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Front-End-Connective Phonics Effectiveness in Reading and Spelling in Fifth Through Seventh Grade Students

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Front-End-Connective Phonics Effectiveness in Reading and Spelling in Fifth Through Seventh Grade Students

A Quantitative Research Methods Proposal

By

Bridget Weber

ED 696
Methods of Research
July 2021
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ABSTRACT

This 2021 study experimentally investigated the impact five front-end-connective phonics had on the academic performance of middle school students in reading and spelling DIBELS nonsense words. In the upper grades, students depend on whole-word instruction instead of phoneme awareness. My focus was on whether or not front-end-connective phonics instruction played a significant role in the outcome of students’ scores on reading and spelling tests. Participants were assessed twice in both reading and spelling. The participants took an assessment at the beginning of the study and then a final assessment at the end of the study. The research took place in a Minnesota school setting, specifically with four fifth through seventh grade students.

Keywords: front-end-connective phonics, reading, spelling, whole-word instruction
CHAPTER 1

INTRODUCTION

Introduction

“How do you spell extinction?” one of my students asked, stopping in the middle of writing an answer for a science assignment.

“Exactly how it sounds and then ends with t-i-o-n,” I say.

There is nothing but a blank look on my student’s face. This isn’t the first time it has happened, and, I’m fairly certain it won’t be the last time it will happen. I have come in contact with many students who have no skill when it comes to spelling. Many rely heavily on the computer program of spell check to ensure their writing can be read by others. When it comes to writing with a pen or pencil and no program available, the words are spelt any way they feel like with no rules or sounds considered.

This lack of being able to spell according to sound or rules also shows in reading. As a student progress through school, the reading introduces words a student may not have come across before. With no knowledge or very little knowledge of the rules of words or how letters work, the student has a hard time reading words they haven’t been taught. Reading is a subject that requires a lot of teaching, but the rules of reading, once taught, are meant to be used to approach words not learned.

So I had to wonder, was there a better way of teaching reading to students that will help them read unknown words and to spell words with a better degree of accuracy. I understand many students who have never read the word pneumonia would probably never think that the word starts with a p, but they should be able to spell the majority of most words, and read even more unknown words if they had a better reading program.
**Brief Literature Review**

As I began my research, I realized this problem was not specific to my classroom or the students who found their path going through my classroom. Throughout the United States, the reading ability of students in fourth and eighth grade have been slowly and steadily decreasing (NEAP, 2019). As I dove into potential reasons why reading grades were slipping, I found many books and articles explaining where the gaps in reading performance came from. *Why Johnny Can’t Read* (Flesche, 1955) and *Professor Phonics Gives Sound Advice* (Foltzer, 1965) both indicate the problem with the reading scores is due to “whole-word” instruction and the lack of “phonics-based” instruction. “Whole-word” instruction is the teaching of sight words or the “say-and-look” approach instead of sounding out the letters which make up a word. Phonics-based instruction focuses on the sounds and phonemes which make up individual words. Furthermore, front-end-connective (FEC) phonics focuses on blending the beginning sounds of words instead of word families which has the reader started from the end of the word to read. Phonics-based instruction gives children the skills needed to read unknown words, and this skill translates into spelling (Adams and Newman, 1991, Clark, 2013, and Drechsler, 2008).

**Statement of the Problem**

I researched if a FEC phonics-based reading program is more beneficial to reading scores and spelling scores. As a middle school teacher, most reading strategies are out of my control as most students have learned to read before then. The school I work at, uses a mixture of phonics-based reading as well as whole-word-based reading, to teach students how to read, so many of the students who enter my classroom have had both types of reading instruction. Some of the students who have started at the school in the later grades may have had a variety of reading programs to learn how to read. Instead, I will be determining if a front-end-connective (FEC) phonics instruction will improve spelling and reading grades of nonsense words for fifth through seventh grade students.
Purpose of the Study

Of all the subjects taught in school, reading is the one that affects a student’s life the most. It is used in nearly every class, and it is used outside the classroom and will be used forever after a student leaves school. This is a crucial aspect to everyone’s life. My wish is for students to have the critical skills needed for reading a variety of texts where they will meet up with words they have not seen or heard before. They should have the skills needed to read the words. This study will be used to see if a specific form of phonics instruction is more beneficial for students to read unknown words. This study may provide potential evidence for creating a new curriculum for schools to use in place of traditional whole-word instruction or even those using some form of phonics instructions. Finally, if this study does increase the reading and spelling skills of the students who partake in the research project, it may improve their performance in their classes and on their standardized tests like the IOWA’s.

Research Question(s)

How will five classes using front-end-connective (FEC) phonics instruction improve the reading and spelling of nonsense words for fifth through seventh graders?

Definition of Variables.

**Variable A:** The reading and spelling of unknown words will be variable A. The list of nonsense words will come from the Nonsense Word Fluency (NWF) list. This list is a standardized, individually administered test using letter-sound correspondence and the ability to blend letters into words (DIEBELS, 2020). I will measure the reading of nonsense words by giving an initial test to find out where the participants are. Then after the FEC phonics instruction, I will test the participants again. They will be tested on accuracy and speed in reading through the list and tested in accuracy in spelling the words given.
Variable B: The front-end-connective (FEC) phonics instructional method is a process of blending sounds together. The focus is on sliding the beginning consonant and vowel sound together with no break in between the two sounds (Foltzer, 1965). This process differs from the common “word-families” where the focus is put on the end of the word, such as –at and reading bat, cat, mat.

Significance of the Study

If the results of my study show an improvement in reading and spelling for students, it could be helpful for other reading teachers. Many reading programs are focused on younger students, and if this study is successful, it may help with the design of curriculum to give the younger students the best reading strategies. But since this study will be working with students who are in fifth through seventh grader, if it is successful, this may give those creating curriculum or teachers looking for ways to help older students who have trouble reading or spelling a way to help students. I would like to see a shift away from teaching mostly whole-word reading program, and more of a focus on the FEC phonics approach, which Foltzer says is the way to educate readers.

Research Ethics

Permission and IRB Approval. In order to conduct this study, the researcher sought MSUM’s Institutional Review Board (IRB) approval to ensure the ethical conduct of research involving human subjects (Mills & Gay, 2019). Likewise, authorization to conduct this study was sought from the school where the research project took place (See Appendix D and E).

Informed Consent. Protection of human subjects participating in research was assured. Participant minors were informed of the purpose of the study via the Method of Assent (Appendix F) that the researcher read to participants before the beginning of the study. Participants were aware that this study was conducted as part of the researcher’s Master Degree Program and that it would benefit her teaching practice. Informed consent (Appendix G)
meant that the parents of participants were fully informed of the purpose and procedures of the study for which consent was sought and that parents understood and agreed, in writing, to their child participating in the study (Rothstein & Johnson, 2014). Confidentiality was protected through the use of pseudonyms (e.g., Participant 1) without the utilization of any identifying information. The choice to participate or withdraw at any time was outlined both, verbally and in writing.

**Limitations.**

My sample size was a limitation to the study. I used a convenience sample of two students in fifth through seventh grade. There was one male and one female participant. They had a similar race and social status. Therefore, my study would not be easily transferrable to a larger population with a greater amount of diversity. Depending on when I actually do the research, COVID could be an impact on the study. My personal bias towards the efficacy of FEC phonics may cause a limitation.

**Conclusions**

I had identified students who had a hard time reading new words or spelling words in their written work. To help these students improve their reading abilities and spelling skills, I implemented a five-lesson, FEC phonics instruction. In the next chapter, we will look at an in-depth literature review which will help with the research study.
CHAPTER 2

LITERATURE REVIEW

Introduction

The reading scores of children in the United States have been declining over the past few years and have consistently been rather poor compared to decades ago. According to the NAEP, only thirty-five percent of fourth graders were at or above a proficient reading level in 2019 (NAEP, 2019). Elementary teachers face the challenge of teaching students to read when the programs given to them are inadequate at presenting the material or employ methods which are not working. Students, in order to achieve success in higher grades, and then in life after school, need to have a good foundation in reading. According to Legge (2016), “the ability or inability to read can and usually does have a profound effect on just about everything else in life” (par. 2).

Body of the Review

Context. A solid foundation in literacy skills is crucial for students. These literacy skills begin in the early grades and then are built upon in the later elementary grades. Many curriculums often rely on the “whole-word” approach to learning or “word families.” Although these types of curriculum do work for some students, they do not meet the needs of most students, as is evident in the bi-yearly report cards put out on the reading levels of fourth graders. Phonics is needed for a solid foundation. Before students can understand the meaning of a text, they must be able to read the words. “High-quality phonics teaching, therefore, secures the crucial skills of word recognition that, one mastered, enable children to read fluently and automatically thus freeing them to concentrate on the meaning of the text” (Primary National Strategy, 2006, p. 3). Recently, there is a shift beginning towards phonics. The National Reading Panel (2000) has reviewed systematic phonics instruction and unsystematic
phonics instruction, and found that systematic phonics was more effective. Most phonics programs focus on word-families, which means the students are learning to read the word from the end instead of the beginning. I am focusing on finding a way to introduce a front-end, connective (FEC) phonics approach into the curriculum as a way to instruct students how to read.

Theme 1. Whole-Word Instruction Approach

In the 1980s and 1990s, whole word approach began to appear on the education scene. Many researchers wrote articles on the new idea, but it was Bergeron who took the many different aspects and definitions of the concept and gave a definitive example of what the whole-word approach was.

“The construction of meaning, wherein an emphasis is placed on comprehending what is read; functional language, or language that has purpose and relevance to the learner; the use of literature in a variety of forms; the writing process through which learners write, revise, and edit their written works; cooperative student work; and an emphasis on affective aspects of the students’ learning experience, such as motivation, enthusiasm, and interest” (Adams, Berabek, and Newman, 2008, pg. 44).

This method of teaching was influenced by the Constructivist Theory which believes children form the framework of their new knowledge from the prior experiences and perspectives. This approach intends to teach children to read words as whole pieces of the language. This form of instruction is more holistic than the phonetic approach used in the past (Clark, 2013).
The early 80’s and into the 90’s wasn’t the first time “sight-words” were used as a teaching tool. In the 1930’s Scott-Foresman debuted *Dick and Jane* touting it as a “look-say” method. Which “constantly repeated the few words in their texts as a replacement for phonics exercises...[and] was heavily illustrated with pictures intended to help new readers associate a word with its meaning” (The Rotunda, 2003, par. 4). This process of teaching students to read became the norm for the largest school system in the US, California, in 1988. It was then that the shift in emphasis from skills-based reading turned to programs where quality literature was the keystone. Many school districts across the United States soon followed California.

With the “new” approach to reading, the schools and curriculum development companies began to find ways to implement it in the classrooms. “The Whole-word Approach teaches kids to read by sight and relies upon memorization via repeat exposure to the written form of a word paired with an image and an audio” (Cicerchia and Freeman, 2020, par. 2). With the whole-word approach, the students are taught to read by saying the word by recognizing its written form. Sometimes this method is called sight-reading. This method skips the decoding process found in phonics, and, instead focuses on the fact that most people “sight-read the majority of the vocabulary they encounter” (Cicerchia and Freeman, 2020, par. 14). Using this “top-down” approach, readers use context clues and pictures to help them decode words they are unfamiliar with. According to Jon Reyhner (2020), using the whole-word approach expects the teacher to provide a literacy-rich environment. Maddox and Feng (2013) go even further and indicate that educators will have to provide time and space for students to engage in texts, independently, working at their own speed and in their own ways.

**Theme 2. Phonics-Based Instruction**

Phonics has been a part of education for centuries, beginning with Blaise Pascal, a French mathematician, in 1655, who basically invented a way to interpret phonemes (sounds) and graphemes (letters) and put them together to create words (synthesized) (Rodgers, 2001,
The process was built upon throughout the years as curriculum was created. However, no matter how the curriculum was designed, “The hallmark of programs of systematic phonics instruction is the direct teaching of a set of letter-sound relationships in a clearly defined sequence” (Armbruster, et al. 2005).

Although the phonics-based instruction has been around for almost four hundred years, it had disappeared for a bit in the 1930's and then again in the 1980's. The first time the school systems disposed of phonics, the devastating results to the reading ability of students was shown by Rudolf Flesch. With his book, *Why Johnny Can't Read*, Flesch (1955) delves into the American education system and explains why the reading tests of students have been dropping consistently for years. He brings to the forefront that the schools are not teaching phonics to the students, but making their reading skill dependent on their ability to memorize words. He goes on to explain how the memorizing of words leaves kids at a loss when they reach a word they haven’t memorized yet. Although not many educators or schools paid much attention to Flesch, parents did, and phonics once more returned to the classrooms as *Dick and Jane* were abandoned. With the second round of phonics being kicked out of the schools, Marilyn Jager Adams (1990) wrote *Beginning to Read: Thinking and Learning about Print*. This book brought the principles of phonics to the forefront of the discussion, and it was written for teachers as well as parents.

“Instruction in phonemic awareness involves teaching children to focus on and manipulate phonemes in spoken syllables and words (National Reading Panel, 2000). Phonetic-based reading attempts to break the written language down to the basic building blocks. The students learn the letters sounds and letter symbols and use this knowledge to decode words on the page. Although the phonics method may be slow and the reading out loud halting at the beginning, “eventually the cognitive processes involved in translating between letters and sounds are automatized and become more fluent” (Cicerchia and Freeman, 2020). With this
increase of fluency as phonics-based instruction continues, the students will succeed in reading with ease, and they will have the skills to decode words unknown to them. Not all English words follow the rules of phonics. As James D. Nicoll (1990, May) once said, “We don’t just borrow words; on occasion, English has pursued other languages down alleyways to beat them unconscious and rifle their pockets for new vocabulary.” However, despite having a smattering of words influenced by other languages, the decoding skills of phonics will give some direction for part of the word.

Even though phonics has some limitations, the benefits it has outweighs the limitations. “Across the research literature, the value of phonics instruction has been demonstrated across literally hundreds of studies - including small, well - controlled laboratory studies us well as large-scale method comparisons involving hundreds of classrooms and thousands of children. When 5 developed as part of a larger program of reading and writing, phonics instruction has been shown to lead to higher achievement at least in word recognition, spelling, and vocabulary, at least in the primary grades, and especially for economically disadvantaged and slower students” (Adams, Beranek, and Newman, 1991, pg. 44-45). Phonics is tried-and-true method that give students the skills needed for later in life.

**Theme 3. Word-Families**

For the programs using a phonics-based instruction, the use of word families is often included in the lessons. “Word families "rhyme," of course, because they share a common rime. Rimes are the basic units for reading and spelling words by analogy. For example, the familiar word park can be used by analogy to read lark, shark or spark” (Johnston, 1999, pg. 64). For many teachers, this works to help students realize they can read more than one word. In fact, they can transfer their knowledge from one word to another (cat into hat). However, this method of having the learners look at the end of the word to read is the opposite of how we read. In English we read from left to right, and that is how we should approach each word—from left to
right, not from the back and then to the front. Paterson, McGowan, White, Malik, Adedipour, and Jordan (2014) did a study on the way eyes moved across the paper when reading in languages whose words are read from left to right and compared them to languages whose words are read from right to left. With English, a language read left to right “it is generally accepted that, when reading from left to right, the perceptual span extends much further to the right of fixation than to the left” (Paterson, McGowan, White, Malik, Abedipour, and Jordan, 2014)

**Theoretical Framework**

Front-end, connective phonics is when the word is read from the beginning to the end of the word, and the emphasis is placed on connecting the first two or three sounds together. Foltzer (1965) knew the importance of front-end-connective phonics. In order to make smooth readers, Foltzer indicates that the first two letters of a word A/B, where A is a constant and B is a vowel, or the first three letters of a word AA/B, where A is a blend and B is a constant, should be read together before adding the end of the word. This type of learning of phonics phonemes means the readers are starting with the beginning of the word whether reading it or writing it.

**Research Question(s)**

How will five classes using front-end-connective (FEC) phonics instruction improve the reading and spelling of nonsense words for fifth through seventh graders?

**Conclusions**

Readers learn best while using phonics and focusing on the beginning sounds of words. While there are benefits to whole-word instruction, phonics has been found to be a more effective foundation when learning to read. As our reading scores keep falling, it is important to implement a reading strategy that will give students the best chance at succeeding in life. Using the information from the literature, along with the action research, I will be able to determine if using FEC phonics will increase reading and spelling in students.
CHAPTER 3

METHODS

Introduction

The literature depicted many positive examples of how phonics-based reading instruction impacting a student’s ability to learn how to read versus using whole-word reading instruction. This positive impact with phonics supported the need for more research to demonstrate the best implementation of a phonics approach and the effectiveness it can have in the classroom. With my school’s focus on working with students who struggle with reading and spelling in older grades, this research will provide another tool teachers can utilize to help them build those skills with their students. Front-end-connective (FEC) phonics instruction can be implemented in the current reading or vocabulary or spelling curriculum as another way for students to develop the skills necessary to develop the skills needed to read unknown words and spell words they haven’t memorized or maybe even seen.

Research Question(s)

How will five classes using front-end-connective (FEC) phonics instruction improve the reading and spelling of nonsense words for fifth through seventh graders?

Research Design

The research method I used was the single-subject design. Fraenkel et al. (2019) stated that the single-subject design is commonly used to study behavior changes after experiencing an intervention. I used the A-B design. This included a baseline period that the intervention data was compared to when evaluating the effectiveness of the intervention. At the beginning of the research, I gave each participant a test on reading DIBELS nonsense fluency words and a test on spelling the same kinds of words. This served at the baseline for the research. Once the
tests were given, I gave five classes of FEC phonics instruction. After the class, the students were given similar tests in reading and spelling. The words on the test were similar in kind to the first test administered, but they weren’t the exact same test as the first one to prevent another reason for the end result. I analyzed the result of the second test and compared it to the first test results.

There was a concern that the older students would think the lessons and subject matter would be too easy and even childish, but with the DIBELS nonsense fluency words, the students had fun reading the made-up words. They liked to guess how they came up with the nonsense word.

**Setting**

The study took place at a school in a small Midwest town known for agriculture and fishing. The school was a small private school with under 100 students who are all taught in the same building. The school’s student body’s ethnicity was approximately 80% Caucasian, 19% Asian, and 1% African American.

**Participants**

The population consisted of two students. The students’ ages ranged from 10 years to 12 years. The sample population was made up of one female and one male. The ethnicity of the students was 100% Caucasian.

**Sampling.** The study utilized a convenience sample comprised of two students from fifth and seventh grade. This class had trouble with spelling words they haven’t seen before, which was directly related to the research.
Instrumentation

The first test, Appendix A, was used to document the baseline of the phonics each student knows. After the students had taken the reading test, the students took a spelling test, Appendix B to document their ability to spell words they wouldn’t have normally seen. After the five classes of FEC phonics instruction were completed, the students were tested with the reading test, Appendix A and another spelling test, Appendix C. The spelling test was different, but the participants used the same reading test for the pre-lesson test and the post-lesson test.

Data Collection. To assess the effectiveness of five instructional periods of FEC phonics on reading and spelling, a baseline assessment was given using DIBELS Nonsense Word Fluency test (Appendix A). Each participant was tested on the reading portion and a score was given to each student on correct letter sounds (CLS) and words recoded completely and correctly (WRC). After the reading test, each participant participated in a spelling test using DIBELS Nonsense Word Fluency test (Appendix B). Using the information gathered from the reading and spelling test, I decided where to begin phonics instruction. After five lessons FEC phonics to build up phonics skills, the participants took another reading test and spelling test using DIBELS Nonsense Word Fluency test. The spelling test varied from the first test given in words, but not in skill level. I used the data produced by the results of the DIBELS Nonsense Word Fluency test in the form of tables to collect data on each participant’s progress.

Data Analysis. To analyze the data for the reading test, I calculated the correct letter sounds (CLS) and the words recoded completely and correctly (WRC). This information was put into tables. After the five lessons of FEC phonics, the information was collected again from the second test. The CLS and WRC were counted and the information put into tables. With the spelling test, I calculated the (CLS) and (WRC). This information was put into tables. The second test looked at the same information and was recorded in the same way. I used all this information to determine if FEC phonics benefited students in their reading and spelling.
Research Question(s) and System Alignment. The table below (Table 3.1) provided a description of the alignments between the study Research Question and the methods used in the study to ensure that all variables of the study have been adequately accounted for.

Table 3.1

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Variables</th>
<th>Design</th>
<th>Instrument</th>
<th>Validity &amp; Reliability</th>
<th>Technique</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will five classes using front-end, connective phonics instruction improve the reading and spelling of nonsense words for fifth through seventh graders?</td>
<td>DV: Reading and spelling skills through the DIBELS Nonsense Word Fluency Assessment</td>
<td>Single Subject Study in AB design</td>
<td>DV: DIBELS Nonsense Word Fluency Assessment</td>
<td>To maintain validity and reliability, I will use the data from DIBELS to choose the starting point of the FEC phonics instruction. Each participant will be given the same instruction and worksheets.</td>
<td>DIEBLS Nonsense Word Fluency Assessment</td>
<td>Fifth-seventh grade students</td>
</tr>
</tbody>
</table>

Procedures

The action research study took place during our regular vocabulary/spelling class, between 12:30 and 1:15 each day. Based on the baseline assessment data I collected, I used five premade FEC phonics lessons. The participants had direct instructional time where I taught them the concept necessary for the lesson. With the concept taught, the participants completed a worksheet to demonstrate competency in the concept taught. The direct instructional time lasted for 20-25 minutes.
Ethical Considerations

Protection of human subjects participating in research was assured. Participant minors were informed of the purpose of the study via the Method of Assent that the researcher read to participants before the beginning of the study. Participants were aware that this study was conducted as part of the researcher’s Master Degree Program and that it would benefit her teaching practice. An informed consent letter was sent home to the families of the participants. I gave the parents/guardians the information necessary to decide whether or not their child would participate. The study is not in violation of ethical practices, and I ensured the confidentiality in my research data. I cannot think of any way I could potentially be deceitful in this research study. There was no possibility of harm to my participants in this study that I was aware of.

Conclusions

This chapter gave an overview of where the study took place, the demographics of the population in the study, and the instruments and tools being used for data collection. It also explained the ways the data was analyzed and the procedures in conducting the action research study. The next chapter will cover the study’s results and findings.
CHAPTER 4
RESULTS AND FINDINGS

Introduction

The literature review showcased many examples of how phonics-based reading instructions benefited a student’s ability to learn how to read. This positive impact of phonics-based instruction versus just whole-word instruction showed there was a need for more research to determine the best phonics approach to implement for the highest effectiveness in the classroom. There was also a need for how to help students in older grades who may have missed out on a phonics-based instruction or who may have forgotten some of the rules. This research will provide another tool which teachers can utilize to help them build those skills with their students. Front-end-connective (FEC) phonics instruction can be used with a current reading, vocabulary, or spelling curriculum as another way for students to develop the skills necessary to develop the skills needed to read unknown words and spell words they haven’t memorized or maybe even seen.

Research Question 1. What is the effect of front-end-connective phonics instruction on fifth through seventh grade students in reading and spelling?

Data set 1.

One of my main goals with FEC Phonics instruction was to enhance reading and spelling of my students. Students were tested before and at the end of the study using DIBELS Nonsense Fluency Words. Below are the results.
Table 4.1

*DIBELS Spelling Score Pre-FEC Phonics Instruction and Post-FEC Phonics Instruction*

<table>
<thead>
<tr>
<th></th>
<th>Pre-FEC Phonics Instruction</th>
<th>Post-FEC Phonics Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CLS</td>
<td>WRC</td>
</tr>
<tr>
<td>Participant 1</td>
<td>51</td>
<td>14</td>
</tr>
<tr>
<td>Participant 2</td>
<td>51</td>
<td>14</td>
</tr>
</tbody>
</table>

*Note.* CLS—Correct Letter Sound  WRC—Words Recorded Completely

Table 4.2

*DIBELS reading score pre-FEC Phonics instruction and post-FEC Phonics instruction.*

<table>
<thead>
<tr>
<th></th>
<th>Pre-FEC Phonics Instruction</th>
<th>Post-FEC Phonics Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CLS</td>
<td>WRC</td>
</tr>
<tr>
<td>Participant 1</td>
<td>372</td>
<td>99</td>
</tr>
<tr>
<td>Participant 2</td>
<td>370</td>
<td>99</td>
</tr>
</tbody>
</table>

*Note.* CLS—Correct Letter Sound  WRC—Words Recorded Completely

After the FEC Phonics instruction, the students showed increase in their reading scores. In CLS, the Participant 1 moved from 372 to 380, and Participant 2 moved from 370 to 375. Both participants moved from 99 WRC to 100 WRC. In the spelling scores the participants showed an increase in CLS, but both Participant 1 and 2 scored a 14 on the WRC on their pre-FEC Phonics instruction test, and then they scored a 14 on the WRC on their post-FEC Phonics instruction test.

In a future study, I would use real words for the spelling test instead of nonsense words. There are a lot of different ways to spell the sounds in nonsense words, and because they are not real words, the students have a hard time knowing which letter to use to show the sounds.
**Figure 4.1**

*DIBELS Reading and Spelling Scores for Participant 1.*

![Graph showing DIBELS scores for Participant 1.]

**Figure 4.2**

*DIBELS Reading and Spelling Scores for Participant 2.*

![Graph showing DIBELS scores for Participant 2.]

Throughout this study, the participants increased post study from their original score. Given this data and my informal observations, FEC Phonics instruction plays a supporting role in increasing a student’s level of reading and spelling.

**Conclusion**

This study offered a particular learning opportunity for students. FEC Phonics instruction provided students with phoneme awareness skills they may not have had in the past or might have forgotten since they learned them last. In conclusion, I do feel that FEC Phonics instruction provides a positive effect on student’s reading fluency. Although there wasn’t an increase in the spelling scores, the students didn’t decrease, and I believe with a larger group of participants, I may have a better outcome to study.
CHAPTER 5
ACTION PLAN AND PLAN ON SHARING

For my plan of action, it is my intention to incorporate phoneme awareness with FEC Phonics instructions three times a week focusing on skills I find the students struggling most with. I hope to integrate an assessment on a bi-monthly basis to ensure the students are grasping the concepts and integrating them into their other subjects.

I plan to carry this information and understanding from this study into my school and to my co-teachers. I will share the results of this study and present the data to them, providing evidence or effectiveness on these skills with older students. I will discuss the pros of the study and share my informal observations with them. I also plan to share the literature research with my co-teachers.

I plan on creating lesson plans for different phoneme awareness needs using FEC Phonics-based instruction. This will include the reading lesson, the worksheets, and a list for the spelling words. I really liked the DIBELS testing for reading, so I would like to use that in tandem with my own created tests for the specific phoneme awareness covered.
REFERENCES


APPENDIX A

https://dibels.uoregon.edu/sites/dibels1.uoregon.edu/files/2021-06/dibels_8_benchmark_3.zipp
### APPENDIX B

<table>
<thead>
<tr>
<th>Spelling Test before the FEC Phonics Lessons</th>
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<tr>
<td>1. Sim</td>
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<td>2. Nem</td>
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<td>3. Lar</td>
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<tr>
<td>4. Ribe</td>
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<td>5. Reb</td>
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<td>6. Fup</td>
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<td>7. Fud</td>
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<td>8. Fring</td>
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<td>9. Spad</td>
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<td>10. Thift</td>
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<td>11. Slish</td>
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<tr>
<td>12. Treath</td>
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<td>13. Swem</td>
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<tr>
<td>14. Flong</td>
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<td>15. Glack</td>
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# APPENDIX C

## Spelling Test After the FEC Phonics Lessons

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<td>15.</td>
<td>Rin</td>
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</table>
APPENDIX D

IRB Approval

APPENDIX E

School Permission

Weber Study Permission.pdf
APPENDIX F

Method of Assent

Your parents have said that it was alright for you to participate in a project that I’m conducting for my Master Degree Program, but you have a choice on whether you do or do not participate. If you do not wish to participate, there will be no effects on your grade, our relationship, or your daily routines at school. This is totally voluntary. The only effect of this study is to help me decide how to help you learn to read and spell better. Here is what will happen. You will take five short reading classes. I want to find the best way that you learn. Are there any questions?”
APPENDIX G

Consent Form

IRB Consent Form.pdf