Using the data and interventions to help students become confident readers was my ultimate goal.

1. Will students who attend the participate in the after-school enrichment program see improvements in literacy skills, word identification, and oral reading fluency?
2. What differences in literacy skills and word identification will be observed between a group of students who participate in the after-school enrichment program and a group of students who do not?

### Research Plan

**Methods and rationale.** The CORE Assessing Reading Multiple Measures book is a book used for reading assessments for students in grades K-12. This book was used to assess the participating action research student's early literacy skills in phoneme deletion, phonological segmentation, phonics, high-frequency words, oral fluency, assessment of reading ability, vocabulary knowledge, and comprehension skills. The student data was documented and analyzed for creating small group intervention activities and student literacy skill groups. These students were able to practice and learn the skills during the after-school literacy intervention sessions.

The AIMS-web Reading Curriculum-Based Measurement (R-CBM) Plus is a universal screening, progress monitoring, and data management system that supports Response to Intervention and tiered instruction for students K-12. The AIMS-web Plus was used to assess the

student's readability level using word lists and reading passages. This program is designed to screen and progress monitor, measure foundational skills, and report your assessment data in a report. The data was analyzed to identify the students that fall into the risk category. As additional AIMS-web assessments were performed, the program tracked and charted the students' oral reading fluency progress.

The Oral Reading Fluency Norms Chart was used to describe oral reading fluency rates of students in grades 1 through 8. The teacher used this chart to draw conclusions and make decisions about the oral reading fluency for each student. The Fluency Norms Chart helped the students set their goals for improving their oral reading fluency rate.

The NWEA Map Growth test measured what students know and informed teachers of what they were ready to learn next. The test adjusts questions to analyze each student's performance and determined if a student is performing on, above, or below grade level. These individual results were viewed on the online NWEA student profile to give a better understanding of the data. The Journeys Learning Continuum was used to assist in creating intervention lessons for groups of students. The NWEA test was performed at our school in grades K-12 during the fall, winter, and spring. I used the winter NWEA student profiles to better understand each students individual needs.

**Schedule.** The CORE Reading Assessment Profile was given in January to each of the students that were participating in the action research. This provided information about each student and identified areas of concern. It was administered again following the research study to compare data. The AIMS-web Reading Curriculum-Based Measurement (R-CBM) Plus was administered to all of the second grade students by the school psychologist during their literacy block in January. This assessment was used for the base line for each of the students. The results

of this AIMS-web Plus was immediately available for me to analyze each students fluency and comprehension. This assessment was completed every two weeks by the reading interventionist.

Table 1

*Assessments for Action Research*

AIMS-web Plus was used to assess each students fluency rates. This assessment was done bi-weekly on participating students. The entire class was assessed in January and again at the end of the research study.
The CORE Assessing Reading Multiple Measures book was used to assess the participating action research students at the beginning and end of the research. The results were examined of the students reading skills in phoneme deletion, phonological segmentation, phonics, high-frequency words, and vocabulary knowledge.
The San Diego Quick Assessment was used to help determine the student's reading level.

Interventions for the foundational skills and reading fluency with comprehension were given to the student in the after-school enrichment program for 60-minutes three times a week for an eight-week period. Each night a three activity rotation was used: 1)The teacher instructed a group, 2)the paraprofessional took another group, and 3) one independent activity was planned.

A fluency chart was used to motivate students to improve their reading rate. The students helped to record the data on their fluency sheets. Each of the students found the challenge of increasing fluency rates to be fun and exciting. The teacher helped each student set goals for improving their fluency and comprehension scores too.

**Ethical Issues.** The parents of the students were aware of the study and signed and approve permission to for the child to participate in the study. The students received foundational skill interventions and lessons in reading fluency with comprehension. These activities did not present any threat of harm or discomfort to them. The subjects were of an age that assent was not

relevant or appropriate. Parental permission was the only method used for their child's participation in this study. The students' identity was protected as the information was collected and analyzed.

### Chapter 3: Data Analysis and Interpretation

**Methods.** To carry out my action research project six students were selected to receive small group interventions during an after-school program. These students were selected because they attended the after-school program all year. The other six students in the second grade were randomly selected out of 11 students. The students in the after-school program received eight-weeks of small group literacy interventions for three days a week.

Will students who attend the participate in the after-school enrichment program see improvements in literacy skills, word identification, and oral reading fluency?

The second grade students had 90-minutes of classroom literacy instruction daily. Many of the students were able to practice and learn the skills that were taught. However, some students struggled to learn the skills during the 90-minute reading block. Students who participate in the after-school program were given the option of receiving literacy interventions for 60-minutes three days a week. This action research was created to focus on increasing skills in oral reading fluency, word identification skills, and other literacy skills that needed to be practiced and reinforced.

**Description of Data.** To complete my action research project a quantitative approach was used. Data were collected from twelve students in the second grade over an eight-week period. Six of the students received small group interventions three times a week during an after-school program. The remaining six students received only class instruction, and did not receive additional small group interventions.

To collect the baseline data, I used the oral reading fluency score from the Achievement Improvement Monitoring System (AIMS-web Plus), a web based progress monitoring system. The AIMS-web is a systematic method of formative assessment used to measure the overall

performance of the students' foundational skills at their grade level. The AIMS-web assessments was norm-referenced and was considered a reliable measure of student achievement. The Reading Curriculum-Based Measurement (R-CBM) measures the students' ability to read fluently through the use of a computer assisted standardized assessment. The one-minute fluency probe was a leveled passage at the student's reading level. All passages given to the students were of similar difficulty. The computer based system assessed the data and provided immediate feedback to the me.

In January, AIMS-web was administered to all students in kindergarten through sixth grade in our school district. This was the first time a fluency assessment program had been used in our school. The suggested national norm for second grade students' oral reading fluency scores at the 50<sup>th</sup> percentile for the winter benchmark was a score of 84 words per minute. The fluency scores for the 50<sup>th</sup> percentile for the spring benchmark was a score of 100 words per minute.

The CORE Assessing Reading Multiple Measures assessments were used to measure the students' literacy skills. These assessments assisted the teacher in targeting areas of strengths and weaknesses, for monitoring student reading development, and for planning appropriate instruction. A flowchart was used to determine the order of assessments for students in second and third grades. If the student received a passing score on the CORE Reading Comprehension test, then no further skill tests are needed. However, if the student had a lower than passing score, then I had to continue to perform assessments to determine areas of intervention. The assessments were in the order of Oral Reading Fluency, CORE Graded High Frequency Word Survey and/or CORE Vocabulary Screening, CORE Phonics Survey, CORE Phonemic

Deletion/CORE, and CORE Phoneme Segmentation Test. I used the assessment results to assist in selecting intervention activities.

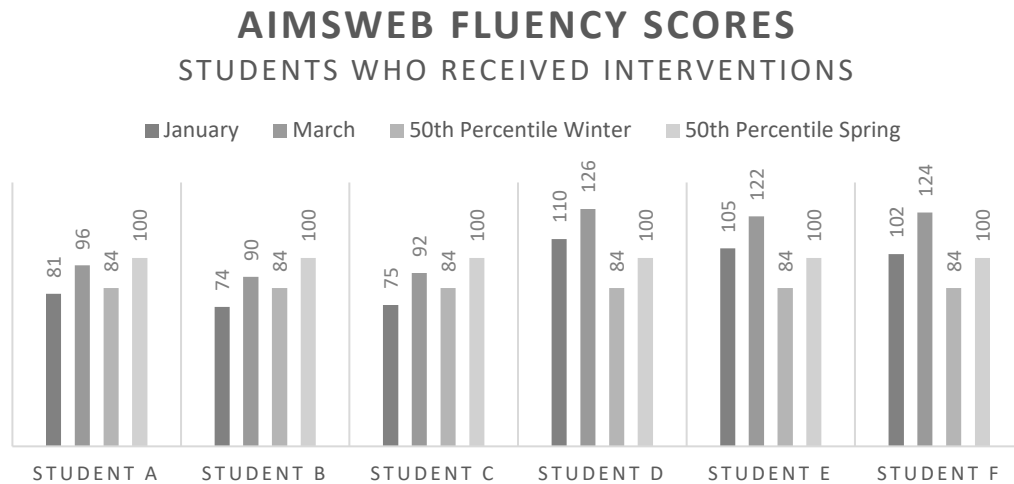
The San Diego Quick Assessment of Reading Ability was a test that measured the recognition of words out of context. To collect this data, the test consists of 13 graded short word lists from preprimer to eleventh grade. The words within each list were of about equal difficulty. This assessment was used to determine the reading level of each student. I determined if the was reading at an independent, instructional, or frustration level based on the errors made in a word list. If the reader made one error it was considered an independent reading level, if two errors were made it was considered an instructional reading level, and if three errors were made it was considered a frustration reading level.

**Findings.** Students that were selected for this action research were six second grade students that attended the after-school program and six students that were randomly selected from the second grade students. To ensure that student's names were anonymous, I referred to the student groups using letters and numbers. The students from the after-school group were identified as Student A, B, C, D, E, and F. The students from the randomly selected second grade class were identified as Student 1, 2, 3, 4, 5, and 6.

Based on the data collection and data analysis of the 12 students' winter and spring AIMS-web benchmark scores the data results were as follows:

Figure 1.0 indicated the AIMS-web fluency scores for the students who received interventions. The scores were from the January and March fluency assessments. The January score was used as the baseline score for each of the students. A score of 84 was the 50<sup>th</sup> percentile for the winter benchmark assessment. A score of 100 was the 50<sup>th</sup> percentile for the spring benchmark assessment.





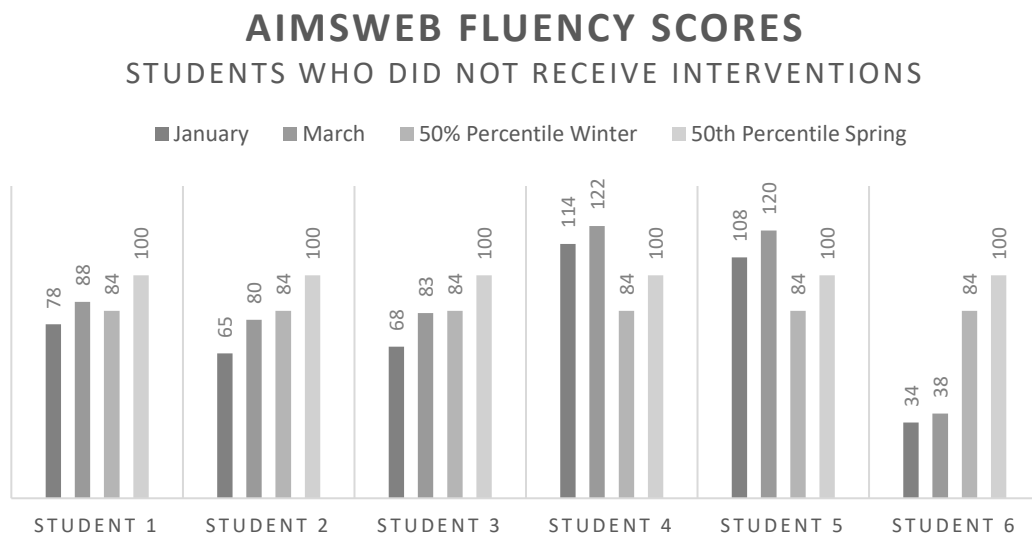
*Figure 1.* AIMS-web fluency scores for students who received interventions

The students who participated in the study were assessed in January and at the end of March. Comparing all students in the nation, a score of 84-109 would be in the 50<sup>th</sup>-75<sup>th</sup> percentile and a score of 110-131+ would place the student at the 76<sup>th</sup>-90<sup>th</sup> percentile. Spring benchmark scores of 106-131 would be in the 50<sup>th</sup>-75<sup>th</sup> percentile and a score of 125-148+ would place the student at the 76<sup>th</sup>-90<sup>th</sup> percentile.

The second grade students who did receive interventions all increased their fluency scores. After the January fluency assessment, Student A read 81 words per minute, Student B read 74 words per minute, Student C read 75 words per minute, Student D read 110 words per minute, Student E read 105 words per minute, and Student F read 106 words per minute. These students all had a winter benchmark goal of obtaining a score greater than 84. Student D, Student E, and Student F achieved this goal and Student A, Student B, and Student C did not. After receiving their regular reading class instruction and eight weeks of after-school small group intervention activities, the March fluency assessments did show that the students made gains in reading fluency. Student A increased their fluency score to 96, Student B increased to 90, Student C increased to 92, Student D increased to 126, Student E increased to 122, and Student F

increased to 124. Student D, Student E, and Student F were able to achieve the goal of 100. Student A, Student B, and Student C were gaining in reading fluency, but they did not achieve the spring benchmark goal of 100. All six of these students showed significant growth in their fluency scores after an eight-week intervention. Three of the students read at a rate that would place them above the 50<sup>th</sup> percentile and three of the students still remained below the 50<sup>th</sup> percentile. However, the growth in the six students' fluency scores indicated the interventions were successful and should be continued.

Figure 2. indicated the AIMS-web fluency scores for the students who did not received interventions. The scores were from the January and March assessments. A score of 84 was the 50<sup>th</sup> percentile for the winter benchmark assessment. A score of 100 was the 50<sup>th</sup> percentile for the spring benchmark assessment.



*Figure 2.* AIMSweb fluency scores for students who did not receive interventions

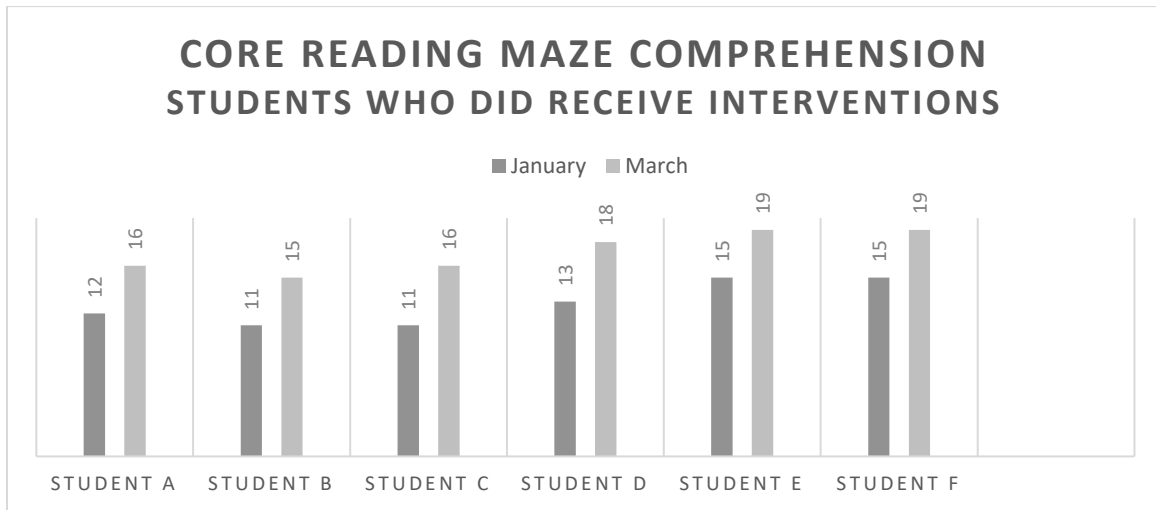
The second grade students who did not receive interventions did not show the same growth as the student who did. After the January fluency assessment, Student 1 read 78 words per minute, Student 2 read 65 words per minute, Student 3 read 68 words per minute, Student 4

read 114 words per minute, Student 5 read 108 words per minute, and Student 6 read 34 words per minute. These students all had a winter benchmark goal of obtaining a score greater than 84. Student 4 and Student 5 achieved this goal and Student 1, Student 2, Student 3, and Student 6 did not. After receiving similar reading instruction, the March assessments did show that the students did show gains in reading fluency. Student 1 increased their fluency score to 88, Student 2 increased to 80, Student 3 increased to 83, Student 4 increased to 122, Student 5 increased to 120, and Student 6 increased to 38. Student 4 and Student 5 were able to achieve the goal of 100. Student 1, Student 2, Student 3, and Student 6 did not achieve the spring benchmark goal of 100.

The results of the AIMS-web fluency scores showed that those students who received interventions in reading fluency increased their fluency rate of 18.8% versus the nonintervention group that increased at a rate of 13.7%. As expected, those students who received small group literacy interventions in the after-school program had a greater increase in their reading fluency scores.

The CORE Assessing Reading Multiple Measures assessments were used to measure the students' literacy skills. The CORE Reading Maze Comprehension assessment was given to all students. This assessment was an independent reading test that measured how well students understood text they read silently. After the first sentence in the passage, every seventh word was replaced with the correct word and two distractors. Students must choose a word that fits best with the rest of the passage. Students with reading difficulties can't comprehend what they read well enough to choose words based on semantic and syntactic accuracy (Lencher et al). The student's score was the number of correct words circled in three minutes. Each of the students were given the same passage. A winter benchmark goal was to obtain a score of 10 for second grade students.

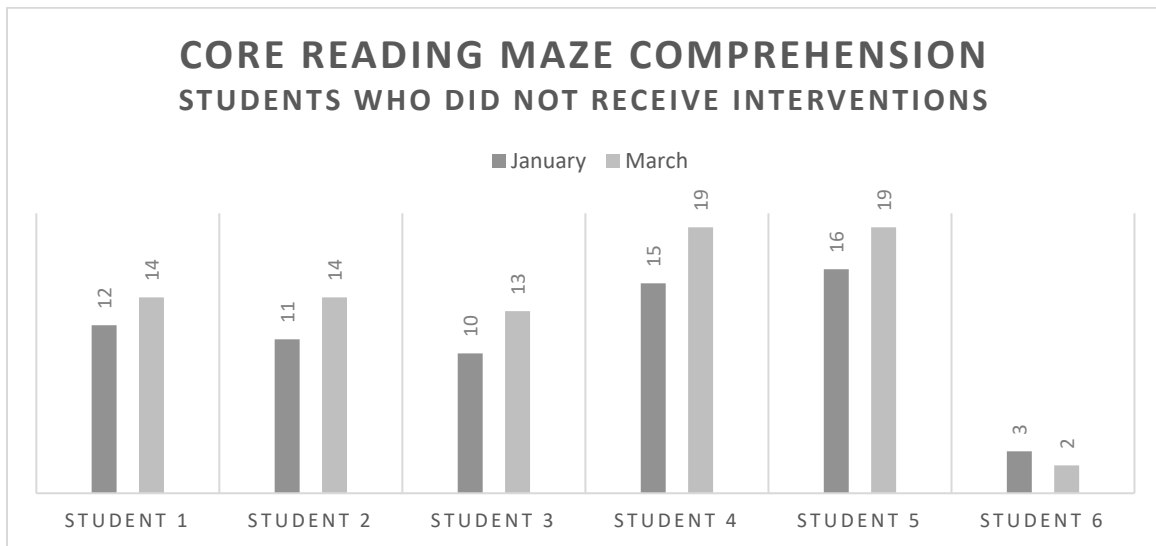
Figure 3. indicated the student's benchmark scores for the winter and spring Maze Comprehension Assessment. A winter benchmark goal of 10 and a spring benchmark goal of 13 was needed to meet the grade level benchmark.



*Figure 3.* CORE Reading Maze Comprehension test for the students who did receive interventions

All six of the second grade students who participated in the after-school small group interventions made gains in their CORE Reading MAZE Comprehension Scores. January was the baseline score for each of the students. After the winter benchmark assessments, Student A had a score of 12, Student B had a score of 11, Student C had a score of 11, Student D had a score of 13, Student E had a score of 15, and Student F had a score of 15. All of the students achieved the winter benchmark goal of 10. After the spring benchmark assessment, Student A had a score of 16, Student B had a score of 15, Student C had a score of 16, Student D had a score of 18, Student E had a score of 19, and Student F had a score of 19. All six students exceeded the spring benchmark goal of 13 for the MAZE Comprehension Assessment.

Figure 4. indicated the student's benchmark scores for the winter and spring CORE Reading Maze Comprehension Assessment. A winter benchmark goal of 10 and a spring benchmark goal of 13 are needed to meet the grade level benchmark.



*Figure 4.* CORE Reading Maze Comprehension test for the students who did not receive interventions

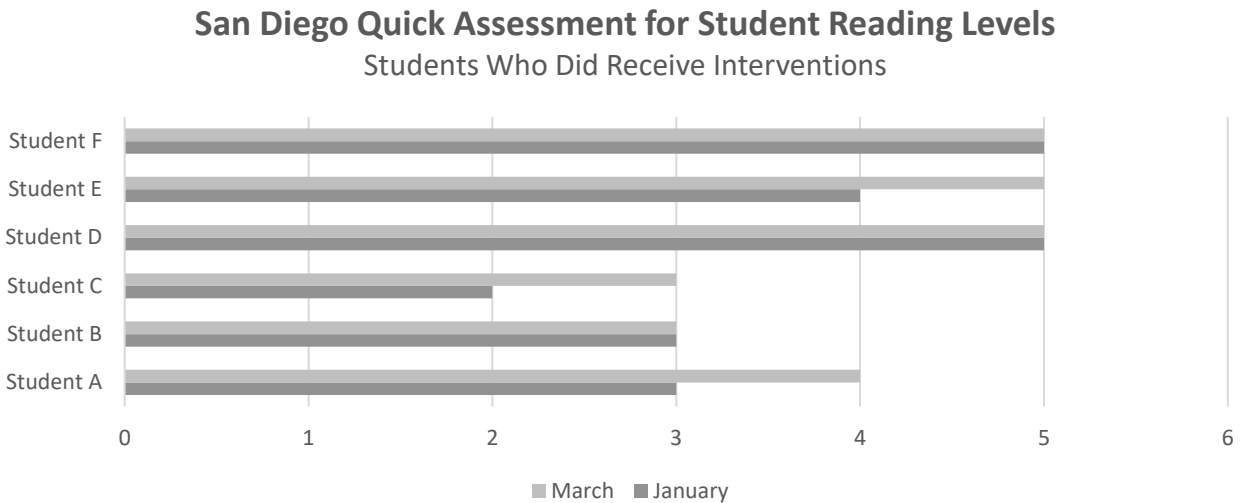
The students who did not receive interventions completed the CORE Reading MAZE Comprehension Assessment in January. Student 1 had a score of 12, Student 2 had a score of 11, Student 3 had a score of 10, Student 4 had a score of 15, Student 5 had a score of 16, and Student 6 had a score of 3. Students 1, 2, 3, 4, and 5 met the winter benchmark goal of 10. However, Student 6 was well below the goal of 10. When the students tested again at the end of March, Student 1 had a score of 14, Student 2 had a score of 14, Student 3 had a score of 13, Student 4 had a score of 19, Student 5 had a score of 19, and Student 6 had a score of 2. Students 1, 2, 3, 4, and 5 had made gains on the Reading MAZE Comprehension Assessment. These scores indicated that they have all achieved the spring benchmark goal of 13. No further assessments will be needed on these students. However, Student 6 dropped to a 2 which is well below the

spring benchmark of goal of 13. Student 6 will need to have additional assessments to help diagnose literacy difficulties.

The results of the MAZE Comprehension Probes showed that those students who received fluency interventions increased their comprehension at an average rate of 33.8% in an eight-week intervention period versus the nonintervention group that increased their fluency at an average rate of 20.9%. As expected, the results indicated that the students who received small group literacy interventions in the after-school program had a greater increase in their MAZE comprehension scores.

The San Diego Quick Assessment of Reading Ability was an assessment that measured the recognition of words out of context. The test consisted of 13 graded word lists from preprimer to eleventh grade. The words within each list were of about equal difficulty. Weak readers overrely on context and recognize words in context more easily than out of context (Lencher et al). This assessment was used to help determine each student's independent, instructional, and frustration reading level. The student's reading level was the last grade-level word list in which the student was able to read eight or more words correctly.

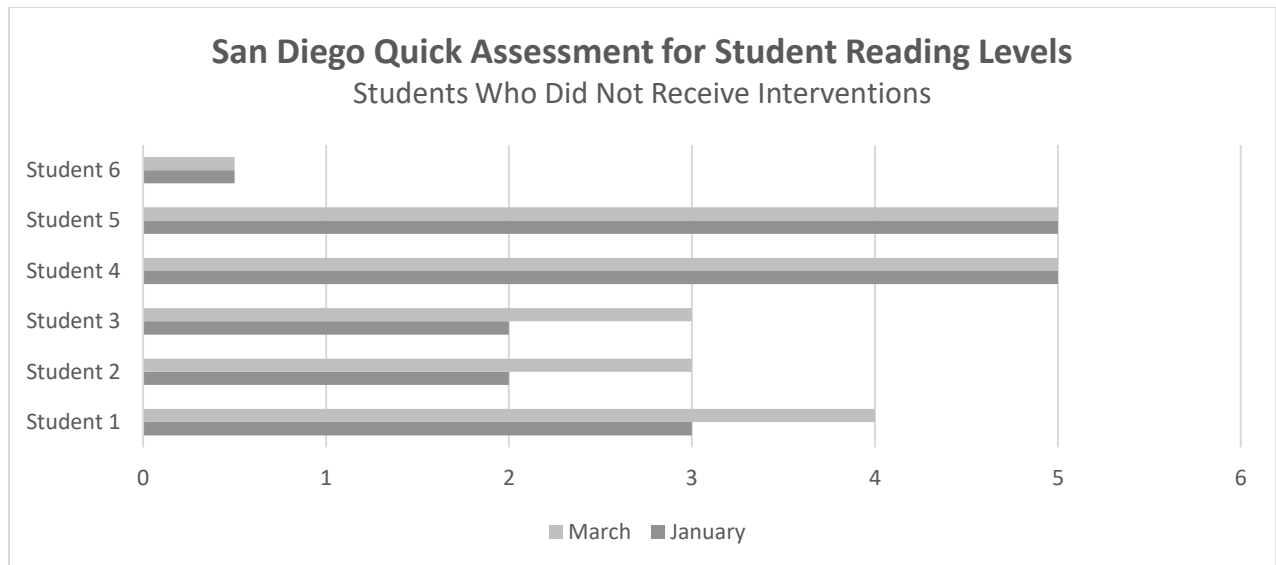
Figure 5. indicated the information obtained from the San Diego Quick Assessment of Reading Ability. This assessment was used to determine each student's reading level.



*Figure 5.* San Diego Quick Assessment of Reading Ability for students who did receive interventions

Each of the students were given the San Diego Quick Assessment for Student Reading Levels. This assessment was used to help determine each student's reading level. January was the baseline score for each of the students. After the winter benchmark, Students A and B were assessed at an instructional grade 3 reading level. Student C was assessed at an instructional grade 2 reading level. Student E was assessed at an instructional grade 4 reading level. Students D, and F were assessed at an instructional grade 5 reading level. In March after eight-weeks of reading interventions, the students were reassessed for reading levels. Students B and C were assessed at an instructional grade 3 reading level. Student A was assessed at an instructional grade 4 reading level. Students E and F were assessed at an instructional grade 5 reading level.

Figure 6. indicated the information obtained from the San Diego Quick Assessment of Reading Ability. This assessment was used to determine each student's reading level.



*Figure 6.* San Diego Quick Assessment of Reading Ability for students who did not receive interventions

Each of the students were given the San Diego Quick Assessment for Student Reading Levels. This assessment was used to help determine each student's reading level. After the winter benchmark, Student 1 was assessed at an instructional grade 3 reading level. Students 2 and 3 were assessed at an instructional grade 2 reading level. Students 4 and 5 were assessed at an instructional grade 5 reading level. Student 6 was assessed at an instructional primer reading level. After eight-weeks the students were reassessed to determine their reading levels. Student 1 was assessed at an instructional grade 4 reading level. Students 2 and 3 were assessed at an instructional grade 3 reading level. Students 4 and 5 were assessed at an instructional grade 5 reading level. Student 6 was assessed at an instructional level of primer reading level.

The results of the San Diego Quick Assessment for Student Reading Levels showed that those students who received after-school interventions increased their word recognition and increased their grade level reading at a rate of .88% versus the nonintervention group that increased their grade level reading at a rate of .85%. The results indicate that the students who



received interventions did increase their grade level reading at a greater rate than the students who did not receive interventions.

**Limitations.** One limitation in this study was the amount of time to collect data. The after-school interventions were held three days a week for eight weeks. The intervention sessions were for 60-minutes each session. The students rotated to three different intervention stations which allowed for interventions to be taught in small groups. During the eight-weeks of after-school sessions, the program was canceled twice due to inclement weather. This left only 22 sessions to meet during the eight-weeks of interventions.

The study only provided interventions to the students that attended the after-school program. Therefore, this rate of growth may not be the same for all students. It should be noted that each assessment represents a sample of a student's performance on a particular day and the results could vary at any time.

**Research Questions.** The basis for this action research project was to identify if small group interventions would increase a student's literacy skills, word identification, and fluency scores. My goal was to answer the following questions: "Will students who attend the participate in the after-school enrichment program see improvements in literacy skills, word identification, and oral reading fluency?" and "What differences in literacy skills and word identification will be observed between a group of students who participate in the after-school enrichment program and a group of students who do not?" The students who received fluency interventions showed a greater rate of progress and increase in their scores on the AIMS-web fluency probes, an increase in their MAZE Comprehension skills that analyzed each student's independent reading that measures how well they understand text they read silently, and increased their word recognition on the San Diego Quick Assessment for Reading Levels than those who did not receive literacy

interventions. The tools used to measure data were appropriate for the literacy skills being assessed. Each assessment was quickly administered and the data was easy to understand.

**Conclusion.** Learning to read is a complicated process. Each foundational skill is important and essential for learning to read. The ultimate goal for the student to gain the ability to read fluently and comprehend what they have read. By including triangular data throughout this study, I noticed that as fluency increased, not only did the student become a more accurate and efficient readers, but their confidence level and self-motivation increased too. Therefore, this action research project proved that after-school small group literacy interventions can be extremely effective for increasing student literacy skills, word identification, and fluency rates for students in second grade.

### **Chapter 4: Action Plan**

The results obtained in this action research project have been valid and show that a student can improve their oral reading fluency, word identification skills, and other literacy skills by using small group literacy interventions. By increasing these literacy skills, the student will likely increase their ability to comprehend text. It is my plan to continue using literacy interventions in the after-school program with my second grade students. I will report the data to encourage other staff to implement literacy interventions within their classrooms too. I plan to utilize this knowledge to become a more effective teacher, while striving to meet the literacy skills needs of my second grade students.

By completing this action research project, I have learned a great deal about the importance of effective reading instruction in each of the five critical areas: phonemic awareness, phonics, fluency, vocabulary, and comprehension. Snow, Burns, & Griffin suggested that the most effective approach to teaching the five components is systematic and explicit instruction. Our school requires that teachers follow the curriculum with fidelity to the program. This requires teachers to clearly define objectives for the skills that will be taught and post their lesson plans online to the entire staff. Each teacher is observed often by our principal, superintendent, and the director of education. Teachers are not aware of when they will be observed so most teachers are working hard to ensure high quality lessons are taught. Teachers are incentivized and can earn up to \$5,000 bonus for being a highly effective teacher. These high expectations have led to me becoming a more effective teacher. The school has collected data for the past three years and it is evident that students are benefiting from all of the efforts teachers are investing in their lessons. Evidence of learning is required by using progress monitoring, end of the week lesson assessments, and students demonstrating the knowledge by reading and writing accurately.

Teachers need to take the time to identify the literacy weaknesses in their students. When they are identified early, interventions can be used to help students be successful readers.

Prior to this study, I had little knowledge of the impact of fluency. However, after completing this study I have learned that fluency is one of the most important components of literacy instruction. By motivating my students to increase their scores, the students found that fluency was one of their favorite skills to practice. As the students worked on their fluency skills, they read more quickly, accurately, and with expression. As students were able to recognize words more quickly, they were able to focus their attention on comprehending the information being read. To improve fluency and comprehension students should have explicit instructions, tools for charting their progress, and a consistent time to practice and assess their fluency. Therefore, I agree with the National Reading Panel that reading fluency is a key ingredient in successful reading instruction.

My second grade students have worked each day on their literacy skills during their core reading instruction. Most of the 17 students have been very successful at learning the foundational literacy skills. However, not all have been successful. I agree with Allington; that struggling readers that are already behind, will always be behind unless they receive more instructional time. The instructional time should focus on helping children achieve levels of literacy that will enable them to be successful through their school careers and beyond. The interventions are not just to boost early literacy achievement. I have three students that struggle to learn the foundational skills. Each of these students has been given interventions at school; however, they still seem to be falling further behind.

One issue that seems to be a factor for my two of my struggling students is they have poor attendance at school. They each miss one or more days of school each week. Slavin &

Madden state that the dropout rate for students have many risk factors. These risk factors include low achievement, retention in grade, behavior problems, poor attendance, low socioeconomic status, and large numbers of poor students. By the end of third grade, these factors can be used to predict with remarkable accuracy which students will drop out of school. Since my students are nearing the third grade, this statement worries me to think of what their future will look like in the next 15 years.

Even though I did not include all of the second grade students in this study, I plan to increase my literacy intervention activities during our 90-minute instructional reading core time. This way all students will have the opportunity to work on skills they have not yet mastered. I am confident that by using literacy interventions during reading instruction and with the after-school program, the students will become stronger, more confident readers. By doing this I believe the second grade students will gain higher test scores on the NWEA tests, AIMSweb benchmark oral fluency tests, and increase their ability to comprehend what they are reading.

Finally, since the results of this study demonstrated that after-school literacy interventions increased students' literacy skills, I will continue to offer literacy interventions for the after-school students for the rest of the school year. I will continue to collect and create specific intervention activities that match the foundational literacy skills in phonemic awareness, phonics, fluency, vocabulary, and comprehension for students in second grade. Then, as the next school year begins, I will be better prepared to use small group literacy intervention activities as part of my core literacy instruction and as an optional small group activity for the second grade students in the after-school program.

### **Chapter 5: Plan for Sharing:**

I will plan to share my action research project with several people in my school. The information will be shared with the staff of the after-school program, our literacy committee, the elementary teachers, the school administration, and with the parents, grandparents, and guardians at the parent-teacher conferences.

While working on this action research project, I discussed with staff members which intervention activities I had been using during the after-school program. The paraprofessional that was assisting me helped collect data and prepare activities to use for the interventions. This team effort was useful for analyzing the data and for recognizing student improvements.

All teachers and paraprofessional are responsible for working with students or teaching some of the components in of the Journeys curriculum. I believe that all of the educators in our district will be interested in the results of this study and will share the findings interesting and valuable. The results may encourage the teachers to incorporate literacy intervention activities within their core reading instruction times too. Since the initial implementation of the AIMSweb Plus program, our school has focused on using fluency to help increase comprehension and boost students motivation and confidence levels in their reading. The program helpful for collecting data in a minimal amount of time. This will be very useful for teachers.

Our literacy committee is working to create a multi-tiered systems of support for students who need more support to intensive interventions. The results of this action research will be support the discussion of options for our response to intervention (RTI) activities for students who need additional support for understanding the foundational skills. Suggestions may include identifying students who need additional learning time and may recommend that those students attend the after-school program to receive additional literacy intervention activities.

Since test scores from the NWEA, AIMSweb, and classroom reading core assessments have become our primary measurements of student improvement, I will be excited to see if the students who received interventions will increase at a greater rate on the end of the year assessments than the students who haven't received the same amount of interventions.

Learning to read is a challenging task and there are no easy answers or quick solutions for improving reading achievement. As I look to the future, I believe it would be wise for me to share my results with the school administration and school board. I hope they see the results as an effective way to improve literacy skills with the students in our school. As we work together to build a strong literacy plan for our school, it is essential to consider how we can help students overcome the skills they struggle to learn. Teachers need to be optimistic, patient, and strive to show their students all of the great potential they see in them. Students need to keep a positive attitude, be patient as they learn, and persistent until they find success in learning how to read.

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