Increasing Reading Scores in DIBELS and NWEA Reading Comprehension Using READ NATURALLY

A Special Project

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FACULTY APPROVAL

Increasing Reading Scores in DIBELS and

NWEA Using READ NATURALLY

Approved for the Faculty

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ABSTRACT

The purpose of this study was to determine if the program Read Naturally would increase reading fluency and reading comprehension based on the Northwest Evaluation Association. The supplementation of the program Read Naturally of a third grade intervention group provided the opportunity for the researcher to have analyzed data to determine if student fluency and reading comprehension improved. Data from the Northwest Evaluation Association tests were gathered in the fall of 2009 and winter of 2009 to assess if students scores had increased. This study concluded that Read Naturally did increase fluency scores but failed to increase reading comprehension scores.

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CHAPTER 1

Introduction

Background for the Project

Many students in schools have struggled with learning to read. Armbruster, Lehr, and Osbourn (2008) stated that "…reading failure has exacted a tremendous long-term consequence for children's developing self-confidence and motivation to learn, as well as for their later school performance" (2008). Reading fluency has been a topic that has caused many educators to adjust programs used inside classroom.

The students in this research project were shown to have low test scores on the Northwest Evaluation Association assessments and Dynamic Indicators of Basic Early Literacy Skills test scores**.** The scores showed that the students were below grade level.

Reading fluency has been an area that has been neglected in the classroom and has been an area that was in dire need of attention. Read Naturally has been shown to be an effective program that has encompassed much research that has benefited below grade level readers in fluency and reading comprehension (Wahl, 2003). Along with Read Naturally the Dynamic Indicators of Basic Early Literacy assessment has been an assessment tool used to monitor the student's fluency.

Statement of the Problem

The school being researched had a percentage of students that were reading below grade level. Thus, a reading intervention program to help the students in all grade levels to increase reading fluency and reading comprehension skills at each grade level. The intervention reading group in the third grade had a designated time blocked for 45 minutes from Monday through Thursday. Because the school had yet to adopt a reading intervention system, the writer researched available programs and decided that the best approach was to implement the Read Naturally reading program. The decision to implement the new reading program was based on the available research provided through the studies that the author examined.

Purpose of the Project

The purpose of the project was to have the third grade students in the reading intervention program use the Read Naturally program to increase test scores in oral reading fluency and reading comprehension based on the Dynamic Basic Indicators of Early Literacy and the Northwest Evaluation Association assessments. Another strategy for the reading intervention program with Read Naturally was to have the students feel confident about the oral reading fluency and reading comprehension.

Delimitations

The students in the intervention program were selected from four different classrooms. The students' teachers analyzed the Dynamic Indicators of Basic Literacy and Northwest Evaluation Association test scores. There were a total of fourteen students involved, consisting of nine boys and five girls.

Assumptions

The researcher assumed that the paraprofessional working with the third grade students was highly qualified for teaching the students in reading. The paraprofessional had proper training with Read Naturally and Dynamic Indicators of Basic Early Literacy testing. The researcher assumed that all the students were treated equally and that all the materials were used accurately and with fidelity.

Hypothesis

Using Read Naturally will improve student scores that are below grade level in reading fluency and reading comprehension based on Dynamic Indicators of Basic Early Literacy Skills and Northwest Evaluation Association assessments.

Null Hypothesis

Using Read Naturally will not improve student scores that are below grade level in reading fluency and reading comprehension based on Dynamic Indicators of Basic Early Literacy Skills and Northwest Evaluation Association assessments.

Significance of the Project

The researcher wanted to find out if using Read Naturally would increase the students' scores based on Dynamic Indicators of Basic Early Literacy Skills and Northwest Evaluation Association.

Procedure

To begin the project, students that qualified for the reading intervention program fell under the category of strategic, meaning that the students need more intensive reading instruction to reach benchmark, for the Dynamic Indicators of Basic Early Literacy Skills oral reading fluency. The students also fell below the 30% in the Northwest Evaluation Association assessment.

The school where the research took place had a reading intervention team which met on a monthly basis to review strategies that were working well and share concerns about the reading intervention program. Some of the teachers expressed concerns as to whether or not the students were making progress, and if the students could be placed in other reading groups. Other concerns articulated were about the curriculum and if there was something different to be used to help students that were not making progress.

The reading intervention team involved one teacher at each grade level, the reading specialist, and the special education teacher. The team met to gather data

relevant to the students that were tested in for the fall Dynamic Indicators of Basic Early Literacy Skills assessment and the fall Northwest Evaluation Association assessment. During every new testing period the reading intervention team met and discussed the progress of the individual students and to determined if the students needed to continue to be in the reading intervention program or be moved into an appropriate grade level group. This decision was based on the progress the student was making in reading fluency and as well as determined by the teacher discretion.

Definition of Terms

benchmark- Benchmark was the beginning and end of year goals for fluency in each grade level.

cold read- The students are timed before having had practiced the reading or even seen the selected text.

fluency- The ability to read accurately, quickly and with expression.

hot read- The students are timed after having had practiced the selected text more than three times.

intensive- Students in this level need explicit help in reading instruction.

No Child Left Behind Act- It was based on four principles; stronger accountability for results, increased flexibility and local control, expanded

options for parents, and an emphasis on teaching methods that have been proven to work.

No Child Left Behind was signed into law on January 8, 2002 by President Bush as part of the Elementary and Secondary Education Act.

progress monitoring- Progress monitoring was a way to determine if students were making sufficient progress in reading or if students needed to be placed in other interventions reach benchmarks according to Dynamic Indicators of Basic Literacy Skills.

Rasch Score (RIT)- interval score that makes it possible to follow a student's educational growth throughout the year or year to year

strand- different reading area that the students are tested on, on the reading NWEA. The reading NWEA tests the areas work recognition and vocabulary, reading comprehension literal, evaluation, inferential/interpretative, and literary response and evaluation

strategic – Students in strategic need intensive reading instruction to reach benchmark.

Acronyms

NPR.	National Reading Program
NWEA.	Northwest Evaluation Association.
DIBELS.	Dynamic Indicators of Basic Early Literacy Skills..

ORF. Oral Reading Fluency.

OSPI. Office of Superintendent of Public Instruction.

RIT. Rasch Score

CHAPTER 2

Review of Selected Literature

Introduction

The National Reading Panel did an intensive study pertaining to reading skills in the year 2000, and chose the topics: phonemic awareness, phonics instruction, fluency, comprehension such as vocabulary instruction, text comprehension instruction, teacher preparation and comprehension strategies instruction, teacher education and reading instruction, computer technology and reading instruction (NRP, 2000). These topics were areas that the public at the regional hearings voiced concerns. According to Wolf, "fluency is one of those seemingly simple concepts that rewards you well for digging deeper"(2003).

One of the areas of the National Reading Panels concerns was oral reading fluency and the effect it had on reading comprehension (NRP, 2000). "The National Reading Panel also found that an effective reading program must include instruction in reading fluency" (Honig, 2008). Research methods and programs have been used to increase reading fluency such as the reading program Read Naturally. In addition, there had also been valid assessments used to test reading fluency, such as the Dynamic Indicators Basic Early Literacy Skills Assessment (Hoffman, 2009).

Reading fluently has been defined as the ability to read with expression accurately and quickly, although fluency was an important skill it was a skill that was often neglected in the classroom (NRP, 2000). According to the Literacy and Research study, "Readers who have not yet achieved automaticity in word recognition must apply a significant amount of their finite cognitive energies to consciously decode the words they encounter while reading. Cognitive attention or energy that must be applied to the low-level decoding task of reading is cognitive energy that is denied to the more important task of comprehending the text." Therefore comprehension was negatively affected by a reader's lack of fluency **(**Rasinski, 2009).

Reading fluency has become a key element in successful reading programs in the primary grades (Rasinski, 2009). Repeated readings with guided oral readings was an effective instructional intervention (Read Naturally). The reading intervention program Read Naturally has shown to encompass repeated readings and guided oral readings to help students be successful in reading.

On the recommendations of national panels and the pressure that many schools were feeling because of The No Child Left Behind Act, many schools and districts had chosen to use Dynamic Indicators of Basic Early Literacy Skills because, "The Dynamic Indicators Basic Early Literacy Skills has shown to be a scientifically based, comprehensive assessment system (DIBELS).

Reading Fluency

"Reading fluency has been thought of as a bridge between the two major components of reading—decoding and comprehension," which has been why reading fluency has been a major concern (Honig, 2008). Honig maintained that at one end of the continuum fluency connected to the automaticity of decoding of words and at the opposite end fluency connected to comprehension through prosody (2008). Prosody, of course, has been defined as the tonal and rhythmic aspects of spoken language. Reading Fluency "has been generally shown that great fluency rates lead to higher levels of comprehension of text read, higher levels of achievement on standardized test, and even a reduction of inappropriate behaviors in students diagnosed with Emotional and Behavioral Disorders" (Hannon, 2008).

According to Hudson, Lane, and Pullen (2005), reading fluency is made up of at least three key elements: "*accurate* reading of connected text at a conversational *rate* with appropriate *prosody* or expression." All three of these elements have a connection to reading comprehension. Accurate reading has been defined as the ability to recognize or decode words correctly (Honig p. 322). The rate that the student reads at has been to show how quickly and accurately the student reads connected to the text.

According to the National Reading Panel recent research has been done to show certain approaches to increase reading fluency and to show the importance of reading fluency in reading. Reading practice was a major benefit to reading fluency but there were two other instructional approaches, and both have had different variations. The first instructional approach, guided repeated reading practice, had children reading orally with guided practice and explicit guidance and feedback from a teacher (NPR, 2000). Not only were the repeated readings important, but also the fact that the students also needed to read with expression. Reading with expression had been a skill that was frequently overlooked. Reading with expression was the abilily show the different pitch, stress, and appropriate phrases while reading. Students needed to make oral reading sound like spoken language (Rasinski, 2009).

The other instructional reading approach, independent silent reading, has children reading silently on their own with little or no help from a teacher. Being able to read silently was a skill that required the student to be able to read fluently with very little assistance. The ability to read fluently was a skill used during silent reading making it possible to read for enjoyment and for comprehension of text (Ambuster, 2003). For students that enter middle school and even high school, improper reading fluency skills had a major impact on the students' ability to comprehend a text while reading independently (Rasinskil, 2009).

Studies had shown that students participating in oral reading with guidance from a teacher, parent, or even peers had to have a significant and positive impact on word recognition, fluency, and comprehension across all grade levels (NPR 2000). According to this study, the ability to read fluently made a positive impact on a student's education.

DIBELS

The Dynamic Indicators of Basic Early Literacy Skills were a set of procedures and measures for assessing the acquisition of early literacy skills from kindergarten through sixth grade. The scientifically based assessments were founded by" Deno and colleagues through the institute for Research and Learning Disabilities at the University of Minnesota in the 1970s-1980s" (Jenkins, 2009). The assessments were later researched more in depth at the University of Oregon in the late 1980s by Roland Good and Ruth Kaminski (Jenkins, 2009). DIBELS was created in part to allow for remedial interventions prior to students failing accountability tests (Johnson, 2009).

According to DIBELS (DIBELS), DIBELS were designed to be short fluency measures to monitor students early on in reading and literacy skills. The assessment was also designed to help identify students that were having difficulty with basic early reading skills that provided immediate support rather than later on in the students' schooling. DIBELS has been an assessment not only used in

districts with federal mandates but in many U.S. and Canadian school districts (Jenkins, 2009).

DIBELS were comprised of seven measures: phonemic awareness, alphabetic principle, accuracy and fluency with connected text, reading comprehension, and vocabulary. According to the authors of DIBELS, the program did not assess all phonemic awareness but DIBELS was designed as an indicator of student progress for long-term phonemic awareness. In essence DIBELS was designed to be short (one minute) fluency measures used to regularly monitor the development of early literacy and early reading skills (DIBELS).

According to Goodman, specific months were designated for student assessment purposes (2006). Individual pupils were tested at the beginning, middle, and end of the year's benchmarks using the DIBELS assessment criteria for assessment purposes. At the researcher's school, the testing booklets were created and designed for each specific grade level by the DIBELS testing services. In order to assure validity of the instrument, all assessments were standardized in the administration of the students' DIBELS evaluation.

During the assessment process students in grades kindergarten thru second grade were individually tested on the seven measures: phonemic awareness, alphabetic principle, accuracy and fluency with connected text, reading

comprehension, and vocabulary. In grades three through sixth grade students were tested on reading fluency and the ability to retell of a story. DIBELS was an assessment tool used in elementary schools to increase and show reading fluency.

Read Naturally

Read Naturally has been a credible program since 1991 that addressed the needs of a broad range of children. The objective of the scientifically based research methodology was not designed to be a core reading program but only one type of reading intervention or supplemental program. "The Read Naturally program supports the five essential components of reading, identified by the National Reading Panel: phonemic awareness, phonics, fluency, vocabulary, and comprehension."(Read Naturally).

Other effective research based approaches included repeated readings of the same text until the reader achieves mastery, guided repeated oral reading with the use of audiotapes, other students, adults, or other feedback that the Read Naturally program offered to the students that used the program. Read Naturally also offered progress monitoring for students and teachers. Students that received progressed monitoring had the opportunity to be placed in other interventions to reach benchmark according to the DIBELS. Read Naturally has been based on the assumption that struggling readers primarily had difficulty with fluency, "stemming from phonological processing problems phonological processing

difficulties pose significant problems for students who are struggling at the word level of reading and have not developed automaticity" (Wahl, 2003).

According to Davidson----Read Naturally has three main components that the program uses as well as subcomponents. The major components were teacher modeling, repeated reading, and progress monitoring (2008). Teacher modeling has been a proven way to improve student's reading fluency (NRP, 2000). In Read Naturally a student reads along or listens to a more advanced reader after selecting the story of choice to be read. Listening to a more advanced reader gave the student the opportunity to learn where all the proper expressions and intonations need to go in order for the text to make sense.

The second component of Read Naturally, the repeated readings gave the students an opportunity to build confidence by practicing the text repeatedly in order to gain mastery. According to The National Reading Panel (2000) repeated reading had shown to improve fluency and the student then had a chance to practice reading the passage over and over until a given day to see the growth the student has made on the passage read.

The last and final reading component, progress monitoring, involved the students in setting goals before reading a text and observing individual growth after having practiced reading the text. Next, the students did a hot read and recorded growth on a graph indicating the progress made over a period of four

days of practicing compared to the beginning of the week's cold read. The final component was crucial for the student's confidence (Read Naturally).

Summary

According to Honig, Diamond, and Gutlohn being able to read fluently was a skill that made a reader become an independent reader (2008). Assessments and programs were created to have helped students become fluent in reading and an overall confident reader. The Read Naturally reading program was designed help teachers give students the much needed practice in order to become fluent readers. Read Naturally has provided the necessary tools that helped students read word by word. Read Naturally has also provided students with reading comfortably and fluently in order to focus on comprehending the text that was being read.

The DIBELS assessments were a set of procedures and measures for assessing the acquisition of early literacy skills from kindergarten through sixth grade. DIBELS had been shown to be an assessment tool that helped teachers intervene with students experiencing difficulty with reading fluently.

Honig, et al. stated that overall reading fluency has shown to be an important factor for students in reading because fluency provided a bridge between word recognition and comprehension. When readers had been able to read fluently, reading fluently has helped students comprehend at the same time. Decoding words automatically gave the students the skill to focus on the comprehension of

the text. Fluency was shown to be important because students often tend to lose interest in reading when students struggling with comprehension. Students experiencing great difficulty in reading tend get farther and farther behind not only in other academic areas as well. Thus, fluent reading acquisition skills proved to help students succeed in many other academic areas as well (2008).

CHAPTER 3

Methodology and Treatment of Data

Introduction

Reading had been shown to be very important for students of all ages. Because studies had shown that reading fluency improves literacy skills the students in the reading intervention program in the district under study used the Read Naturally program to increase literacy skills and also improved reading scores. The students were tested in the fall of 2009 and later tested that winter using the Dynamic Indicators of Basic Early Literacy Skills and Northwest Evaluation Association assessments. The pre- and post- test scores were compared by the researcher to determine whether or not the Read Naturally program helped increase reading scores.

Methodology

The study was conducted as a quantitative study to see if using Read Naturally would show growth in DIBELS and NWEA scores and more specifically in the strand of reading comprehension from fall to winter. Reading fluency rates and grade level achievement in reading were compared along with reading comprehension based on the NWEA strand.

The researcher worked as the intervention teacher for the grade level, therefore the intervention group was used for the study. The test scores from fall

and winter DIBELS, NWEA, and NWEA comprehension strand were compared by using an independent t-test.

Participants

The population set of third grade students came from a rural community. The school's enrollment was 496 students and the special programs were broken down as follows: 41% of the student population participated in the district's free or reduced lunch program, 13% special education, 17% transitional bilingual, and 14% migrant. The school's ethnicities consisted of 69% White, 28% Hispanic, and 3% Black, Asian, Asian/Pacific Islander, and American Indian/Alaskan Native (Washington State Report Card 2008).

Third grade students from four separate classrooms made up the reading intervention group that consisted of nine boys and five girls. Individual selection was based on NWEA and RIT performance. The students chosen were shown to be in the lowest 30% based on the NWEA reading RIT strand. The students also showed that they were considered strategic, which meant that the students needed intensive reading instruction to reach benchmark, according to DIBELS.

Instruments

The Dynamic Indicators of Basic Early Literacy Skills (DIBELS) was implemented and used for assessment of student literacy along with The Northwest Evaluation Association reading assessment. DIBELS were a set of

standardized, individually administered measures of early literary development (DIBELS). The assessment was a short one minute fluency measure that was used to monitor the student fluency rate. The test administrator kept track of the student's reading rate and mistakes, omissions, substitutions, and hesitations on a separate sheet of paper with the same reading passage. The number of errors were then counted and subtracted from the total number of words read. The final number in the assessment process represented the final words read per minute.

The reading NWEA assessment was used as well and administered in a computer lab located in the school. Students had the same testing condition and no time limit was established. Learners sat at a computer and answered reading questions based on the student's understanding.

Read Naturally was the program used to increase reading fluency and reading comprehension in the students. The students received teacher modeling, worked on repeated reading and progress monitoring. The program was conducted for four days and for 45 minutes a day throughout the weeks of the duration of the study.

Design

The study was conducted using a quantitative study using a t-test to compare statistical significance, comparing the student's fall and winter DIBELS and NWEA reading scores to see if progress had been made in reading. The data

retrieved from the scores was used to calculate significance of the use of Read Naturally on the intervention group. The quantitative study used a STATPAK to have analyzed the data and to have shown the relationship between the fall and winter scores.

Procedure

To begin the project, all third grade students DIBELS and NWEA test scores were analyzed. The students that qualified for the reading intervention program either fell under the category of strategic for the DIBELS oral reading fluency. Having been considered strategic meant that the readers needed intensive reading instruction to reach benchmark. Another factor for having qualified for the reading intervention program was falling below the 30% in the NWEA assessment. Most of the students were chosen based on falling under the 30% of the NWEA reading assessment.

The school where the research took place had a reading intervention team which met on a monthly basis to review strategies that were working well and share concerns about the reading intervention program. The teachers expressed concerns as to whether or not the students were making progress, and if the students could be placed in other reading groups. Other concerns expressed pertained to the curriculum and if there was something different to be used to help individuals make progress.

The reading intervention team involved one teacher at each grade level, the reading specialist, and the special education teacher. The team met and gathered data relevant to the students that were tested for the fall DIBELS assessment and the fall NWEA reading assessment. During new testing periods the reading intervention team met and discussed the progress to determine if the students needed to continue to be in the reading intervention program. This decision was based on the progress the individual student was making in reading fluency as well as input from the classroom teachers' discretion.

In the reading intervention program the four lowest students worked with a paraprofessional and the other ten students worked with a classroom teacher. The students followed the guidelines of the Read Naturally program. The first step in the program required that the story's vocabulary be introduced by the teacher. Then, the students were timed on a cold read. A cold read involved reading a text that had not been previously seen the story or practiced. Next, the text was read to the students aloud by the teachers so that the learner could hear the story being read by a fluent reader. In addition, the students independently read the story all the way through on and asked any questions about the text, in order to become very familiar with the text. Following the previous step, the individual reading goals were set for the week. The student chose an oral reading fluency number to achieve for that week. The goal was set so that the students had a motivator to

help reach a higher level of competency. The students then worked on repeated readings by having had practiced with another student or just having read aloud to themselves. Finally, the students were timed individually, having the opportunity to review the text prior to being timed, and then having checked the goal that had been set to see if the learning target had been reached.

Treatment of the Data

The researcher gathered scores from the fall DIBELS and reading NWEA assessments. Then, the scores were compared to the winter DIBELS and reading NWEA scores. The two sets of scores were compared with each other to see if growth had occurred in reading and more specifically in the reading comprehension strand.

The data gathered by the researcher was analyzed using the STATPAK software. The STATPAK software came with the "Educational Research: Competencies Analysis and Applications" (Gay, Mills, & Airasian, 2006). The STATPAK offered the independent t-test as part of the software. Individual student's scores were inputted and the levels of significance were determined by the software.

Summary

The author analyzed the intervention group of students in the 30% according to NWEA testing data. Throughout the duration of the study, individuals in the

group received 45 minutes of the Read Naturally program for four days a week where the primary focus was reading fluency. The students were split into two groups by using the assessment standards of DIBELS and NWEA. The students' scores from fall testing were used to form the groups and later the scores from winter's assessment were used to see if growth had occurred according to the NWEA reading assessment standards.

CHAPTER 4

Analysis of the Data

Introduction

Reading fluency had been shown to be an integral component in reading and instrumental for increasing reading skills of students. The National Reading Panel conducted extensive research and drew the conclusion that that reading fluency had a direct correlation in having increased reading comprehension. The researcher conducted a study to determine whether using the reading intervention program Read Naturally would increase individual student's reading scores. The study took three months and a select group of 14 third grade students participated in the research. The students involved in the study took a fall Dynamic Indicators of Basic Literacy Skills (DIBELS) evaluation and reading Northwest Evaluation Association (NWEA) assessment. A second set of the DIBELS and NWEA assessments were conducted during the winter. The test scores were later analyzed to see if growth had occurred over the duration of the study.

Description of the Environment

The students in the intervention program were selected from four different classrooms. The students' teachers analyzed the Dynamic Indicators of Basic Literacy and Northwest Evaluation Association test scores. There were a total of 14 students involved, consisting of nine boys and five girls. The student's

ethnicities consisted of Caucasian and Mexican. The group was then split into two smaller groups, one consisting of ten and four students respectively. The smallest group consisted of the four lowest scoring students, according to NWEA scores. The intervention group of ten students was done in a regular third grade classroom while the smaller group of four students received intervention instruction in a back room of the regular third classroom.

Hypothesis

Using Read Naturally will improve student scores that are below grade level in reading fluency and reading comprehension based on Dynamic Indicators of Basic Early Literacy Skills and Northwest Evaluation Association assessments.

Null Hypothesis

Using Read Naturally will not improve student scores that are below grade level in reading fluency and reading comprehension based on Dynamic Indicators of Basic Early Literacy Skills and Northwest Evaluation Association assessments.

Results of the Study

The students were tested in the fall and later tested in the winter with the DIBELS assessment and reading NWEA. Test scores from the reading NWEA RIT score were also collected and analyzed. Each of the individual scores were collected and analyzed as a whole to see if growth had occurred in the

intervention group. The following table showed the individual scores of each individual student that participated in the study.

Table 1 Individual Scores for Oral Reading Fluencies from fall and winter DIBELS Assessment

Student	**Fall ORF**	**Winter ORF**	**Change**
1	111	99	-2
2	106	115	+9
3	95	116	+9
4	90	112	+3
5	63	77	+14
6	78	99	+11
7	92	113	+11
8	92	146	+54
9	55	82	+27
10	59	68	+9
11	72	85	+13
12	69	71	+2
13	49	80	+31
14	81	101	+20
Mean	79.4	97.4	+18

All but one of the students in the intervention group made growth in reading fluency. The students that had achieved growth had made a significant change from fall to winter. The students gained at least nine more words per minute by the winter.

Table 2 Scores for Intervention Group in Oral Reading Fluencies from fall and winter DIBELS

Assessment	**Statistical Findings**		
Fall DIBELS	N=14	Mean = 79.43	SD = 18.42
Winter DIBELS	N=14	Mean = 97.43	SD = 20.98
Independent T-Test	t-value = -2.32	*df* = 26	p < .05

Note. N = Number; SD = Standard Deviation; *df* = degrees of freedom; p = probability

The intervention group as a class made significant growth from fall to winter of the 2009-2010 school year. The mean of the class increased to 97.43 from 79.43. The mean increased 16 points for the whole group. An independent t-test was run to test for statistical significance or non-significance. The independent t-test showed statistical significance therefore rejecting the null hypothesis.

Table 3 Individual Reading RIT score from NWEA fall to winter

Student	Fall ORF	Winter ORF	Change
1	178	188	+10
2	182	192	+10
3	182	185	+3
4	175	192	+17
5	184	200	+16
6	184	190	+6
7	185	189	+4
8	184	197	+13
9	182	181	-1
10	183	175	-8
11	181	176	-5
12	184	179	-5
13	182	170	-12
14	186	201	+ 15
Mean	182.29	186.79	+4.5

Most of the students had made some gains or significant gains in reading scores based on the reading NWEA. However, five of the students did not make growth, and perhaps this can be attributed to student absenteeism. Through

examining the scores the researcher noticed that the students that did not make growth were all students that were right around the same RIT score in the fall. The pattern with the scores continued in the winter scores for the students.

Table 4 Intervention Group Reading RIT score from NWEA fall to winter

Assessment	**Statistical Findings**		
Fall NWEA	N=14	Mean = 182.29	SD = 2.76
Winter NWEA	N=14	Mean = 186.79	SD = 9.21
Independent T-Test	t-value = -1.69	*df* = 26	p < .20

Note. N = Number; SD = Standard Deviation; *df* = degrees of freedom; p = probability

The mean for the NWEA reading assessment for the intervention group had different results than the DIBELS. The mean was four points from each other. An independent t-test was again run to test for significance or non-significance. The independent t-test showed no statistical significance between the fall and winter test scores.

Table 5 Individual Reading NWEA Reading Comprehension Strand

Student	Fall RIT	Winter RIT	Change
1	176	188	+12
2	190	207	+17
3	180	176	- 4
4	181	179	- 2
5	200	180	- 20
6	182	176	- 6
7	182	176	- 6
8	183	194	+ 11
9	184	205	+ 21
10	191	184	- 7
11	181	182	+ 1
12	183	192	+ 11
13	184	179	- 5
14	182	182	0
Mean	184.21	185.71	+ 1.5

The researcher analyzed the NWEA reading score more closely and looked at the reading comprehension strand of the students. The test results showed that six

out of the 14 students showed growth in the area of reading comprehension. One student's remained unchanged throughout the testing period.

Table 6 Intervention Group Reading NWEA Reading Comprehension Strand

NWEA Assessment	**Statistical Findings**		
Fall Comprehension RIT	N=14	Mean = 184.21	SD = 5.68
Winter Comprehension RIT	N=14	Mean = 185.71	SD = 9.91
Independent T-Test	t-value = -0.42	*df* = 26	p < .20

Note. N = Number; SD = Standard Deviation; *df* = degrees of freedom; p = probability

Findings

The study partially supported the hypothesis. The students showed improvement in reading fluency and six students showed improvement in reading comprehension from fall to winter based on DIBELS and NWEA reading assessment. The findings showed that the implementation of Read Naturally did improve reading fluency and Read Naturally proved to improve reading comprehension, for six of the students. However the null hypothesis failed to be rejected according to the independent t-test for the reading scores.

Discussion

The researcher predicted there would be an increase in reading fluency based on DIBELS and reading comprehension based on the reading NWEA. All but one of the students increased the DIBELS fluency score in the winter, therefore

showing that Read Naturally does increase reading fluency. However, only six students showed reading comprehension growth, while over half of the class did not show growth in reading comprehension.

There were a few factors that could have also contributed to student testing outcomes. Four of the students that did not increase in reading comprehension were absent at least once a week for the three months of the study. Thus, the learners were unable to practice and participate in the repeated readings as the program Read Naturally stated. The students either missed the goal setting at the beginning of the text or the hot read at the end of the week. That was a crucial component of the program because the students were unable to meet the goal that was set. The period devoted to the intervention time was only 45 minutes thus student absenteeism would have had a negative impact on the overall performance the program.

Other factors that possibly had a negative impact of the program were that the students came from different classrooms. Although, all third grade teachers used the implemented district curriculum, the instructors presented the reading curriculum differently and focused on different areas of reading during regular instruction. Having used different methodologies certainly could have had negative impacts on the student's test scores.

Summary

The students were tested using the DIBELS and the reading NWEA assessment from the fall to winter of the 2009-2010 school year. The test scores of the intervention group were collected and analyzed to show growth in reading fluency and reading comprehension for each individual student. The mean, standard deviation, and probability were determined for the intervention group to see if growth had occurred during the time of the study. The student's used in the study showed significant growth in reading fluency based on the independent t-test. Growth was not significant in reading comprehension based on the independent t-test.

CHAPTER 5

Summary, Conclusions and Recommendations

Introduction

Many students in schools have struggled with learning to read. Armbruster, Lehr, and Osbourn (2008) stated that "…reading failure has exacted a tremendous long-term consequence for children's developing self-confidence and motivation to learn, as well as for their later school performance" (2008). Reading fluency has been a topic that has caused many educators to adjust programs used inside classroom.

The students in this research project had low test scores on the Northwest Evaluation Association assessments and Dynamic Indicators of Basic Early Literacy Skills test scores**.** Testing results indicated that individual learners were performing well below grade level expectations in reading.

Reading fluency was an area that had been neglected in the classroom and was in dire need of attention. Read Naturally has been shown to be an effective program that encompassed much research proven beneficial to students performing below grade level in readers fluency and reading comprehension (Wahl, 2003). Along with Read Naturally the Dynamic Indicators of Basic Early

Literacy assessment was an assessment tool used to monitor student's reading fluency.

Summary

The researcher investigated increasing reading scores using the reading program Read Naturally. The study consisted of 14 students from four different third grade classrooms. During the first half of the school year of 2009-2010, the students participated in a four day a week, 45 minute reading intervention program. The reading intervention program used was Read Naturally. The strategies implemented were from the Read Naturally program.

The students' scores from the fall DIBELS and NWEA were compared to the scores from winter DIBELS and NWEA. The author predicted that the students would make significant gains in reading fluency and reading comprehension by using the reading program Read Naturally. The researcher studied reading fluency, the DIBELS assessment and the reading program Read Naturally. Reading fluency was found to be an important indicator for all areas across the curriculum and not just for reading.

Conclusions

Reading fluency was a great predictor for increasing reading scores in students according to the NWEA reading assessment, but based on the study Read Naturally was not shown to be a significant program to use. A careful analysis of

the NWEA test scores from the study showed that reading fluency was increased in accordance with the DIBELS criteria. The strategies used from Read Naturally appeared to have been effective in having a positive impact on student reading fluency and student's reading scores. Read Naturally did not appear to increase reading comprehension in the reading NWEA, therefore failing to reject the null hypothesis.

Recommendations

Based on the outcome of the study the researcher recommends using Read Naturally to increase reading fluency. The researcher believes that Read Naturally does increase reading fluency but based on the conclusions another type of reading program should also be used in order to increase reading comprehension. Read Naturally should not be used as the sole reading curriculum. Read Naturally does worked well as a supplemental reading intervention program enhancing a student's reading fluency.

The researcher believes that using Read Naturally in a small group setting worked well for the students. First of all, small group worked well because the students had the opportunity to communicate the goals set more in depth with an adult. Having the opportunity to really communicate the goal motivated the students to achieve the learning target for the week. As a result of goal setting the

students were able to talk more in depth about the text and focus on reading fluency.

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