Utilization of Progress Monitoring as an Intervention to Increase and Measure the Reading Growth of Below Benchmark Second Grade Students

A Special Project

Presented to

Dr. Audrian Huff

Heritage University

In Partial Fulfillment
of the Requirement for the Degree of
Masters of Education

Sally Lou Nicholas

Spring 2009

FACULTY APPROVAL

Utilization of Progress Monitoring as an

Intervention to Increase and Measure the Reading Growth of

Below Benchmark Second Grade Students

Approved for the Faculty	
	, Faculty Advisor

ABSTRACT

The purpose of this special project was to analyze the utilization of progress monitoring as an intervention tool to increase and monitor the growth of the second grade below benchmark students. Sixteen students were progress monitored once every three weeks from October to December 2008 and then again from January 2009 to May 2009. The author compared the pre-test and posttest DIBELS scores of the below benchmark students from October 2008 to May 2009 by completing a *t*-test. The results stated there was a significant difference in the amount of growth the below benchmark students made with progress monitoring.

PERMISSION TO STORE

I, Sally Lou Nicholas, do hereby irrevocably consent and authorize Heritage College
Library to file the attached Special Project entitled, <u>Utilization of Progress Monitoring as an Intervention to Increase and Measure the Reading Growth of Below Benchmark</u>

<u>Second Grade Students</u>, and make such paper available for the use, circulation and/or reproduction by the Library. The paper may be used at Heritage College Library and all site locations.

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

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

 , Author
 , Date

TABLE OF CONTENTS

	Page
FACULTY APPROVAL	ii
ABSTRACT	iii
PERMISSION TO STORE	iv
TABLE OF CONTENTS	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
CHAPTER 1	1
Introduction	1
Background for the Proje	ct1
Statement of the Problem	2
Purpose of the Project	2
Delimitations	3
Assumptions	4
Research Question	5
Significance of the Project	et5
Procedure	6
Definition of Terms	9
Acronyms	11

CHAPTER	2
Revie	ew of Selected Literature
	Introduction
	No Child Left Behind
	Reading Research: National Reading Panel14
	Read Well
	Phonics for Reading
	Pathways for the Advancement of Literacy Skills18
	Dynamic Indicators of Basic Early Literacy Skills
	Northwest Evaluation Association
	Standardized Test for the Assessment of Reading
	Intervention
	Summary
CHAPTER	325
Meth	odology and Treatment of Data25
	Introduction
	Methodology25
	Participants
	Instruments
	Design
	Procedure
	Treatment of the Data
	Summary

CHAPTER 4.		33
	Analysis of the Data	33
	Introduction	33
	Description of the Environment.	33
	Hypothesis/Research Question	34
	Null Hypothesis	35
	Results of the Study	35
	Findings	37
	Discussion	37
	Summary	38
CHAPTER 5.		39
	Summary, Conclusions and Recommendations	39
	Introduction	39
	Summary	39
	Conclusions	41
	Recommendations	42
REFERENCE	ES	.45
APPENDICE	S	49
	Figure 1	50
	Figure 2	51
	Figure 3	52

LIST OF TABLES

	Page
Table 1, t-test for Pre-Post DIBELS from Fall to Winter	
35	
Table 2, t-test for Pre-Post DIBELS from Fall to	
Spring	

LIST OF FIGURES

		Page
Figure 1	DIBELS Oral Reading Fluency Assessment Scores	
	for Below Benchmark Students	50
Figure 2	DIBELS Progress Monitoring – Oral Reading Fluency	
	September 2008-January 2009.	51
Figure 3	DIBELS Progress Monitoring – Oral Reading Fluency	
	February 2009-May 2009	52

CHAPTER 1

Introduction

Background for the Project

Society has viewed education as the key to increased earning power, social status and future employment. Education, particularly the area of literacy, has been important to competition in a global market and has affected the social, cultural and citizenship participation in society. President George W. Bush realized the importance of national literacy when signed into law No Child Left Behind on January 8, 2002. The bill held public education to higher expectations and put pressure on schools to meet or exceed state standards in reading, language arts, mathematics, and most currently, science. Washington State piloted the Washington Assessment of Student Learning in 1997. In response to No Child Left Behind, Washington State chose the assessment to become the tool to test, monitor and track student achievement and progress.

Read Well was a research-based and data-driven key reading program for kindergarten and first grade at the elementary school in the study. The elementary school implemented the direct instruction program as a remedial reading tool in second grade. The program focused on phonemic awareness, phonics, vocabulary, fluency, and comprehension skills. In order for students to have mastered literacy skills, Read Well has integrated explicit, systematic instruction, intense themes and content, and structured learning activities (Sprick, 2006).

Walk-to-Read was an instructional approach used in the second grade. The 5 second grade teachers participated in the Walk-to-Read method in which students were grouped by ability levels and were from multiple classrooms. Research has suggested

ability grouping produced greater achievement gains when students from the same grade level were grouped by ability for reading instruction. Achievement was successful when the level and pace of instruction were adapted to students' needs (Westchester Institute for Human Services Research, 2002).

Statement of the Problem

The elementary school studied had 5 second grade classes. The classes incorporated a Walk-to-Read program for one hour every day. The author taught the lowest reading group, and realized an intervention was necessary to increase literacy skills in the lowest reading group for second grade. The author researched the Dynamic Indicators of Basic Early Literacy Test Skills and determined progress monitoring would provide a curriculum intervention strategy to address essential student-reading skills. Phrased as a question, the problem, which represented the focus of the present study, was stated as follows: To what extent did the adoption of the progress monitoring program increase reading scores of below benchmark second grade students as measured by the Dynamic Indicators of Basic Early Literacy Skills reading assessments?

Purpose of the Project

The purpose of the project was to analyze and monitor the amount of growth the below benchmark students made when the students received progress monitoring to determine effectiveness of an increase in oral reading fluency. The progress monitoring focused on the area of oral reading fluency and retell. The author predicted the progress monitoring intervention helped the below benchmark students achieve greater than expected growth.

Delimitations

The school was located in a rural community in central Washington. The town's economy relied heavily on agriculture, commercial businesses, and some factories. The elementary school examined by the author had a population of 546 in 2007. The school did not meet Adequate Yearly Progress for the 2007-2008 school year. The ethic mix was Asian 1.3%; Black 2.0%; Hispanic 42.3%; and White 54.4%. The Office of the Superintendent of Instruction report card data denoted a high Hispanic ratio to the total number of students. The percentage of students under the special programs of Free or Reduced-Price Meals was 68% and the Migrant program population was 8.8%. (Washington State Report Card, 2008). The teacher information reflected 34 classroom teachers, 31 of which taught core academic classes. There were no teachers with an emergency certificate which meant 100% of the teachers met the qualification of No Child Left Behind highly qualified definition. The average years of experience was 14 years for teachers and 70% of the teachers held master's degrees.

The study took place from September 2008 to May 2009 and used beginning of the year and mid-year assessments as required by the school district. The students in the study were initially chosen based upon a collaboration meeting by all second grade teachers in which beginning of the year using test scores from the Standardized Test for the Assessment of Reading and scores from the Dynamic Indicator of Basic Literacy Skills assessments. The teachers also took into account ending year scores from the previous year. An additional meeting was held with the school's Response to Invention team in which student behavior was also a factor in decision for placement into reading groups. Four of the students chosen for the study originated from the author's classroom.

The remainder twelve students came from additional second grade classrooms. The classroom had one para-professional to work with the researcher for sixteen students, which came from supplementary classrooms based on reading ability. The instructional approach was teacher directed with intense small group oral response and some written seatwork. The sixteen students consisted of thirteen with intensive needs and three with strategic needs as assessed and rated by the Dynamic Indicators of Basic Early Literacy Skills assessment. The author had chosen to conduct the study from fall to winter, and then again from fall to spring. The author was aware of the maturity level of the students that came to second grade in the fall but also wanted to compare the overall growth from fall to spring.

<u>Assumptions</u>

The author assumed the second grade teachers were highly qualified to teach and make decisions upon placement of the reading groups based upon the definition of highly qualified as spelled out in No Child Left Behind. The author's expectations were the students were treated fairly with the best interests of the students in mind.

Accommodations were given to individuals with special needs. The curriculum was taught with the instructional design intended and did not waiver from the scripted teacher manuals provided. The para-professional in the classroom had been trained in the Read Well curriculum and was later trained in Phonics for Reading to further supplement the struggling young readers. Once the author examined and analyzed reading assessments, the author was able to group the students accordingly for progress monitoring intervention. The author was trained in the curriculum and was appropriately using the material in the classroom.

Hypothesis or Research Question

Reading scores of second grade students who received progress monitoring would make greater than expected growth as measured by the Dynamic Indicator of Basic Literacy Skills reading assessments from fall to winter as proven by a non-independent pre and post *t*-test score.

Reading scores of second grade students who received progress monitoring would make greater than expected growth as measured by the Dynamic Indicator of Basic Literacy Skills reading assessments from fall to spring as proven by a non-independent pre and post *t*-test score.

Null Hypothesis

Reading scores of second grade students who received progress monitoring would not increase as measured by the Dynamic Indicator of Basic Literacy Skills reading assessments from fall to winter as proven by a pre and post non-independent *t*-test score with a significance level of .05.

Reading scores of second grade students who received progress monitoring would not increase as measured by the Dynamic Indicator of Basic Literacy Skills reading assessments from fall to spring as proven by a pre and post non-independent *t*-test score with a significance level of .05.

Significance of the Project

The researcher realized the importance for students to learn valuable and constructive reading skills throughout the early years of school. The author knew first grade students were introduced to basic literacy skills such as how to blend and segment

sounds in words. Blending and segmenting skills were important for first graders to achieve in order to enter second grade at benchmark level in reading. Since the No Child Left Behind legislation emphasized the importance of all students to read at grade level by the end of third grade, first and second grades were looked at for gains in the reading growth process.

The author's low group had targeted explicit phonics instruction. With the help of the elementary school's Response to Invention Team, the low group teacher made great enhancements to the curriculum. The enhanced curriculum created if not accomplished fluent readers, made more confident readers.

Procedure

The second grade teachers at the author's elementary school held a special collaboration meeting in the early fall which included the first grade teachers. The members analyzed all second-grade students' Dynamic Indicators of Basic Early Literacy Skills scores, Standardized Test for the Assessment of Reading scores, and the fall Measures of Academic Progress reading assessment scores. First grade teachers supported the second grade teachers and provided additional background such as behaviors of the second graders being received. Over 125 students were placed by reading ability between the five teachers. The top group of students were exposed to an enhanced curriculum based on the use of chapter books and some third grade curriculum. The next group of students worked with the higher second grade level of the Harcourt Brace curriculum's program called Harcourt Trophies. The Harcourt Trophies research-based developmental reading and language arts program implemented specific skills to ensure successful reading for every student. The skills included "explicit phonics"

instruction, direct reading instruction, guided reading strategies, phonemic awareness instruction, systematic, intervention strategies, integrated language arts components, and state-of-the-art assessment tools" (Harcourt Trophies, 2006, pg. 1). The third group worked on grade level curriculum and applied the at-grade-level Harcourt Brace materials. The fourth group employed a combination of the first grade Read Well Plus and the new second grade Read Well materials. The fifth, which was the author's group, used the first grade Read Well materials and hoped to move to Read Well Plus by midyear.

An additional intervention, progress monitoring, was employed, but only quarterly for the at-benchmark students, every three weeks for the strategic students and twice a month for the intensive (at risk) students. The progress monitoring intervention started in September 2008 and the author's low reading group students were progress monitored every other week until the end of May 2009. If the students had not made adequate growth through the process, the decision was made to implement another intervention.

For the winter Dynamic Indicators of Basic Early Literacy Skills testing all students were assessed in quiet environments. The students were tested by paraprofessionals and taken out of the room to a separate classroom for the one-minute timed test on non-sense words, and then a one-minute test on oral reading fluency followed by a one-minute retell. The materials available to the author and para-professionals included the progress monitoring nonsense word fluency student booklet, individual student booklets to record progress monitoring data, timer, clipboard and pencil.

Progress monitoring continued for about four months until the students were given the winter Dynamic Indicators of Basic Early Literacy Skills assessment. Once the students' scores from the winter assessment were available, the author analyzed and examined the data to determine the outcome of the hypothesis. The author compared the fall and winter scores of the below benchmark students and completed a *t*-test on the data obtained.

After the winter testing, the author was concerned about the low scores. The writer approached the Response to Invention team and was invited to the first grade Response to Invention meeting. The ideas discussed and materials used in first grade appealed to the researcher and changes in the classroom curriculum and structure were made after approval of the principal and Response to Invention team. Prior to the meeting the classroom was structured in three separate groups and rotated every 20 minutes. The para-professional taught spelling and listened to the students read. An independent group worked on the Read Well activity packets, and the last group worked with the author on Read Well decoding and reading packets. After the meeting, the author divided the sixteen below benchmark students into two groups of eight. One group worked with the para-professional for 30 minutes and utilized the Phonics for Reading curriculum materials. The Phonics for Reading materials were research-based and also used by the elementary school's Title 1 teacher. The writer worked for 30 minutes with the other group using a research-based curriculum called Pathways for the Advancement of Literacy Skills. The Pathways for the Advancement of Literacy Skills focused on phonics, segmented sounds and blended sounds. The groups rotated after 30 minutes. The author was excited to have attended the first grade meeting and the changes made in

the structure of the classroom and materials resulted in a more focused learning environment.

Progress monitoring continued for about four months until the students were given the spring Dynamic Indicators of Basic Early Literacy Skills assessment. Once the students' scores from the spring assessment were available, the writer analyzed and examined the data to determine the outcome of the hypothesis. The author compared the fall and spring Dynamic Indicators of Basic Early Literacy Skills assessment scores and used a *t*-test on the data obtained.

Definition of Terms

<u>ability grouping</u>. "Ability grouping is the practice of dividing students for instruction on the basis of their perceived capacities for learning" (Westchester Institute for Human Services Research, Author, 2002, p. 1).

• Adequate Yearly Progress. Adequate Yearly Progress is one of the cornerstones of the federal Elementary and Secondary Education Act signed into law January 2002, as the No Child Left Behind Act. In Washington, it is primarily a measure of year-to-year student achievement on the Washington Assessment of Student Learning in reading and mathematics. Each year the state must "raise the bar" in gradual increments so that by 2013-2014, all (100%) students will achieve proficiency in each subject area. Adequate Yearly Progress applies to each school in the state that serves students in grades 4, 7, and 10. School totals for these grades are aggregated up to the district and state totals.

<u>benchmark</u>. Benchmark was one of the three levels from the Dynamic Indicators of Basic Early Literacy Skills assessment which rated the student and provided educators with a standard for gauging the progress of all students individually.

<u>direct instruction</u>. "Direct instruction is a model for teaching that emphasizes well-developed and carefully planned lessons designed around small learning increments and clearly defined and prescribed teaching tasks" (National Institute for Direct Instruction, Encyclopedia, 2006, p. 1).

<u>intensive</u>. Intensive was one of the three levels from the Dynamic Indicators of Basic Early Literacy Skills assessment which rated the student as at risk. The student required additional instruction in order for the student to succeed.

nonsense word fluency. Nonsense word fluency was the ability to read two-letter and three-letter nonsense words, primarily consonant-vowel-consonant patterns.

oral reading fluency. Oral reading fluency was monitored and used to determine how many words per minute a student read accurately.

<u>phonemic awareness</u>. Phonemic awareness assessed the student's ability to have identified and produced the initial sound of a given word as well as the individual sounds in a word.

<u>progress monitoring</u>. Progress monitoring included assessments that determined if students were making adequate progress or needed more intervention to achieve grade level reading outcomes.

Read Well. "Read Well is a validated core reading curriculum that teaches students the important building blocks of literacy while providing the foundation and skills to develop lifelong readers" (Sprick, 2006, p. 1).

Response to Intervention. Response to Intervention was a framework for making instructional decisions based on assessment data obtained in order to accelerate learning for all students.

Strategic. Intensive was one of the three levels from the Dynamic Indicators of Basic Early Literacy Skills assessment which rated the student at some risk. The student requires some additional instruction in order for the student to succeed.

<u>Walk-to-Read</u>. Walk-To-Read was a method of teaching reading in which the students were ability grouped and went to other teachers for instruction provided at the appropriate ability level.

Acronyms

AYP. Annual Yearly Progress.

DIBELS. Dynamic Indicators of Basic Early Literacy Skills

ELL. English Language Learner.

ISF. Initial Sounds Fluency

MAP. Measures of Academic Progress

NCLB. No Child Left Behind

NWEA. Northwest Evaluation Association

NWF. Nonsense Word Fluency

ORF. Oral Reading Fluency

OSPI. Office of the Superintendent of Public Instruction

<u>PALS</u>. Pathways for the Advancement of Literacy Skills

PSF. Phonemic Segmentation Fluency

RTI. Response to Intervention

STAR. Standardized Test for the Assessment of Reading

WASL. Washington Assessment of Student Learning

<u>WUF</u>. Word Use Fluency

CHAPTER 2

Review of Selected Literature

Introduction

The author chose to look into the various laws, programs, curriculum and tests that influenced the outcome of the utilization of progress monitoring as an intervention to increase and measure the growth of below benchmark second grade students. The variables which influenced the outcome were the NCLB, Reading Research: National Reading Panel, Read Well, Phonics for Reading, PALS, DIBELS, NWEA, STAR, and RTI. Within the first subset the research described the definition of NCLB and the various goals related to the NCLB act. The author also discussed the importance of reading skills in the early years of school and how NCLB played a part in the creation and formation of increased support. The writer discussed the reading research of the National Reading Panel in the second subset. The National Reading Panel's research on phonemic awareness instruction and phonics instruction was examined. Within the third subset, the writer reviewed the curriculum used in the study such as Read Well, Phonics for Reading and PALS. In the fourth subset the researcher explored the three separate assessment tests used in second grade such as DIBELS, NWEA and STAR. In the last subset, interventions were discussed, and RTI and progress monitoring were examined and analyzed.

No Child Left Behind

The important beliefs of the NCLB act were summarized as,

The No Child Left Behind Act of 2001 embodied the four principles of President George W. Bush's education reform plan: stronger accountability for results,

expanded flexibility and local control, expanded options for parents, and an emphasis on teaching methods that have been proven to work (Fact Sheet on the Major Provisions of the Conference Report to H.R. 1, the No Child Left Behind Act, 2006, p. 1).

The author believed the act's goals focused on having a highly-qualified teacher in every classroom, as well as providing extra support for low-performing students. The act's goals consisted of providing a better education to every student, and included the typically lower performing poor and minority population. The author viewed the act as one that raised standards for each child while focusing on meeting the needs of disadvantaged children. A plus to school districts were incentives offered for turning around schools in need of improvement (McElroy, 2005).

Research based studies have proven students were more successful in the later years of school if the children were able to read well in the early year grades. The result of students not successful in reading in the primary grades showed students not only fell behind but stayed behind in the area of academic achievement. Young, skillful readers were also more likely to thrive in other subject areas such as science, mathematics, writing, and social studies. Experienced readers were self-confident and, therefore, have taken advantage of reading for pleasure and made reading a priority. Inexperienced readers were more likely to drop out of school and were restricted to low-paying jobs (Questions and Answers on No Child Left Behind-Reading, 2006).

Reading Research: National Reading Panel

The instruction of phonemic awareness involved students being taught to concentrate on and manipulate phonemes in spoken syllables and words. Phonemic

awareness instruction qualified as phonics instruction when students were taught to blend or segment the sounds in various words using letters. Phonemic awareness instruction was reviewed and analyzed by the National Reading Panel through correlation studies. The studies recognized letter knowledge and phonemic awareness as the two greatest school-entry predictors of how well students would learn to read during the first two years of instruction (National Institute of Child Health and Human Development, 2000).

The results and analysis of the studies were significant. The findings of the study demonstrated when students were taught to manipulate phonemes in words as part of phonemic awareness instruction, the results indicated a notable improvement in reading (National Institute of Child Health and Human Development, 2000).

Phonics instruction allowed entry-level readers to understand how letters were linked to sounds, or phonemes. The students then were able to form letter-sound associations and created spelling patterns. The phonics instruction taught method utilized the attainment of letter-sound associations and the use of letter-sound associations then applied to spelling and reading. Phonics instruction should have been integrated with additional reading instruction in phonemic awareness, fluency, and comprehension strategies to build a complete reading program (National Institute of Child Health and Human Development, 2000).

The National Reading Panel study of phonemic awareness instruction found that a methodical and organized approach to phonics instruction improved student's success in learning to read. The findings concluded systematic phonics instruction was considerably more effective than instruction that involved little or no phonics.

Read Well

Read Well was a research based reading program produced by Sopris West, a division of Cambrium Learning Company in 1998 as a beginning reading program designed for kindergarten and first grade students, as well as second and third grade students in need of remediation. According to the Florida Center for Reading Research, "the goal of Read Well is to provide students with the foundational skills critical to reading with understanding" (p 1). The inclusive Read Well framework incorporated the following important instructional components: phonemic awareness, phonics, fluency, vocabulary, and comprehension.

Each student was assessed and placed into small groups that matched ability skill level. Daily instruction in the areas of phonemic awareness, phonics, fluency, vocabulary and comprehension built the foundation required for students to become lifelong readers. A general Read Well lesson was taught by the teacher in a small group for 30 minutes per day, with 15 minutes of decoding practice and 15 minutes of story reading. Ongoing assessment and progress monitoring informed instruction. The Read Well units included duet and solo stories, which enabled children to listen and grasp story content and began to read independently.

With regard to reliability and validity, two evaluations of the Read Well program were reviewed. One study was done in which Read Well was used as an intervention and one district wide evaluation in which Read Well was implemented as a core reading program. The first study included participants (n=93) which were bilingual. Over a 10-week period, students received tutoring three times per week for 40-minute sessions. The DIBELS subtests were used at pretest and at posttest and scores were analyzed using

analysis of variance with repeated measures. For the Read Well program, there were significant results only for the word identification subtest, p=.023. The second study was conducted with kindergarten (n-72) and first grade students over a 13-week period. Kindergarten students received 60 minutes of daily instruction and first grade students received 90 minutes of daily instruction. Subtest scores for DIBELS were analyzed. In kindergarten, there were significant time by group interactions for phonemic segmentation fluency (PSF; ES=1.47) and Nonsense word fluency (ES=.57) from DIBELS. On PSF, Read Well students improved from the 43rd percentile to the 90th percentile. First grade students had significant time by group interaction on phonemic segmentation fluency in DEBELS (ES=1.18) and increased from the 76th percentile to the 84 percentile.

Phonics for Reading

The National Reading Panel report's findings and recommendations supported the benefits of phonics instruction. Phonics for Reading was a research-based program that delivered direct instruction in phonics; increased fluency; and, provided word-recognition and spelling instruction, plus story reading, and independent activities. Because of the importance to beginning reading acquisition, phonemic awareness activities were included in Phonics for Reading. Consistent with the recommendations of the National Reading Panel (2000), the authors of Phonics for Reading included a limited number of phonemic awareness tasks. The tasks focused on phonemic awareness skills that had the greatest benefit to reading acquisition, blending, and segmenting (Snider, 1995). The author had researched supplemental programs to be used in the classroom and initiated

the use of Phonics for Reading in January 2009 after having met with the first grade teachers, the special education instructor and the principal.

Pathways for the Advancement of Literacy Skills

Originally, PALS was designed to be used in grades K-2 classrooms. The research based reading program was not intended to replace a reading program but rather to supplement. Over the past 10 years, repeated evaluations of PALS Reading indicated mainstreamed students with learning disabilities, low-achieving students without disabilities, average-achieving students and high-achieving students made greater progress in PALS Reading classrooms than the respective counterparts in non-PALS classes. Additionally, there have been PALS evaluations conducted by educators in California, Iowa, and Texas independent of Vanderbilt researchers. The independent evaluations conducted in California, Iowa and Texas also found a strong "value-added" for PALS Reading. Based on independent evaluations and Vanderbilt's research, the U.S. Department of Education's Program Effectiveness Panel approved PALS Reading for inclusion in the National Diffusion Network of effective educational practices. As stated in the Journal of Educational Psychology, "describes a study examining the effectiveness of PALS with kindergarten children; results provide evidence that PALS helps children get off to a stronger start in reading" (Fuchs, et al, 2001, p.3).

DIBELS

The Dynamic Indicator of Basic Early Literacy Skills was a research-based set of procedures and measures for assessing the acquisition of early literacy skills from kindergarten through sixth grade. The DIBELS assessments were short one-minute fluency measures were used to regularly monitor the development of early literacy and

early reading skills of students. According to Good, Gruba, and Kaminski, evidence of reliability, validity and sensitivity for DIBELS has been investigated in a series of studies (2001). Alternate form reliability of the DIBELS measures was generally considered adequate, ranging from .72 to .94 for the various indicators. The lowest reliability measure was for the ISF at .72. DIBELS literature stated, "By repeating this measure five times on five days using multiple alternative forms, the resulting average score had a reliability above .90" (Hall p. 283).

The DIBELS was created through the Institute for Research and Learning

Disabilities at the University of Minnesota in the 1970s-80s. The program was meant to
be an economical and efficient indicator of a student's progress toward achieving at or
above benchmark level. The DIBELS measures were intended to assess the areas of
phonological awareness, alphabetic principle, fluency with connected text, vocabulary
and comprehension. To measure the phonological awareness, the student completed an
initial sounds fluency, ISF, which assessed a student's skill to identify and produce the
initial sound, or was given phonemic segmentation fluency, PSF, which assessed the
student's skill to produce the individual sounds of a given word. The nonsense word
fluency, NWF, assessed a student's knowledge of letter-sound correspondences as well as
ability to blend letters together to form unfamiliar "nonsense" words. The oral reading
fluency, ORF, assessed a student's skill at reading connected text in grade-level materials.
When ORF was combined with the retell fluency, RTF, the measure showed a student's
understanding of a verbally read connected text and gave a measure of comprehension.

The role of DIBELS measures, by design, were indicators of each of the Basic Early Literacy Skills. The DIBELS measure of phonemic awareness, PSF, was designed

to be an indicator of a student's progress toward the long-term phonemic awareness outcome of segmenting words (Kaminski, Cummings, Powell-Smith, and Good, 2008).

Northwest Evaluation Association

The Northwest Evaluation Association was a non-profit organization incorporated in 1977. The mission was to "partner to help all kids learn" and the vision was "we are the catalyst to create a world in which education is kid-centric, relying on accurate and comprehensive data to inform each child's optimal learning path (NWEA, 2004, p 1). The Northwest Evaluation Association non-profit organization provided formative assessment, research-based educational growth measures, and professional training and improved teaching and learning and partnered with school districts, states and other education organizations. The organization delivered computer-adapted assessment services to more than 2,400 education agencies and two million students nationwide. Additionally, the non-profit organization's Growth Research Database, the most extensive collection of student growth data in the country, provided a rich opportunity for the study of academic achievement.

The measures of academic progress tests were state-aligned computerized adaptive tests that accurately reflected the instruction level of each student. The MAP tests also enabled teachers to measure growth over time, identified the skills and concepts students had learned, diagnosed instruction needs and was an aid in placing new students into appropriate instructional programs.

The author's school used NWEA scores to assist in ability grouping for reading at the beginning of the year as well as DIBELS scores. The students were tested three times during the year and on-going assessments were analyzed and compared with the other teachers with various students due to the Walk-to-Read program. When looking at achievement gaps with NWEA scores, there were "other demographic attributes of students and schools including information about instruction and curricula which may improve multilevel growth estimates and suggest methods for closing the gap" (McCall, et al, 2006, p.4).

The NWEA reliability and validity estimates were conducted used a test-retest reliability across time. The data was analyzed using a Pearson product-moment correlation coefficient (*r*). The test-retest data was examined for each grade level and the range was between .76 and .89 as documented in a NWEA Norms Study in 1999 (NWEA, 2004, p.4). Test-retest reliability only dipped slightly below .80 twice, both at the grade two level. Most coefficients were in the mid-.80's to the low 90's.

STAR

As an acronym, STAR used to stand for Standardized Test for the Assessment of Reading. The meaning is no longer maintained, as the company had created STAR assessments for skills in domains other than reading. The Standardized Test for the Assessment of Reading was a uniform, computer-adaptive assessment created by Renaissance Learning, Incorporated and used in K-12 education. The purpose of the STAR assessment was to provide information to teachers about student growth and achievement in grades 1-12. Students took an assessment and then scored the test automatically by the software. The assessment provided an approximate measure of each students' reading level. The company claimed that students could complete the assessment in less than 10 minutes (STAR, 2009, p.1).

The reliability of an assessment was the extent to which scores from the assessment would have remained the same between two administrations within a short period. The validity of an assessment was the extent to which the assessment measured actually claimed to measure. A number of studies have demonstrated the reliability and validity of Star Reading, however, which studies and reliability reports were conducted by the Renaissance Learning Company. In fact, according to Wikipedia information on STAR, a newsletter published by the Illinois State Board of Education in July/August 2005 disallowed future use of STAR Reading towards Illinois educational grant programs (Illinois State Board of Education, 2005, p.1). Due to the fact of the lack of research, the author's school utilized STAR assessments on a request basis only. All second grade teachers at the surveyed school chose to use the STAR assessments and compared data at quarterly collaboration meetings.

Intervention

In the author's school district, the response to invention policy ensured all students received high quality, scientific, research-based general education core instruction and, as appropriate, strategic and intensive intervention supports matched to students needs. The district utilized the core principles of the Response to Intervention process which combined systematic assessment, decision-making and a multi-tiered service delivery model to improve educational and behavioral outcomes for all students. The policy also addressed the parent involvement in the RTI process and included communication and the parents' right to request a special education evaluation. The RTI model consisted of three tiers: Tier 1 was the "universal level" and included 80% of

students; Tier 2 was the "targeted level" and included 15% of students; and, Tier 3 was the "intensive level" and included 5% of students (Renaissance Learning, 2009, p. 1).

The Reading First Assessment Committee provided a definition of progress monitoring. The definition was stated as, "Assessments that determine if students are making adequate progress or need more intervention to achieve grade level reading outcomes" (U.S. Department of Education, 2002, p. 153).

Progress monitoring measures were responsive to growth and required multiple forms. Progress monitoring incorporated the appropriate requirements necessary for second grade. Oral reading fluency and nonsense word fluency were two other DIBELS measures of reading integrating the sensitivity to growth and change over a short period of time (Chard & Dickson, 1999).

Progress monitoring assessments were administered to students at the strategic and intensive levels as determined by DIBELS screenings and confirmed the DIBELS placement of at-risk students. The author also met with the RTI team in the building where the study was conducted and as a result the students received intervention instruction.

The teachers made professional judgments based upon the data gathered from progress monitoring. The author met with the second grade teachers and the RTI team and discussed whether the progress monitoring intervention should be continued or modified. The decision was to continue with the supplementation of Phonics for Reading. The choice of Phonics for Reading was determined by a meeting with the first grade teachers and what had worked for students in the past. Progress monitoring as an assessment tool helped teachers determine whether the strategies and materials selected

worked. With the change in curriculum going from only using Read Well to the supplementation of Phonics for Reading and PALS the teacher made adjustments rapidly, rather than waiting until the end of the school year to measure the level of achievement. The intervention instruction adjustment was critical regarding the amount of time the below benchmark students had to raise reading levels in an attempt to reach benchmark status.

Summary

The author reviewed various key essential pieces of literature. One of the pieces of literature suggested students were more successful in the later years of school when the students were able to read well in the early grades. When students were not successful in reading throughout the early years of school, the students were likely to fall behind and stay behind in the area of academic achievement. An additional piece of literature discussed the students' ability to read nonsense words fluently and accurately reflected in the ability to read real words correctly.

Progress monitoring literature identified to the author how progress monitoring assessments were administered to below benchmark students. The author also ascertained the progress monitoring data could be used to track student success in a Walk-to-Read program with the lowest level of second grade readers.

CHAPTER 3

Methodology and Treatment of Data

Introduction

For the study, the author included a total of 16 second grade students. The students were all below DIBELS benchmark level, 14 were intensive and two strategic. The students came to the author's room for one hour every day. The second grade teachers met at the beginning of the year and reviewed assessment scores from NWEA, STAR, and DIBELS testing. The teachers discussed a potential need for intervention strategies. The author then met with the first grade teachers, as well as the building RTI team. The decision was made the author would incorporate DIBELS progress monitoring as an intervention tool, and, in addition, supplement the Read Well curriculum with two other research based reading programs.

Methodology

The researcher used a quantitative quasi-experimental study on student reading scores during a given academic year. The author began by gathering the second grade DIBELS oral reading fluency scores of the 16 students in the reading group. The researcher than set up a separate reading group on the DIBELS website, due to the fact 14 of the students were not the normal author's students in the homeroom, (but would have to pull data from other teachers to track progress monitoring scores). The researcher validated, "In experimental research, the research manipulates at least one independent variable, controls other relevant variables, and observes the effect on one or more dependent variables" (Gay, Mills & Airasian, 2006, p. 233).

Participants

The elementary school examined by the author had a population of 546 in 2007. The school did not meet Adequate Yearly Progress for the 2007-2008 school year. The ethic mix was Asian 1.3%; Black 2.0%; Hispanic 42.3%; and, White 54.4%. The Office of the Superintendent of Instruction report card data denoted a high Hispanic ratio to the total number of students. The percentage of students under the special programs of Free or Reduced-Price Meals was 68% and the Migrant program population was 8.8%. (Washington State Report Card, 2008). The researcher performed the study on a total of 16 second grade students. The project was comprised of 14 intensive students and two strategic, of which four students originated from the author's room.

The study took place from September 2008 to May 2009 and used beginning of the year and mid-year assessments as required by the school district. The students in the study were initially chosen based upon a collaboration meeting by all second grade teachers in which beginning of the year test scores from the Standardized Test for the Assessment of Reading, and scores from the Dynamic Indicator of Basic Literacy Skills assessments were analyzed. The teachers also took into account ending year scores from the previous year. An additional meeting was held with the school's Response to Invention team in which student behavior was also a factor in the decision for placement of students into reading groups. Four of the students chosen for the study originated from the author's classroom and the remaining 12 were from the supplemental second grade classrooms. The classroom had one para-professional to work with the researcher for 16 students, which came from other classrooms based on reading ability. The instructional approach was teacher directed with intense small group oral response and some written

seatwork. The sixteen students consisted of thirteen with intensive needs and three with strategic needs as assessed and rated by the Dynamic Indicators of Basic Early Literacy Skills assessment. The author had chosen to conduct the study from fall to winter, and then again from fall to spring. The author was aware of the maturity level of the students that came to second grade in the fall, but also wanted to compare the overall growth from fall to spring.

Instruments

The materials available to the researcher included DIBELS assessment data via the DIBELS website. The progress monitoring was done in the homeroom by qualified para-professionals and then the author obtained the scores and inserted the data to the website. Other data gathering devices needed were individual student booklets to record progress monitoring data, timer, clipboard and pencil.

The DIBELS assessments were short one-minute fluency measures and could be used to regularly monitor the development of early literacy and early reading skills of students. According to Good, Gruba, and Kaminski, evidence of reliability, validity and sensitivity for DIBELS has been investigated in a series of studies (2001). Alternate form reliability of the DIBELS measures was generally considered adequate, ranging from .72 to .94 for the various indicators. The lowest reliability measure was for the ISF at .72. DIBELS literature stated, "By repeating this measure five times on five days using multiple alternative forms, the resulting average score would have a reliability of above .90" (Hall, p. 283).

The DIBELS was created through the Institute for Research and Learning

Disabilities at the University of Minnesota in the 1970s-80s. The program was meant to

be an economical and efficient indicator of a student's progress toward achieving an at or above benchmark level. The DIBELS measures were intended to assess the areas of phonological awareness, alphabetic principle, fluency with connected text, vocabulary and comprehension. To measure the phonological awareness, the student completed an initial sounds fluency, ISF, which assessed a student's skill to identify and produce the initial sound, or was given phonemic segmentation fluency. PSF, which assessed the student's skill to produce the individual sounds of a given word. The nonsense word fluency, NWF, assessed a student's knowledge of letter-sound correspondences as well as ability to blend letters together to form unfamiliar "nonsense" words. The oral reading fluency, ORF, assessed a student's skill at reading connected text in grade-level materials. When ORF was combined with the retell fluency, RTF, the measure showed a student's understanding of a verbally read connected text and gave a measure of comprehension.

The role of DIBELS measures, by design, were indicators of each of the Basic Early Literacy Skills. The DIBELS measure of phonemic awareness, PSF, was designed to be an indicator of a student's progress toward the long-term phonemic awareness outcome of segmenting words (Kaminski, Cummings, Powell-Smith, and Good, 2008). Design

The quasi-experimental study consisted of the pre-post DIBELS scores of a second grade below benchmark reading group. A first set of pretest scores were collected in September 2008 and compared to post test scores in January 2009. A second set of pretest scores were the September 2008 then compared to the post test scores of May 2009 to review the entire academic year. The below benchmark students received progress monitoring intervention from October 2008 to May 2009. After the intervention

of progress monitoring, the author wanted to analyze the data and compare the growth from the pre-test and posttest for the first half of the year, and then against the posttest scores at the end of the year using the same methods of DIBELS testing within the classrooms and administered by trained para-professional staff.

Procedure

The second grade teachers at the author's elementary school held a special collaboration meeting in the early fall which included the first grade teachers. The members analyzed all second-grade students' Dynamic Indicators of Basic Early Literacy Skills scores, Standardized Test for the Assessment of Reading scores, and the fall Measures of Academic Progress reading assessment scores. First grade teachers assisted with additional background such as behaviors. Over 125 students were placed by reading ability between the five teachers. The top group of students were exposed to an enhanced curriculum based on the use of chapter books and some third grade curriculum. The next group of students worked with the higher second grade level of the Harcourt Brace curriculum's program called Harcourt Trophies. The Harcourt Trophies research-based developmental reading and language arts program implemented specific skills to ensure successful reading for every student. The skills included "explicit phonics instruction, direct reading instruction, guided reading strategies, phonemic awareness instruction, systematic, intervention strategies, integrated language arts components, and state-of-theart assessment tools" (Harcourt Trophies, 2006, pg. 1). The third group worked on grade level curriculum and applied the at-grade-level Harcourt Brace materials. The fourth group employed a combination of the first grade Read Well Plus and the new second

grade Read Well materials. The fifth, which was the author's group, used the first grade Read Well materials and hoped to move to Read Well Plus by mid-year.

An additional intervention, progress monitoring, was employed, but only quarterly for the at-benchmark students, every three weeks for the strategic students and twice a month for the intensive (at risk) students. The progress monitoring intervention started in September 2008 and the author's students were progress monitored every other week until the end of May 2009. If the students had not made adequate growth through the process, the decision was made to implement another intervention.

For the winter Dynamic Indicators of Basic Early Literacy Skills testing all students were assessed in quiet environments. The students were tested by paraprofessionals and taken out of the room to a separate classroom for the one-minute timed test on non-sense words, and then a one-minute test on oral reading fluency followed by a one-minute retell. The materials available to the author and para-professionals included the progress monitoring oral reading fluency student booklet, individual student booklets to record progress monitoring data, timer, clipboard and pencil.

Progress monitoring continued for about four months until the students were given the winter Dynamic Indicators of Basic Early Literacy Skills assessment. Once the students' scores from the winter assessment were available, the author analyzed and examined the data to determine the outcome of the hypotheses. The author compared the fall and winter scores of the below benchmark students and completed a *t*-test.

After the winter testing, the author was concerned about the low scores shown on DIBELS and NWEA assessment tests. The writer approached the Response to Invention team and was invited to the first grade Response to Invention meeting. The ideas

discussed and materials used in first grade appealed to the researcher and changes in the classroom curriculum and structure were made after approval of the principal and Response to Invention team. Prior to the meeting the classroom was structured in three separate groups and rotated every 20 minutes. The para-professional taught spelling and listened to the students read. An independent group worked on the Read Well activity packets, and the last group worked with the author on Read Well decoding and reading packets.

After the meeting, the author divided the 16 below benchmark students into two groups of eight. One group worked with the para-professional for 30 minutes and utilized the Phonics for Reading curriculum materials. The Phonics for Reading materials were research-based and also used by the elementary school's Title 1 teacher. Some strengths of Phonics for Reading were, "Instruction is explicit and systematic, and the materials included a detailed scope and sequence and clear objectives" (Archer, 2006, p. 5). At the present time, no research studies had been conducted that examined the effectiveness of Phonics for Reading. The writer worked for 30 minutes with the other group using a research-based curriculum called Pathways for the Advancement of Literacy Skills. The Pathways for the Advancement of Literacy Skills focused on phonics, segmented sounds and blended sounds. The groups rotated after 30 minutes. The author was excited to have attended the first grade meeting and the changes made in the structure of the classroom and materials resulted in a more focused learning environment.

Progress monitoring continued for about four months until the students were given the spring Dynamic Indicators of Basic Early Literacy Skills assessment. Once the

students' scores from the spring assessment were available, the writer analyzed and examined the data to determine the outcome of the hypotheses. The author compared the fall and spring Dynamic Indicators of Basic Early Literacy Skills assessment scores and used a *t*-test and obtained data of the below benchmark students.

Treatment of the Data

The author collected fall and winter DIBELS test scores for the 16 experimental students. The data was treated statistically by completing a non-independent *t*-test from the software package StatPak to determine significance of scores. The second set of DIBELS scores collected were fall and spring and were then ran as a non-independent *t*-test to determine the significance of the scores.

Summary

The researcher conducted an experimental research method and included a pre and posttest for the quasi-experimental study. The author implemented an intervention of progress monitoring for the below benchmark students from October 2008 to May 2009. The author examined the below benchmark student's scores on the DIBELS measure of oral reading fluency and studied the amount of growth from the pre-test to the posttest over the academic year.

CHAPTER 4

Analysis of the Data

Introduction

The researcher conducted the study to determine if the effects of progress monitoring used as an intervention tool for below benchmark students would increase students' DIBELS oral reading fluency scores. The second grade teachers had expressed a concern that the lowest reading group should have something more than just the Read Well curriculum and the researcher explored other areas of intervention. The author wanted to determine if progress monitoring would make a significant difference in the growth of reading scores.

The researcher described the parameters of the environment and restated the hypothesis and null hypothesis. For the results of the study, the author displayed the data and provided two tables which can be found on pages 35 and 36. The tables included the students' pre-test and posttest scores. The first table showed the amount of growth the below benchmark students made from fall to winter, and the second table portrayed the amount of growth from fall to spring on the DIBELS measure of oral reading fluency. The author analyzed and discussed the findings from the *t*-tests for the below benchmark students who received progress monitoring interventions.

Description of the Environment

One of the parameters that affected student learning was the physical arrangement of the classroom. The classroom was actually the stage (due to room constraints the school utilized the stage as a classroom) and did not have any windows. One wall of the room was the folding doors that opened up into the gym. There was no bathroom, sink,

or water fountain in the room, and students had to walk up a flight of seven steps to come in and out of the room. The stairway was hidden behind a wall and the teacher could not see who was coming in the room until the visitor arrived at the top of the stairs. Also, the only door to the room was usually propped open for more air, hence, a student/teacher/parent could have walked into the entryway, but the population in the room would not have known a visitor was standing on the stairway.

Another parameter was noise from the gymnasium was often loud and distracted the students, especially if there was an assembly for the older students or a loud game where basketballs had hit the folding wall. Not only external noise affected the environment, but the noise within the room when testing was done. With two groups of eight working on the curriculum and reading aloud, often times the para-professional or teacher had to ask other students to turn down the volume of voices.

The students were assessed by a different group of educators on the fall, winter and spring assessments. All the evaluators were trained para-professionals of the school in the study, but even a change in an evaluator could have affected the scores outcome due to the relationship between the test giver and test taker.

Hypothesis/Research Question

Reading scores of second grade students who received progress monitoring would make greater an expected growth as measured by the Dynamic Indicator of Basic Literacy Skills reading assessments from fall to winter as proven by a non-independent pre and post *t*-test score.

Reading scores of second grade students who received progress monitoring would make greater than expected growth as measured by the Dynamic Indicator of Basic

Literacy Skills reading assessments from fall to spring as proven by a non-independent pre and post *t*-test score.

Null Hypothesis

Reading scores of second grade students who received progress monitoring would not increase as measured by the Dynamic Indicator of Basic Literacy Skills reading assessments from fall to winter as proven by a pre and post non-independent *t*-test score with a significance level of .05.

Reading scores of second grade students who received progress monitoring would not increase as measured by the Dynamic Indicator of Basic Literacy Skills reading assessments from fall to spring as proven by a pre and post non-independent *t*-test score with a significance level of .05.

Results of Study

Table 1.

t-test for pre-post Fall to Winter Oral Reading Fluency for Below Benchmark Students

Test	N	Mean	Standard Deviation
Pre	16	17.94	19.41
Post	16	32.00	12.38
df= 15	t =	7.84	p < .001

After scoring the DIBELS oral reading fluency posttest in the winter, a non-independent *t*-test was performed to determine if significant growth had occurred from the fall scores. When the author conducted a *t*-test for the below benchmark students

receiving progress monitoring, the t-value was 7.84 and the degree of freedom was 15. The *t*-value was significant beyond the .001 probability level. The amount of growth the below benchmark students made receiving progress monitoring was significant.

The null hypothesis was rejected. The *t*-test for oral reading fluency indicated greater than expected growth in oral reading achievement scores from fall to winter as measured by the pre-post DIBELS test scores.

Table 2.

t-test for pre-post Fall to Spring Oral Reading Fluency for Below Benchmark Students

Test	N	Mean	Standard Deviation
Pre	16	17.94	19.41
Post	16	45.25	12.37
df= 15	t =	9.98	p < .001

After scoring the DIBELS oral reading fluency posttest in the spring, a non-independent *t*-test was performed to determine if significant growth had occurred from the fall scores. When the author conducted a *t*-test for the below benchmark students receiving progress monitoring, the t-value was 9.98 and the degree of freedom was 15. The *t*-value was significant beyond the .001 probability level. The amount of growth the below benchmark students made receiving progress monitoring was significant.

The null hypothesis was rejected. The *t*-test for oral reading fluency indicated greater than expected growth in oral reading achievement scores from fall to winter as measured by the pre-post DIBELS test scores.

Findings

Both hypotheses were supported when the author analyzed the data of the findings. The researcher analyzed the data for the below benchmark students that received progress monitoring intervention. The data supported the hypotheses. The below benchmark students receiving progress monitoring made better than expected growth. The results of the *t*-test indicated a significant difference in the amount of growth the below benchmark students made when progress monitoring was received.

The findings would support the utilization of progress monitoring for future below benchmark students. From the standpoint of educators the results had an impact on intervention of supplemental curriculum for the next year's students. From the standpoint of a parents, the colorful progress monitoring charts went home monthly and were easy to read and kept the parents involved and increased communication.

Discussion

The author analyzed the data from the *t*-tests. The author concluded from the data and analysis there was a significant difference in the amount of growth the below benchmark students made when progress monitoring was received.

An assumption of the researcher was below benchmark students needed to go back to the basics of phonemic awareness, fluency, and comprehension in a teacher-directed environment. The author believed the discontinued weekly spelling tests also gave more time for focused work in the areas of reading and decoding. Another assumption was the needed combined effort between the student, parent and teacher to have made the difference necessary. The author communicated with the parents with regard to the progress monitoring intervention and obtained buy-in early in the year.

Summary

The researcher discussed the parameters of the environment in the beginning of the chapter. The author restated the hypothesis and null hypothesis. The results for the non-independent *t*-tests indicated there was a significant difference in the amount of growth the below benchmark students made when progress monitoring was implemented as an intervention tool. The two hypotheses were supported.

CHAPTER 5

Summary, Conclusions and Recommendations

Introduction

Society has viewed education as the key to increased earning power, social status and future employment. Education, particularly the area of literacy, has been important to competition in a global market and has affected the social, cultural and citizenship participation in society. Literacy was the main focus of the researcher and the researcher wanted to explore intervention tools which could be used to not only monitor and track progress, but also be used to increase gains in phonemic awareness, phonics, vocabulary, fluency and comprehension.

The researcher reviewed the project. The author provided the vital facets of the project and highlighted the main points for each chapter. The author discussed the main features of the project in the summary. The researcher discussed the conclusions based upon the findings of the tables presented. A set of recommendations were given by the researcher based on the conclusions.

Summary

The researcher investigated and examined the effects of progress monitoring intervention. The below benchmark students received progress monitoring as an intervention tool from October 2008 to May 2009. The growth of the below benchmark students was monitored and recorded with the utilization of fall, winter, and spring DIBELS assessment scores.

The scope of the project was to monitor and track progress monitoring as an intervention tool to analyze the amount of growth of the below benchmark students.

Progress monitoring tests given every other week to the below benchmark students focused on oral reading fluency and retell. The researcher predicted the progress monitoring intervention tool assisted the below benchmark students achieve greater than expected growth.

The intervention tool of progress monitoring began in late September/early

October 2008 with all sixteen below benchmark students. The students were first

assessed and placed at the appropriate level of progress monitoring stories. The students

were progress monitored every other week until the end of May 2009. The author

analyzed the data to determine if students were making adequate growth and progress. If

the students were not making adequate growth through progress monitoring, the author

made a decision to consult the RTI team and grade level to implement another

intervention along with progress monitoring. Other interventions were brought into the

lowest reading group, such as Phonics for Reading and PALS to supplement the Read

Well program due to the progress monitoring information gathered.

When reviewing literature about DIBELS, Phonics for Reading and Read Well, the researcher identified how progress monitoring could be combined with the basics of Read Well's phonemic awareness, phonics, vocabulary, fluency and comprehension as introduced in the Phonics for Reading and PALS reading programs. The DIBELS literature also outlined the guidelines and goals for benchmark, strategic and intensive students which helped the second grade teachers' ability group the students at the beginning of the year.

For the study, the researcher conducted a pre-test and posttest using the quasiexperimental research method. The author included 16 second grade students for the study. The data was treated statistically and completed by *t*-tests through the StatPak software program. The author compared the growth of the fall to winter and then from fall to spring DIBELS oral reading fluency scores of the below benchmark students.

The researcher performed a *t*-test for the below benchmark students that received progress monitoring as an intervention tool. The analysis of the *t*-test indicated a significant difference in the amount of growth the below benchmark students made after progress monitoring was utilized.

Conclusions

In conclusion, the below benchmark students that received progress monitoring as an intervention tool made better than expected growth in oral reading fluency. The results for the non-independent *t*-test indicated there was a significant difference in the amount of growth in reading assessments. The two hypotheses were supported.

Other conclusions emerged from quantitative data and anecdotal observations made by the researcher. Motivation among the below benchmark students increased with other intervention tools such as Phonics for Reading and PALS were included in the program. The students liked the new stories and worksheets implemented.

Student self-esteem was evidenced by student behavior and pride shown as the students completed new strategies that related to phonemic awareness and decoding. The students wanted to be tested and were rewarded when scores went up. The students worked better in two groups of eight at 30 minutes each rotation than by prior structure. The prior structure had three groups of students at 20 minutes each rotation with an independent table and the researcher noted taking away the independent table increased

more focused time with teacher-directed activities and benefited the students to a greater extent.

Parent involvement and communication increased after letters went home and new reading packets went home to supplement the Read Well program. Parents were curious and wanted to help. The researcher made the observed conclusion that perhaps the parents could better understand the more simplified concepts to better help the child at home.

Recommendations

Based upon the conclusions, the author suggests the intervention of progress monitoring is a valid and reliable assessment. The second grade team of teachers agreed that progress monitoring the below benchmark students on a consistent basis, such as every other week, and adjusting and/or supplementing when progress is not being made is highly recommended. Also, the supplemental curriculum provided empowered students to grasp more fully the fundamental concepts of phonemic awareness, phonics, vocabulary, fluency and comprehension.

Future research may include a study with utilizing progress monitoring as a tool for teachers in all classrooms, at all academic achievement levels, not just the lowest reading group. Also, this research was completed over one academic year; research could be conducted for over a two-year span following the same students increasing the amount of time students would have for raising achievement scores. A variety of student groupings may benefit from progress monitoring as an intervention tool such as incorporating progress monitoring into the English Language Learner pull-out instruction time.

The researcher concludes that simply using progress monitoring should not be the "cure-all" to raising reading scores by supplementing/adjusting curriculum for students, but administrators must continue to provide resources for teachers to access and encourage support through collaboration not only at the grade level but include district special services personnel. Educators must work with other educators at a state, district and building level to explore new avenues in which to raise student scores and success using the No Child Left Behind structure established for reform to close the achievement gap.

REFERENCES

- Archer, A., Flood, J., Lapp, D. & Lungren, L. (2006). *Teaching phonics for reading*.

 Retrieved June 24, 2009 from

 http://www.casamples.com/downloads/PhonicsReadingFCRR-brochure.pdf
- Author, A. (2007). Why is phoneme awareness so critical for the beginning reader?

 Retrieved September 3, 2008 from
 - http://www.brainconnetionCom/topics/?mainfa/learn-read
- Chard, D.J. & Dickson, S.V. (1999). *Phonological awareness: Instructional and assessment guidelines*. Retrieved May 20, 2009 from http://www.ldonline.org/article/6254
- Dynamic Indicators of Basic Early Literacy Skills (2008). *DIBELS benchmark goals*.

 Retrieved September 11, 2008 from

 https://dibels.uoregon.edu/benchmark.php#3grade2
- Fact sheet on the major provisions of the conference report to H.R. 1, the no child left behind act. Retrieved February 27, 2009 from http://www.ed.gov/print/nclb/overview/intro/factsheet.html
- Florida Center for Reading Research (2008). *Assessment program*. Retrieved September 8, 2008 from http://www.fcrr.org/assessmentscreeningprogressmonitoring.htm
- Florida Center for Reading Research (2008). *Read Well*. Retrieved April 10, 2009 from http://www.fcrr.org/fcrrreports/PDF/Read_Well_Report.pdf
- Fuchs, D., Fuchs, L.S., Thompson, A., Al Otaba, Sl., Yen, Lk, Yang, N.J., Braun, M., & O'Connor, R. (2001). Is reading important in reading readiness programs? *A randomized field trial with teachers as program implementers*. As cited in the

- *Journal of Educational Psychology*, 93(2), 251-267. Retrieved May 3, 2009 from http://kc.vanderbilt.edu/pals/library/readingres.html
- Gabriel, J. (2001). *Dual degrees: Teamwork brings solutions to learning difficulties*.

 Retrieved January 14, 2009 from http://www.brainconnection.com/content/161_1
- Gay, L.R., Mills, Geoffrey E., and Airasian, Peter (2006). *Educational research:*Competencies for analysis and applications. (8th ed.) Upper Saddle River, NJ:

 Pearson Education, Inc.
- Hall, S.L. (2006). *I've DIBEL'd now what: Designing interventions with DIBELS data*. Longmont, Colorado: Sopris West Educational Services.
- Illinois State Board of Education (2005). *The reading improvement block grant update*.

 Retrieved June 23, 2009 from

 http://www.isbe.state.il.us/ILS/ela/reading/pdf/ribg_newsletter07_08.pdf
- Kaminski, R., Cummings, K.D., Powell-Smith, K.A., & Good, R.H.III (2008). Best practices in using Dynamic Indicators of Basic Early Literacy Skills for formative assessment and evaluation. In A. Thomas and J. Grimes (eds.) *Best Practices in School Psychology V.* Bethesda, MD: National Association of School Psychologists.
- McCall, M., Hauser, C., Cronin, J., Kingsbury, G., Houser, R., Achievement

 Gaps: An examination of differences in student achievement and growth.

 (November 2006). Retrieved June 4, 2009 from

 http://www.nwea.org/assets/research/national/409_AchivGapStudyFinallowres_1

 1006a.pdf

- McElroy, E.J. (2005). *Teaching left behind*. Retrieved February 20, 2009 from ProQuest

 Database:

 http://proquest.umi.com.libdb.heritage.edu/pqdweb?Index=4&did+834007281&S
 rchMode
- National Institute for Direction Instruction (2006). Encyclopedia. Retrieved February 25, 2009 from http://www.reference.com/browse/wiki/Direct_instruction
- National Institute of Child Health and Human Development (2000). Report of the

 National Reading Panel. Teaching children to read: An evidence-based

 assessment of the scientific research literature on reading and its implications for reading instruction. Washington, D.D.: U.S. Government Printing Office.
- National Reading Panel (2000). Teaching children to read. An evidence-based assessment of scientific research literature on reading and its implications for reading instruction. NIH Publication No. 00-4754. Washington DC: National Institute of Child Health and Human Development.
- Northwest Evaluation Association (2004). Reliability and Validity Estimates. *NWEA*achievement level tests and measures of academic progress. Retrieved June 24,
 2009 from

 $\underline{http://www.nwea.org/assets/research/NWEA\%20Reliability\%20\&\%20Validity.pdf}$

Office of the Superintendent of Public Instruction. (2008). Washington state report card.

Retrieved September 6, 2008 from

http://reportcard.ospi.k12.wa.us/summary.aspx?schoolId=815&OrgType=4&repo

rtLevel=School&year=2007-08

Questions and answers on no child left behind-reading. Retrieved February 16, 2009,

- from http://www.ed.gov/print/nclb/methods/reading/reading.html
- Renaissance Learning (2009). Announcing the most reliable, cost-effective approach to practical RTI implementation. Retrieved March 11, 2009 from http://www.renlearn.com/sr/RTI.aspx
- Snider, V.E. 1995. A primer on phonemic awareness: What is is, why it's important, and how to teach it. *School Psychology Review* 24: 443-455.
- Sprick, M. (2006). *Read Well*. Retrieved September 4, 2008 from http://store.Cambiumlearning.com/ProgramPage.aspz?parentID019005451&functionID=0
- Standardized Test for the Assessment of Reading. (2009). Receive norm referenced scores immediately! Retrieved June 6, 2009 from http://www.renlearn.com/sr/overview/
- United States Department of Education. (2005). No Child Left Behind Act of 2001:

 Annual report to congress. Department of Education.
- Washington School Research Center. (2002). Bridging the opportunity gap: How

 Washington elementary schools are meeting achievement standards. Research

 report #2. Lynnwood, WA: Washington School Research Center, Seattle Pacific

 University. Retrieved January 8, 2009 from

 http://www.spu.edu/orgs/research/WSRC%20Bridging%20the%20Opportunity%20Gap%20FinalReport.pdf
- Westchester Institute for Human Services Research (2009). *The balanced view:**Research-based information on timely topics. White Plains, New York: Author.

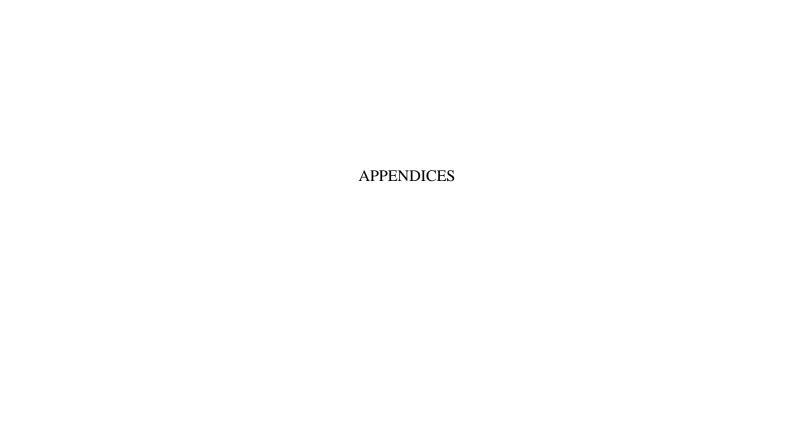


Figure 1

DIBELS Oral Reading Fluency assessment scores for below benchmark students.

Student	Fall 2008	Winter 2009	Spring 2009
1	25	31	43
2	12	26	34
3	20	37	58
4	4	15	29
5	12	20	41
6	16	24	54
7	21	41	50
8	2	16	24
9	21	34	42
10	8	26	45
11	18	40	45
12	28	26	39
13	35	52	67
14	34	58	54
15	21	46	68
16	10	20	31

Figure 2

DIBELS Progress Monitoring – Oral Reading Fluency. September 2008-January 2009.

Student	Sep	tember	Oct	ober	Nove	ember	Dece	ember	Jan	uary
	Wk 1	Wk 3	Wk 1	Wk 3	Wk 1	Wk 3	Wk 1	Wk 3	Wk 1	Wk 3
1	X	22	18	21	25	19	20	25	28	30
2	X	12	16	14	18	20	24	21	23	25
3	X	22	25	27	29	34	29	33	34	36
4	X	3	6	8	10	9	14	12	13	14
5	X	10	13	16	13	17	19	16	18	20
6	X	15	18	16	20	26	18	20	22	24
7	X	22	25	31	24	36	39	43	38	41
8	X	2	4	7	10	13	8	14	11	16
9	X	22	25	28	30	22	30	32	27	34
10	X	7	12	17	20	18	22	25	23	26
11	X	18	23	26	31	35	32	38	35	40
12	X	24	26	21	23	25	22	26	21	25
13	X	34	38	41	45	34	43	46	39	52
14	X	32	36	41	42	47	45	52	58	54
15	X	21	25	28	34	38	40	42	45	44
16	X	9	12	10	14	16	11	18	21	19

Figure 3

DIBELS Progress Monitoring – Oral Reading Fluency. February 2009-May 2009.

Student	February		March		April		May	
	Wk 1	Wk 3	Wk 1	Wk 3	Wk 1	Wk 3	Wk 1	Wk 3
1	30	34	37	34	40	41	43	44
2	25	27	30	23	31	30	32	34
3	37	40	44	43	47	49	54	57
4	14	15	18	21	23	25	26	28
5	20	23	25	27	32	36	40	40
6	24	27	32	35	40	44	50	51
7	41	43	45	44	49	47	49	50
8	16	18	21	17	20	23	19	24
9	34	35	34	36	40	41	38	42
10	26	29	32	33	37	40	42	44
11	40	41	38	40	41	39	44	45
12	26	27	30	33	36	39	37	39
13	51	50	52	48	55	58	61	65
14	57	48	44	49	50	51	49	54
15	45	48	52	55	61	63	65	68
16	20	21	28	24	27	29	30	31