Increasing Phonological Awareness Using a Direct Reading Instruction Model

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A Special Project

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ABSTRACT

The purpose of this project was to investigate the effects direct reading instruction had on first graders' phonological awareness as measured by the Dynamic Indicators of Basic Early Literacy assessment. The researcher wanted to know if the students who received direct reading instruction showed greater improvement on the Dynamic Indicators of Basic Early Literacy assessment than those who did not receive direct reading instruction. The results indicated that both groups made growth from fall to spring. However, students who received direct reading instruction demonstrated greater improvement.

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CHAPTER 1

Introduction

Background for the Project

Phonological awareness was a crucial skill that students needed to become successful readers. First graders needed a strong understanding of this skill to be able to recognize letters and their sounds. The researcher believed that this study was important to determine whether or not the reading curriculums that were used benefitted students' reading. First grade was a crucial age for students' reading in phonological awareness, and it was vital to have a successful reading program in place for students to benefit.

Teachers needed to help children reach grade level standards. According to an education act, No Child Left Behind or NCLB, signed by George Bush in 2002, all educators were required to provide students with an equal, fair, and significant opportunity for a high-quality education (Office of Superintendent of

Public Instruction, 2007). The No Child Left Behind Act held students to high standards, therefore teachers had to work hard to help their students meet those standards of the NCLB act. This included improvement in reading assessment scores.

Statement of the Problem

This study investigated whether direct instruction in reading had a greater impact on students' phonological awareness as measured by the Dynamic Indicators of Basic Early Literacy or DIBELS scores. The school in the study needed to change its reading assessment scores to meet the goal of having at least eighty percent of students at standard. The district in which the study took place also had a requirement of eighty percent.

The evidence that was collected was from the DIBELS assessment pre and posttests. The consequence of not meeting the goal of eighty percent on the DIBELS was that students who were not at level in reading would remain below level and not make improvements towards the reading standard.

Purpose of the Project

The purpose of the study was to understand if students' phonological awareness improved based on the direct reading instruction curriculum, Reading Mastery. The data collected was shared with teachers and passed on to parents. The purpose of gathering and sharing the findings was to better educate teachers and parents of the impact of direct reading instruction.

Delimitations

This study was performed using 27 first graders from Eastern Washington. The research addressed the difference in reading assessment scores between first grade students who received direct reading instruction, and those who did not.

The study took place from the fall of 2011 to spring of 2012 in a small rural town. The elementary school where the data was collected had approximately 480 students with demographics of 44.3% White, 48.7% Hispanic, 3.1% Black, 1.9% Asian, and 1.2% American Indian/Alaskan Native. There were 74.5% of students on

the free and reduced lunch program, which indicated a high population of lower to middle class socioeconomic status students. Special Education was at 6.8%, Transitional Bilinguals at 22.7%, and Migrant Students at 8.7% completed the demographics of the elementary school (Office of Superintendent of Public Instruction, 2012).

All students had reading instruction from 8:50-10:10, 80 minutes a day, and five days a week. The researcher compared the students who did not receive direct reading instruction, the control group, to the students who did receive direct reading instruction, the treatment group. All students were assessed in June, so the researcher, classroom teacher, and reading specialists could gather data on the effect of direct reading instruction on reading assessment scores.

Assumptions

Multiple factors were assumed in this research. The control and treatment groups were comparable. The teacher had training in teaching the classroom

curriculum. The reading specialists used Reading Mastery, a research-based reading curriculum and had received training to teach the curriculum.

Hypothesis

Phonological awareness was an essential part of reading. First graders who received direct reading instruction improved their reading scores in phonological awareness from fall to spring as measured by the DIBELS assessment.

Null Hypothesis

First graders who received direct reading instruction did not improve their reading scores in phonological awareness from fall to spring as measured by the DIBELS assessment.

Significance of the Project

The research study focused on the effects direct reading had on students' phonological awareness. The researcher wanted to determine if the direct reading curriculum benefitted students' reading.

Procedure

The control group remained in the classroom with the classroom teacher for reading instruction. They worked on reading skills from curriculum that was aligned with state and district standards. Students were assessed with the DIBELS progress monitoring assessment to track progress.

The treatment group received Reading Mastery, a direct reading instruction curriculum for the entire school year. Students were assessed frequently with the use of mastery level tests, and DIBELS progress monitoring assessments.

At the end of the school year in June, all students took the DIBELS assessment. The classroom teacher and reading specialists recorded students' progress on a scatter plot. The researcher gathered the data that was collected and generated a score to measure the significance of the pre test (September DIBELS score) and posttest (June DIBELS score). The researcher then compared the scores to see if

improvement in phonological awareness was made and if the hypothesis was supported.

Definition of Terms

benchmark. Benchmark was defined as students at grade level for reading based on assessment.

cut scores. Cut scores were defined as scores used to determine the minimum performance level needed to pass a competency test.

direct reading instruction. Direct reading instruction was defined as a teaching model that utilized explicit instruction where students and teacher constantly interacted.

intensive. Intensive was defined as students who were identified as below grade level for reading based on assessment.

phonological awareness. Phonological awareness was a knowledge that spoken words were made up of sequences of discrete sounds and the ability to manipulate these sounds.

Reading Mastery. Reading Mastery was a direct reading instruction curriculum focusing on sound-to-letter correspondence.

strategic. Strategic was defined as students who were identified as approaching grade level for reading based on assessment.

Acronyms

DIBELS. Dynamic Indicators of Basic Early Literacy Skills

NCLB. No Child Left Behind

OSPI. Office of Superintendent of Public Instruction

Chapter 2

Review of Selected Literature

Introduction

"Children who are successful in the early grades gain a strong foundation that helps them build literacy achievement that will carry them into their adult lives" (Donovan, Bransford, & Pellegrino, 2003, p.14). Knowing this information, primary teachers were always looking for ways to help students become better readers. This study compared first grade students who received Reading Mastery and those who did not by their DIBELS scores. The researcher found research from a range of the following: Reading Mastery curriculum, DIBELS, and phonological awareness.

Reading Mastery curriculum

According to Schieffer, Marchanda-Martella, Martella, Simonsen, and Waldron in 2002, "Reading Mastery includes techniques to develop accurate and fluent oral reading through the use of repeated readings" (p. 2). Reading Mastery was a direct reading instruction curriculum that focused on sound-to-letter

correspondence and repetitive oral reading.

"Direct reading is an approach that focuses directly on sound-symbol correspondences by practicing phoneme-grapheme relationships daily" (Savage, 2007, p. 13). Reading Mastery curriculum had a strong emphasis on sound-to-letter correspondence. This meant that students would decode words by sounds, not read words as wholes. Direct reading instruction differed from whole language reading, because of the phonetic approach. Rather than words read as a whole, words were decoded sound by sound and then blended together. This decoding and blending was a strategy used in Reading Mastery.

Reading Mastery curriculum focused on the following: sound-to-letter correspondence, vocabulary development, comprehension, and building oral reading fluency. The program also emphasized accurate and fluent decoding while teaching students the skills necessary to comprehend and learn from expository text.

The program was set up to have students work in ability-based groups. Ability-based groups were reading groups in which students were grouped together at the same reading level based on their DIBELS assessment score. The instructor taught the lesson following the curriculum script, whereby students had to respond to a cue. If errors were made, the instructor followed the correction process. At the end of each lesson, the instructor explained the worksheet and students worked independently. After every five lessons in the curriculum, the instructor assessed students with a mastery level test. Students needed to get an 80% or higher in order to have passed. If students did not pass, the instructor would reteach the skill and assess again. Mastery tests were given to track student growth and monitor progress.

Students who received reading intervention typically were divided into the following reading groups: benchmark, strategic, and intensive. Benchmark was defined as students who were at grade level for reading. Strategic was defined as students who were

approaching grade level for reading. Intensive was defined as students who were well below grade level for reading. These three groups were determined based on assessment scores.

According to the curriculum guide, Reading Mastery required a small group setting. This benefitted students because they received more attention and feedback, and worked with students at their level and appropriate pace. Reading Mastery was an intensive program that required the teacher and students' full attention, and therefore required a small group setting.

Dynamic Indicators of Basic Literacy Skills

The assessment used in the research project was DIBELS. The DIBELS were created by the University of Oregon Teaching and Learning. The goal was to provide educators with standards for gauging the progress of all students (University of Oregon Teaching and Learning, 2012).

DIBELS were developed to be economical and efficient indicators of a student's progress toward

achieving an important outcome (University of Oregon Teaching and Learning, 2011). The district adopted this assessment because it was inexpensive, provided immediate feedback, and was easy for staff to administer. This assessment was used for all grades kindergarten through fifth. The DIBELS goals and cut scores were research-based, criterion-references scores.

The classroom teacher and reading specialists were trained and had experience with the curriculum. They tracked student progress using the scores from the DIBELS and kept records of growth and/or decline.

The DIBELS were specifically designed to assess phonological awareness, alphabetic principle, fluency connected with text, vocabulary, and comprehension (University of Oregon Teaching and Learning, 2011). The assessment was a one-minute fluency measure and was used regularly to monitor the development of early literacy and early reading skills. The test booklet was used to monitor growth, because on the front was a graph set up to plot growth every month. This served

as an accessible recording device for teachers to see the scores easily on the scatter plot showing if the student showed growth.

Phonological Awareness

Phonological awareness was a knowledge that spoken words were made up of sequences of discrete sounds and the ability to manipulate those sounds (Savage, 2007). Understanding those abstract language components had the potential to help students learn to read quicker than those who do not.

Phonological awareness was an important skill for students to help them understand the reading process. Students needed a strong understanding of phonological awareness because it helped them become more successful readers.

According to Caldwell & Leslie, in 2009, "The most important time for teachers to understand their students' phonological awareness is when the students are just learning to read" (p.9). Even though phonological awareness continued to develop as students learned to read, when students were just

learning they had greater odds of retaining the knowledge to carry over into their reading.

According to research, phonological awareness was a strong predictor of long-term reading and spelling success (Gillon, 2004). Long-term reading and spelling success were skills that benefitted students, especially students that were at risk. Reading and spelling skills were both important for phonological awareness development in early readers.

Phonological awareness was a necessity for young children learning to read and children at risk for reading failure (Andreassen & Smith, 2008). Students in first grade were just beginning to learn to read, and if phonological awareness strategies were implemented students had the potential to benefit. Also, children at risk for reading failure were more susceptible to not making grade level; therefore serious intervention would be needed. Monitoring students' phonological awareness early was important for teachers to assess the need for improvement and how to help students.

According to research, more than 20 percent of students struggled with some aspects of phonological awareness, while 10 percent exhibited significant delays. Early intervention was crucial and had the potential to make a significant difference for students with limited levels of phonological awareness (Adams, Foorman, Lundberg, & Beeler, 1998).

Phonological awareness had been shown to be a primary factor underlying early reading achievement (Ehri, Nunes, Willows, Schuster, Yaghoub-Zadeh, & Shanahan, 2001). Beginning readers needed a strong foundation of phonological awareness to be successful readers.

Summary

The reviewed research provided a background on phonological awareness and why it was important to reading. The researcher examined the DIBELS assessment and how it was utilized. Finally, the research provided information on the direct reading instruction, Reading Mastery, including the purpose and organization.

Reading Mastery was the direct reading instruction curriculum, used for students that scored below grade level in reading. The curriculum was taught with the goal of students meeting standard. Phonological awareness was explained as an important skill for students' learning to read, especially for younger grades. The DIBELS assessment was the tool used to assess the impact of direct reading instruction on students' reading scores.

CHAPTER 3

Methodology and Treatment of Data

Introduction

As a result of the NCLB act, teachers in the Eastern Washington school that were part of this study believed there was a need to focus on students' phonological awareness in reading. The school had implemented an intervention curriculum, Reading Mastery, a direct reading instruction approach for students classified as intensive and strategic readers. Benchmark students stayed in the classroom to receive district-mandated reading curriculum.

Reading specialists and teachers were trained in the intervention program. Classroom teachers were trained in the proper use of the reading curriculum used in the classroom.

The DIBELS were used to monitor progress. The researcher gathered the data from the September and June DIBELS assessments as well as the mastery level test scores. The researcher used the data to analyze student growth and track progress.

All students were assessed with the DIBELS assessment at the beginning of the year in September and then placed in groups based on their scores. Students were assessed with DIBELS throughout the school year to gauge progress. At the end of the year in June, students were assessed again with the DIBELS assessment. The September DIBELS assessment served as the pretest and the June DIBELS assessment served as the posttest.

The goals were to have students that were intensive and strategic readers increase their reading assessment scores. Students were grouped based on their scores from the DIBELS assessment. In ability-based groups, students were then instructed using a direct reading instruction curriculum, Reading Master, and understood the direct reading instruction process. Students in the study who were below grade level readers received early intervention from Reading Mastery with the goal of improving their phonological awareness because it focused on sound-to-letter correspondence and utilized repetition.

Methodology

For this study, the method used was quantitative research. Quantitative research meant that methods were based on the collection and analysis of numerical data, obtained from a pre and posttest (Gay, Mills, & Airasian, 1992). The research analyzed the pre and posttest scores.

Participants

This study was performed using 27 first grade students from an elementary school in Eastern Washington. A majority of the students came from lower-middle class families. The reading specialists and reading teachers had a combined experience of 4 years with Reading Mastery curriculum. The reading specialists and teachers had received training in using the curriculum mandated by the administration.

The treatment group consisted of 14 students, 7 were girls and 7 were boys. One student was classified as special education and received extra support. Five of these students were English as Second Language learners, which meant they learned a language prior to

English.

The control group consisted of 13 students, 4 girls and 9 boys. Five of these students were English as Second Language learners.

Instruments

The instrument used in this study to assess students' phonological awareness was the DIBELS. The DIBELS assessment gave a breakdown of components of reading including: phonological awareness, decoding, fluency, vocabulary, and comprehension.

The Reading Mastery curriculum supported the classroom instruction, which used the Imagine It series as the main source of instruction. The Reading Mastery curriculum's purpose was intended to be a reading intervention strategy.

Design

This experimental study used pre test and posttest DIBELS scores. The approach for this study was correlational research, which meant that it investigated the relationship between two or more variables (Gay et al., 1992). The DIBELS were

administered in September as the pre test and again in May as the posttest. Students were assessed one-on-one with a trained reading specialist.

Procedure

The reading specialists in the research were trained to effectively instruct the Reading Mastery curriculum. The classroom teacher also had training in the classroom curriculum. Based on fall DIBELS scores, students were placed in ability-based reading groups. Students in the intensive and strategic groups received ninety minutes of direct reading instruction daily.

The intervention sessions started in late September where the goal was to work on students' sound-to-letter correspondence and their overall success as a reader. Students that were in the benchmark group remained in the classroom with their teacher, working on reading skills as mandated by the curriculum and school district.

The DIBELS were administered by reading specialists in a one-on-one setting. The pre test was

given in early October and the posttest was given in May. The reading specialists had been trained in proctoring the DIBELS.

Treatment of the Data

The data analyzed in this study consisted of pre test DIBELS scores and posttest DIBELS scores. The testing was done in early October and May. After fall and spring scores were collected, the researcher compared scores to analyze growth. The scores were entered into an excel spreadsheet. Students' DIBELS scores were checked to see if growth was made on phonological awareness from fall to spring.

Summary

This study used quantitative research, which meant that the study was based on the collection and analysis of numerical data. The assessment tool used was the DIBELS assessment where students took a pre and posttest. The data was analyzed using an excel spreadsheet to show scores to determine whether or not students' phonological awareness made improvement from fall to spring.

CHAPTER 4

Analysis of the Data

Introduction

This study compared the effects direct reading instruction had on first graders' phonological awareness. Twenty-seven first graders took part in this study. Students were separated into ability-based reading groups based on their DIBELS scores. Students classified as intensive and strategic received Reading Mastery for their intervention. Students classified as benchmark remained in the classroom and received district-mandated curriculum, Imagine It.

Description of the Environment

The elementary school where the data was collected had approximately 480 students with demographics of 44.3% White, 48.7% Hispanic, 3.1% Black, 1.9% Asian, and 1.2% American Indian/Alaskan Native. There were 74.5% of students on the free and reduced lunch program, which indicated a high population of lower to middle class socioeconomic status students. This study compared 27 first grade

students who received direct reading instruction to those who did not as measured by the DIBELS. This study took place from the fall of 2011 to spring of 2012.

Hypothesis

Phonological awareness was an essential part of reading. First graders who received direct reading instruction improved their reading scores in phonological awareness from fall to spring as measured by the DIBELS assessment.

Null Hypothesis

First graders who received direct reading instruction did not improve their reading scores in phonological awareness from fall to spring as measured by the DIBELS assessment.

Results of the Study

The results of the study were displayed in two tables. Each table represented the two groups of students who were the students of this study. Those groups were the students who received direct reading instruction and the students who remained in the

classroom and received the district-mandated curriculum.

The first group, displayed in Table 1-A, was made up of the students who received direct reading instruction. Table 1-A showed that students' DIBELS scores grew from fall to spring by an average of 54 points.

Students who received direct reading instruction

Student	Fall	Spring	Total growth
One	34	127	93
Two	59	48	-11
Three	72	174	102
Four	82	131	49
Five	90	168	78
Six	91	188	97
Seven	93	122	29
Eight	95	142	47
Nine	115	207	92
Ten	121	130	9
Eleven	144	207	63
Twelve	157	184	27
Thirteen	172	245	73
Fourteen	202	209	7
Average	109	165.7	53.9

Table 1-A

The second group was made up of students who received district-mandated reading curriculum in the classroom. The results of these students' DIBELS scores were shown in Table 1-B. The students who received this curriculum grew an average of 12.2 points from fall to spring on the DIBELS.

Students who received reading curriculum in classroom

Students	Fall	Spring	Total growth
Fifteen	122	152	30
Sixteen	139	205	66
Seventeen	144	231	87
Eighteen	152	141	-9
Nineteen	168	209	41
Twenty	176	173	-3
Twenty one	218	211	-7
Twenty two	242	231	-11
Twenty three	276	275	-1
Twenty four	279	279	0
Twenty five	300	259	-41
Twenty six	315	296	-19
Twenty seven	213	239	26
Average	218.5	223.1	12.2

Table 1-B

Findings

The results indicated that both of the groups made growth from fall to spring on the DIBELS assessment. However, students who received Reading Mastery grew the most.

The goal in the fall for students' scores was 160 and in the spring with 170. Out of the 14 students who received direct reading instruction, 7 of them made the benchmark goal of 170 in the spring. Six of the remaining 7 students made significant growth, although not to benchmark. The one remaining student decreased by 11 points. From the control group that did not receive direct reading instruction, 11 out of the 13 students met the goal of 170 in the spring. The remaining two did not meet the goal of 170.

The treatment group had three students who made significant growth including student one with 93 points growth, student three with 102 points growth, student six with 97 points growth, and student nine with 92 points growth. These students were all intensive, with 3 of the 4 meeting benchmark in the

spring.

From the control group there were three students who made significant growth and they were: student sixteen with 66 points growth, student seventeen with 87 points growth, and student nineteen with 41 points growth. All students in the control group received the district-mandated curriculum throughout the year.

Discussion

The researcher in this study believed that Reading Mastery had a direct impact on students' phonological awareness. Students did not move from reading groups throughout the year. Students classified as intensive remained in the treatment group the whole year, receiving direct reading instruction. The Reading Mastery curriculum suggested that students who received the curriculum should use it for the entire school year to better help students at the intensive and strategic level because of the benefits of the smaller groups.

Summary

This study compared reading approaches for

students at different levels. The study took 27 first graders from an Eastern Washington elementary and compared the students' DIBELS reading scores from fall to spring. Based on their scores, students were placed in ability-based groups where intensive and strategic students received Reading Mastery, while benchmark students remained in the classroom for the district-mandated reading curriculum. The results were shared through two tables. Each table showed students' fall scores, spring scores, and students' average growth. Students who received Reading Mastery grew the most, while students who did not receive Reading Mastery grew the least.

CHAPTER 5

Summary, Conclusions and Recommendations

Introduction

Reading was an important focus of the district in this study, with the need for all students to meet standards, as mandated by the NCLB act. The researcher wanted to analyze the effects of direct reading instruction on first graders' phonological awareness as measured by their performance on the DIBELS assessment. The study took place in an Eastern Washington elementary school.

Summary

The researcher investigated the effects direct reading instruction had on first graders' phonological awareness as measured by the DIBELS. The students were grouped by ability based on their fall DIBELS scores. Students classified as intensive and strategic received Reading Mastery daily as an intervention. Students classified as benchmark remained in the classroom for the district-mandated curriculum daily. In the spring students were assessed again with the

DIBELS. The researcher compared the DIBELS scores to determine which group showed the most growth.

Conclusions

In conclusion, the treatment group demonstrated greater improvement in students' phonological awareness. The control group did not improve as many points on the DIBELS assessment as the treatment group did. According to Table 1-A, the treatment group increased by an average of 53.9 points from fall to spring. Students in the control group grew an average of 12.2 from fall to spring according to Table 1-B. The treatment group, which had students below grade level, showed significant growth because of the direct reading instruction curriculum, Reading Mastery.

Recommendations

The researcher recommends future research to see if, over a period of years, the data proved to be consistent. Future research should include more data about the Reading Mastery curriculum. Another recommendation would be to have a larger sample of students to assess the hypothesis. Also, research

could track students from first grade to upper levels to determine whether gains were maintained over time.

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