The Effectiveness of Phonemic Awareness Instruction on Struggling Readers

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The Effectiveness of Phonemic Awareness Instruction on Struggling Readers

by

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August 2008

A thesis submitted to the
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The Effectiveness of Phonemic Awareness Instruction on Struggling Readers

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Chapter 1: Introduction

Reading is a skill that is necessary to lead a successful life. One way to learn how to read is through the development of phonemic awareness. Students are taught in small groups explicit phonics skills and this form of learning how to read can also be coupled with guided reading. This allows students to be successful because instruction is directed at the students reading ability, so the students' learning is positively impacted.

Problem Statement

Walking into second grade for the first time, I wondered what the biggest challenge as a teacher I would encounter. My question was quickly answered, reading! Through weeks of observation and trial and error, I discovered that the majority of students lacked phonemic awareness. They did not know when a vowel had a short sound, a long sound, or how two letters next to each other made a certain sound. Phonemic awareness, which is the ability to manipulate sounds within a syllable and strongest predicative factor in learning to read or spell, was weak in the students in my classroom (Adams, Foorman, Lundberg & Beeler, 1998). When reading an unfamiliar word, children have to be able to decode the printed letters back into segments and blend them together to form the word (Lane, Pullen, Eisele & Jordan, 2002). Therefore, children with strong phonological awareness can detect, match, blend, segment and manipulate speech sounds.
Significance of Problem

Research has found that if a student does not learn to read by the fourth grade there is an 88% chance that the student will never learn how to read (Lane, Menzies, Muntion, Von Duering, & English, 2005). This means that second grade is one of the most crucial years in a child’s reading education because the foundations of reading need to be mastered. I found that in my classroom only two students read above grade level, four students were at grade level, leaving the remaining eight students reading below grade level.

Purpose

The purpose of this study was to see if through the use of small group instruction teachers would be able to increase their second grade students’ phonemic awareness skills through the use of small group instruction. The ultimate goal of the study was to increase the reading ability of struggling readers and help these struggling readers gain confidence in their reading ability. This was done through explicit instruction in leveled groups and through guided reading. The hopes of the study were that students would be proud of their accomplishments in reading and want to read more often. If they became stronger readers then picking up a book and reading would be a fun and rewarding experience for them. Not only will students make gains and learn something new, as a teacher the same outcome would happen. I hope to learn whether or not teaching phonemic awareness to students through small groups is an effective strategy.
Rationale

Torgesen (2006) discovered that explicit and individual reading lessons were required to help students gain reading levels. As a result of Torgesen's findings, I focused on teaching phonemic awareness skills in small groups through guided reading and small group instruction. Allowing students to be successful at their level is crucial. Exposing these reading skills to students in second grade would hopefully allow them to be successful on New York State ELA exams in the future. The students will encounter their first New York State ELA exam in January of their third grade year. The early test date does not allow for much intervention in third grade, so students need to come into third grade with solid reading skills.

Definition of Terms

Swank (1994) defined phonemic awareness as the understanding of different ways oral language can be broken or divided into smaller components and manipulated. Manipulating sounds includes deleting, adding, or substituting syllables or sounds. Educators sometimes confuse the terms phonological awareness, phonemic awareness and phonics because they are at times used interchangeably in research. These terms all carry different meanings that are important to understand. Phonemic awareness refers to the ability to manipulate individual sounds, called phonemes, within words. Phonemes are the smallest detectable unit of sound in spoken language, which are essential to the understanding of grapheme-phoneme (letter-sound) relationships. Phonics is an instructional approach used to help children make sense of the connection between sounds and letters (Adams et al., 1998).
Summary

It is critical for students to be successful in reading. Teaching students phonemic awareness will give them one skill that will allow them to be successful in their reading. Hopefully once students gain confidence in their reading ability their capacity to work independently will increase. Creating independent thinkers is the ultimate goal of education. The study set out to examine what effect phonemic awareness instruction has on second grade struggling readers when applied during small group instruction? Student success was measured using a phonic skills pre- and post test model on phonic skills, sound skill checklist and anecdotal records.
Chapter 2: Literature Review

Learning to read is one of the most important events in a child’s life. Research on phonemic awareness and phonics instruction has been done for many years. The findings on the benefits of teaching reading to young children through phonemic awareness and phonic instruction are astounding. Helping a child develop these skills will give them tools to be a successful reader. Though both terms can be used interchangeably, they both hold their own meaning and advantage in the journey of learning to read.

*Empirical Findings of Phonemic Awareness*

The relationship between phonemic awareness, also known as phonological awareness and reading ability, has been studied for many years. Phonemic awareness, which is the ability to manipulate sounds within a syllable, is the strongest predictive factor in learning to read and spell (Adams, Foorman, Lundberg & Beeler, 1998). Learning to read is a process. Perceiving and recognizing phonemes, the sounds of our language, is one stage in this process. To be successful during the beginning stages of reading, children must recognize individual sounds (Lerner, 2003). Phonological awareness had been shown to be both a reliable predictor of reading achievement and a key to beginning reading acquisition (Swank, 1994).

Phonological awareness is the understanding of different ways oral language can be divided into smaller components and manipulated. Spoken language can be broken down into many different components, including sentences into words and words into syllables, and syllables into individual phonemes. Manipulating sound
includes deleting, adding, or substituting syllables or sounds (Swank, 1994). A person must have a general understanding of all three of these levels to be considered, phonologically aware (Chad & Dickson, 1999). Therefore, children with strong phonological awareness can detect, match, blend, segment and manipulate speech sounds.

Educators sometimes confuse the terms phonological awareness, phonemic awareness and phonics because they are at times used interchangeably in research. These terms all carry different meanings that are important to understand. Phonemic awareness refers to the ability to manipulate individual sounds, called phonemes, within words. Phonemes are the smallest detectable unit of sound in spoken language, which are essential to the understanding of grapheme-phoneme (letter-sound) relationship. Phonics is an instructional approach used to help children make sense of the connection between sounds and letters (Adams et al., 1998).

A more recent study conducted in 2007, revealed that developing young readers through the phonic approach is most beneficial to the readers (Gray et al.). The authors stated that beginning reading instruction with sounds instead of letter identification is more beneficial to young readers. They want students learning to be scaffolded on their all ready present oral language skills and to teach them to marry sounds with the written word. The authors also found that the phonemic awareness approach to teaching reading affects the attainment levels positively on all levels of readers. The below average readers attain the same amount of knowledge as the high reader (Gray et al., 2007).
Numerous educational research books support phonemic awareness, phonics instruction, and the use of guided reading to support struggling readers. According to Fountas and Pinnell (1996), it is the teacher’s job to take the child from where they are in reading to where they need to go in reading, the way to do this is by assessing the students as individuals. This supports the use of small group instruction because it gives students the opportunity to develop as individual readers, gives teachers the opportunity to observe individuals, the groups give students an enjoyable experience, and allows successful experiences in reading for meaning. Another advantage of groups doing phonemic awareness instruction and guided reading is that students use and develop strategies “on the run” (Fountas & Pinnell, 1996, p.1).

Another educational research book supports the direct instruction of phonics in guided reading groups. Students will always come into contact with words that they do not know or have not seen before, so students need to have phonemic awareness skills (Schulman & Payne, 2000). Instruction of word study skills also need to be tailored to the students’ individual needs, but also need to be done in small groups. Consonant blends, digraphs, vowels, vowel patterns, contractions, compound words, plurals, homophones, affixes are word study skills that need to be taught to young readers. Exploring phonics and words during guided reading instruction provides opportunities for students to become word-solvers (Schulman & Payne, 2000).

By second grade, some students still lack basic phonological decoding skills, whereas other students may have difficulty decoding multi-syllable words with
unique vowel patterns. Teaching phonic skills to older children requires confidence because of all the inconsistencies in the English language that second graders will now be exposed to (Vadasy, Sanders, & Tudor, 2007). These authors tested five skills in an intervention of second graders using phonemic awareness. The five skills that were tested included letter-sound correspondences, decoding, sight word reading, spelling, and phonics generalizations. After a three-month intervention all students involved scored higher on spelling skills, reading accuracy, and passage fluency. A unique aspect to this study is that paraeducators worked one-on-one with below average readers and students that had this assistance made strong gains in the three areas as well (Vadasy, Sanders, & Tudor, 2007).

Levels of Instruction and Measurement Instruments

Lane et al. (2002) describes the first developmental level in phonological awareness as the word level; this is when the awareness of speech flow is a complication of individual words. This is typically achieved at a very young age. The linguistic play of young children, including rhyming and nonsense words provides evidence of this early level of phonological awareness. When a child utters a single word that he or she had only heard in combination with other words, they are demonstrating the word level of phonological awareness (Lane at al., 2003).

The syllable level is the second developmental stage in gaining phonological awareness. Syllables are the most easily distinguishable units within words. Most children acquire the ability to segment words into syllables with minimal instruction. Activities such as clapping and tapping are often used to help develop syllable
awareness. The ability to detect, segment and count syllables is very important to reading acquisition (Lane et al., 2003). The onset-rime or intrasyllabic level of phonological awareness is an intermediate and instructionally useful level of analysis between the syllables in words and the phoneme. The onset is the part of the syllable that precedes the vowel. The rime is the rest of the syllable. A syllable must contain a vowel, therefore all syllables must have a rime, but not all syllables have an onset (Lane et al., 2003).

The most sophisticated level of phonological awareness is the phoneme level, which is most commonly referred to as phonemic awareness. Children with strong phonemic awareness are able to manipulate individual phonemes. Phonemic analysis requires the reader to detect, segment, manipulate and blend phonemes. This level of phonological development is often difficult for a child to acquire (Lane et al., 2003).

Phoneme blending and phoneme segmentation are two activities that help children acquire phonemic awareness. Phoneme blending is when children listen to a sequence of separately spoken phonemes and then combine the phonemes to form a word. Phonemic segmentation is an activity that requires a child to break up a spoken word into its separate phonemes (Armbruster, 2003). Phonics instruction teaches children that relationship between phonemes (the sounds) and graphemes (the letters). Systematic and explicit phonics instruction provides instruction in a carefully selected and useful set of letter-sound relationships and then organizes the introduction of these relationships into a logical instructional sequence. This type of phonics instruction has been shown to be the most effective when compared to nonsystematic
instruction. It also had been shown to significantly improve children’s reading comprehension. Phonics instruction should be incorporated as part of a reading program, not as an entire reading program (Armbruster, 2003).

Another study that supports phonemic instruction through the use of segmenting words and then blending the letters was a study entitled “The Stop and Go Phonemic Awareness Game: Providing Modeling, Practice, and Feedback” (Allor, Gansle, & Denny, 2006). The authors used scores from the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) to determine the participants of this study. DIBELS measures a young reader’s reading level based on phonemic awareness skills. The authors recognized six kindergarten students that were in need of this intervention. A paraprofessional played the Stop and Go Game, a blending a segmenting intervention, individually with the students for twenty-six minutes a day for ten weeks. At the end of ten weeks, the DIBELS was administered again to the six students. All students made gains phoneme segmentation and blending and some even exceeded the kindergarten benchmark (Allor, Gansle, & Denny, 2006).

Assessment of phonological awareness serves two purposes. The first is to initially identify students who appear to be at risk for difficulty in acquiring beginning reading, and the second is to monitor the progress of students who are receiving instruction in phonological awareness, the type of assessment used should be determined on the number of children assessed, the amount of existing information about the children, and the amount of time available. Assessment can be informal, or norm-referenced. Individual testing is the most reliable and informative method of
assessing phonological awareness. This can be done through keeping anecdotal records.

Developing phonological skills requires practice. Most skill instruction can be incorporated into the context of reading and writing (Wadlington, 2000). Students who have very low levels of reading ability benefit the most from explicit instruction in phonological skills paired with explicit instruction in how to apply those skills in a meaningful context. As children develop sensitivity to the sound structure of language, instruction in phoneme segmentation and blending should be coupled with instruction using letters. Instruction can be conducted as formal, structured lessons and an integrated pair of ongoing reading instruction, or even be incorporated into fun activities throughout the day. An individual student’s deficits in the area of phonological awareness must be taken into account when determining the amount and type of instruction provided (Chad & Dickson, 1999).

Phonological awareness training is beneficial for beginning readers starting as early as age four. Effective methods of teaching phonological awareness include activities that are age appropriate and highly engaging. Instruction of four-year olds involves rhyming activities, whereas kindergarten and first-grade instruction includes blending and segmenting of words into onset and rime, eventually advancing to blending, segmenting, and deleting phonemes (Chad & Dickson, 1999).

Much research has shown the benefits to phonemic awareness instruction, but another point of research is how to teach it. Roberts and Meiring explored a group of students from first grade through fifth grade and the large group was split into two
small control groups. One group received phonics instruction through spelling and the other group received phonics instruction embedded into literature. At the end of fifth grade, spelling-context children had significantly higher comprehension that did literature-context children. This study shows the phonic instruction needs to be taught first and then brought into literature (Roberts & Meiring, 2006).

A question that many teachers had about teaching phonemic awareness was how early in a child’s school career should these skills be taught and how long should the skills be taught for? A study by Reading and Van Deuren, answers these questions. They studied a group of first grade students and within this group of students half of the students received phonics instruction in kindergarten and half did not start to receive this instruction until first grade, but both groups received the same instruction in first grade. At the beginning of the school year the group of students that received the early phonics instruction scored higher on the phonemic segmentation test that was given to all of the students and had fewer students classified as have reading difficulties. At the mid-year test, the group of students that did not receive phonics instruction until first grade had comparable scores to the group of students that did receive early phonic instruction. These findings suggest that not introducing phonic skills to children until first grade will still result with readers that are performing on grade level and that the length of instruction time does not have to be lengthy to support phonic skills (Reading & Van Deuren, 2007).
Benefits of Phonemic Awareness Instruction

Snider et.al (1997) conducted two longitudinal studies to explore the relationship between phonemic awareness and reading achievement in the primary grades. The first study analyzed the results of phonemic awareness measures administered to thirty-six boys and thirty-seven girls and the mean age of these kindergarten students was six months, six years old. Each child was individually administered a phonemic awareness test. This test included rhyming tasks and more difficult phonemic segmenting and deletion tasks (Snider et.al, 1997).

Three years later, the same students were administered a standardized reading measure in second grade. There was a high rate of attrition, only fifty of the original seventy-three students participated in this follow-up assessment. Snider et. al (1997) explained that this high rate of attrition was caused by students moving, students being retained, or placed into special education classrooms that did not participate in this standardized testing. Also following kindergarten, some students began attending Catholic schools; therefore the standardized reading tests that were administered differed from the students attending the public school and those attending the Catholic school. The standardized reading tests were administered to the fifty remaining students from the original group of students tested in kindergarten. The second grade classroom teachers administered the test to these students as a group. Results of this study showed that those kindergarten students that performed higher on phonemic awareness tasks in kindergarten also received higher scores on the inventory they were assessed on in second grade. The results of this longitudinal
study replicated previous research by confirming the predictive value of phonemic awareness to later reading achievement.

Bramlett and Gilbertson (1998) examined the effects of an informal phonological awareness measure as predictors of first-grade broad reading ability. They hypothesized that phonological awareness is one variable that is strongly related to the development of reading skills. There were ninety-one first grade children, forty-three boys and forty-eight girls, who participated in this study. The mean age of these students was six years, seven months. Ninety-eight percent of this sample was Caucasian and only two percent was African American. All participants formally attended the Head Start program. This group was selected because children in this program are generally regarded as at risk for academic failure in school.

Schools are always trying to create academic interventions to help children succeed in school, such as those children enrolled in Head Start programs, to help them succeed in school. Bramlett and Gilbertson (1998) conducted this study to determine if phonemic awareness measure could possibly be used to identify at-risk readers in kindergarten. During the first six weeks of first grade all ninety-one students were administered the phonological awareness measures, which included deletion, categorization, blending, segmentation and invented spelling tasks. These tasks were chosen because of their previously demonstrated relationship to reading ability (Bramlett & Gilbertson, 1998).

Results of this study concluded that children who performed better on the phonemic awareness tasks in kindergarten were found to be stronger readers in first
grade. These results support the idea that phonological awareness skills are strongly associated with both decoding ability and reading comprehension. Bramlett and Gilbertson (1998) hypothesized from these results that phonemic awareness screening is a good predictor of later reading ability, and could possibly be a better predictor of later reading ability in children than some of the more standardized reading measures.

Compton (2002) examined the relationships between phonological processing skills, orthographic processing skills and level of print exposure in children with and without reading disabilities to gain a better understanding of how to intervene when children present with reading disabilities. Compton looked at the development of two lexical acquisition systems were word-specific knowledge and subword orthographic and phonological connections in children with and without reading disabilities. The purpose of this study was to replicate and extend findings in previous research that found that the level of phonological awareness in word reading was below where it should be in students with reading disabilities.

There were a total of sixty-four participants in this study. These participants were separated into four groups. The first group consisted of students with reading disabilities (RD). These children were all in fifth and sixth grade and had previously been identified with a specific learning disability. The second and third group consisted of reading-level matched students and the fourth group consisted of typically developing chronologically-aged matched peers.

The results of this study support a general model that poor readers, due to phonological processing deficits, fail to develop the network of subword
orthographic-phonological connections that are considered essential for successful reading acquisition. Therefore, when compared to typical achieving age-matched peers, Compton (2002) concluded that children with reading disabilities have underdeveloped orthographic lexicons, much less experience with print and underdeveloped phonological and orthographic abilities.

Torgesen, Myers, Schrim, Stuart, Vartivarian, Mansfield, Stancavage, Durno, Javorsky, and Hann (2006) questioned what impact individualized reading intervention programs have on students' reading abilities. Those students that did not gain grade level in reading were more likely to drop out of high school (US Department of Education, 2003).

Nancollis, Lawrie and Dodd (2005) studied how phonological awareness intervention affects young children? According to Stothard (1996), in order for children to complete literacy skills they need to have developed strong phonological awareness. The authors also stated that it was important to create phonemic awareness through early intervention (U.S. Department of Education, 2001). Ninety-nine children received a nine-week program of phonological intervention. The participants were divided into two different groups. One group received a phonemic awareness intervention and the other group (control group) did not receive the intervention. The students also took pre- and post tests to track their phonemic awareness progress. Post-test results revealed that the group receiving the intervention performed better on rhyming and spelling, but the control performed better on phoneme segmentation tasks, which is the breaking down of words. Since
the intervention that was performed focused on syllable and rhyme awareness, the authors concluded that the intervention had little effect on literacy development. They also believed that it might have interfered with students gaining skills naturally in the classroom.

Vadaszy, Sanders, and Peyton (2006) explored the effectiveness of supplemental instruction in structural analysis and oral reading practice for second- and third-grade students with below-average word reading skills? The authors described related readings that helped define struggling reader and structural analysis. Bradley & Bryant (1983) suggested reading difficulties reflect phonological awareness, which is reading by the sounds of the letters. According to Chall (1967), structural analysis encompasses the division of written words into parts. This is the breaking up of a word into affixes, roots, and syllables. It was important to have structural analysis because it helped students develop morphological layer of language. The authors also talked about how one-on-one reading instruction focused on these reading problems and was supported by No Child Left Behind. There were two different studies. The first study was of second graders from 12 urban schools. Study participants were selected based on the following characteristics: nonretention in first and second grade, have had no prior tutoring, and a pretest reading accuracy composite standard score at or below ninety-five. Forty-six students met these criteria. Students received 30 minutes of individual tutoring, four days a week, for 20 weeks. Each session included 15 minutes of instruction in word-level skills and structural analysis and 15 minutes of oral reading practice. They were administered
post test. The second study included both second and third graders from at-risk schools. The intervention was the same. Tutoring provided to the students resulted in significantly higher reading accuracy and fluency skills. Though neither group reached end-of-grade benchmarks for fluency, the authors found an increase in reading skills over those students receiving general education instruction. Ten to fifteen percent of the students tested were in special education. The students with poor reading skills lacked explicit direction in spelling. This was a good model for response-to-intervention because all students made some type of gain. The authors concluded that non-responsive students should be in classrooms with differentiated instruction and referred for more individualized instruction. Overall, the authors believed that one-on-one instruction was important for poor readers.

Manset-Williamson and Nelson (2005) studied which reading intervention was most effective for students with reading disabilities? According to the U.S. Department of Education (2002), approximately 2,887,217 of school-aged children identified with learning disabilities had a reading disability. In one reading by Fletcher, Morris, & Lyon (2003), the major reading deficits were in comprehension skills, basic automatic word identification, decoding, and fluency. Students that struggle with these skills lack phonemic awareness. The participants of this study were picked because of their reading fluency scores on the Woodcock-Johnson achievement test. Overall there were twenty-one participants in the study and they were randomly assigned to two treatment groups. In each group the students received one-on-one reading instruction. The difference between the two groups was that in
one group they were taught both reading comprehension and self-regulatory strategies. Also, this group was given explicit directions and modeling of skills. Both groups were given pre and post tests. Both groups made gains after the five-week intervention. Approximately half of the students in the study became close or at grade level for reading. The more explicit comprehension group was more effective for the age level of students in the study. The authors found that both groups made meaningful gains in the reading skills. This study reinforced the belief that small group instruction with explicit instruction benefits struggling readers.

Lane, Menzies, Muntion, Von Duering, and English (2005), studied the effects of supplemental literacy program at-risks students that did not respond to a school-wide intervention program? The authors stated that according to Juel (1988), if a student does not learn to read by the fourth grade there is an 88% chance that the student will never learn how to read. The case study was done with a five-year old Hispanic male. He was identified as non-responsive to a school-wide intervention for literacy and behavior. The student met with the literacy coordinator of the school four days a week for thirty minutes at a time. While they met, they work on a program called Phonics Chapter Books, which was composed of six books that focus on phonics (letter sounds). There was an assessment at the end of the program.

Observations of the student were also made in the classroom and on the playground to track the student’s antisocial behavior. Overall the results of the case study were positive. They indicated that the student gained phonemic awareness. The student said that he liked the intervention and felt comfortable in his classroom. According to
the authors of this study, it is important to intervene with struggling readers while they are in the lower elementary grades and that explicit phonics instruction is an important to accelerate students reading.

One of the most recent articles written that supports instruction and offers teachers different teaching strategies to reinforce phonemic awareness skills is students was written by Patrick Manyak (2008). He stressed that it was important for students to be able to recognize the sounds that letters make, but it was extremely important that students are able to blend different phonemes together. He offered several strategies to reinforce blending with the students. One activity was beginning, middle, and end. In this activity students needed to guess the letters and the beginning, middle, and end based on the teacher only giving the sound of the letter (Manyak, 2008). For older students, one activity that helped to enforce blending is word mapping. In this activity students were given a word and then had to map the word out by answering questions about the word. Questions included, how many sounds does the word have and how many letters (Manyak, 2008). All of his activities prompted students to use phonemic awareness.

Learning to read is one of the most important and exciting events in a child’s school career. Phonological awareness has been shown in reading research to be both a key to beginning reading acquisition and a reliable predictor of reading achievement (Swank, 1994). Helping children develop phonological awareness appears to be step towards helping each child develop the skills needed to be a successful reader. The results of the studies clearly show that phonemic awareness can be developed through
instruction, and that doing so can significantly accelerate a child’s subsequent reading and writing achievement.
Chapter 3: Applications and Evaluations

Introduction

The objective of this study set out to determine whether or not phonemic awareness instruction, presented in small groups, would increase in second grade students’ phonemic awareness skills. The ultimate goal of the study was to increase the reading ability of struggling readers and help the struggling readers to gain confidence in their reading ability. This was done through explicit instruction in leveled groups and through guided reading.

Participants of Study

A class of fourteen second grade students participated in the intervention. The class was made up of seven boys and seven girls. Three of the boys had an Individualized Education Plan (IEP). Two of the three boys with IEPs were classified as having multiple disabilities, including mental retardation. In addition, both students had a one-on-one teaching assistant. The third boy was classified with a reading disability. The three students with IEPs were given their testing modifications, which included separate location and test read to them. The school district in which the study took place was a rural community with small class sizes. The ratio of student per teacher is an average of 17:1. According to the New York State School Report Card, Caucasian was the dominate race in the school district with 82% of students at the elementary level, 15% of students are Hispanic, and only 2% of students were African American. Also, 28% of students qualified for free lunch status. In the class, there were twelve students that were Caucasian, one student was Hispanic and one
student was African American. There were five students that qualify for free lunch status.

This was my fifth year teaching, but my first year as a second grade teacher. For four years I was a high school special education teacher that was continuously implementing phonemic skill awareness instruction. This was my first year implementing this plan. There were also two teaching assistants in my room. One had been a teacher assistant for fifteen years and this was her second year working with the implementation plan. The other teacher assistant was a certified teacher and had used implementation plans in the past. They will not be implementing the intervention for this study.

**Procedures of Study**

Students were given a pre-test on specific phonics skills that were addressed in the upcoming unit. The test was created by the reading series the Harcourt Trophies reading series used by the district. The phonics skills tested were the vowel dipthongs /ou/ and /oi/, vowel digraphs /oo/, inflectional endings –es (changing f to v), and suffixes –ing, -ly, -ful, and –less.

During the first week of the study each guided reading group, which was broken up by reading levels, were given a sound inventory and the phonetic skills pre-test by the teacher. In the second week, students were instructed on the vowel dipthong /ou/. After explicit instruction on the phonetic skill, students used their newly acquired awareness of phonics in their guided reading sessions. Guided reading groups assemble students homogenously and books are leveled to the students'
reading ability. The same procedures were followed with all of the phonemic awareness skills taught. In the final week a post test was given on the same phonic skills. Throughout the study, anecdotal records were kept by the teacher on important observations made. The record was kept weekly and any important successes that students had or distractions that might have restricted the lesson that day were kept. At the end of the study, students were given the same sound inventory checklist to measure any phonemic awareness gains.

**Instruments of Study**

Student success was measured using a pre- and post test model, sound inventory checklist and anecdotal records. The purpose of the pre- and post tests (see Appendix A) as an instrument was to gather information for the study because it is important to assess the progress of both the student and the teacher. Assessment is the process of collecting information in order to make instructional decisions about students and good decisions require concrete information. Having this as an instrument as part of the study allowed for quantitative data that showed not only the success of the students, but the success of the teaching. The multiple choice test allowed for easy scoring and analysis. The questions on both of the tests were exactly the same, so it was an accurate measure of the students’ gains or failures.

A sound inventory checklist (see Appendix B) was given to each student and a phonemic awareness level was given to each student according to the number of sound skills the students earned. The students were labeled a beginner, intermediate, or advanced based on the checklist. Students were given the checklist one-on-one.
with the teacher and the teacher checked if the student knew the sound or if the student did not know. It was then revisited at the end of the study to determine if the student could advance to the next level. This instrument was used because it will give the teacher baseline data of where the students are at on their phonemic awareness.

The teacher completed an anecdotal record journal. It kept track of what was taught that day and of any specific observations that were made that day, including gains by students or distractions that may have occurred during instruction or reading. This helped the teacher keep track of what phonics lesson was taught that day and the successes of the students. This instrument was used to keep a daily track of the students.
Chapter 4: Results

As a teacher it is important to test the validity of instruction to guarantee that students are receiving proper instruction and if learning is taking place. When teaching reading, phonics instruction is important, but is phonics instruction positively impacting students reading? In order to know if instruction is working properly data had to be collected. Data was collected over a six-week period. In this period of time students took both a pre- and post test and participated in a phonics skill checklist.

Quantitative Analysis

The results of the pre and post tests indicated important findings. The use of pre and post tests as an implemented strategy resulted in improved classroom performance. Throughout this six-week study, the students took the pre-test on the first day of the study and the post test on the last day of the sixth week. All fourteen students took each test.

Table 1 displays the results from the pre-test, while Table 2 displays the results of the post test and the number of questions each student answered correctly in each phonic skill. Every phonic skill had four questions that went with the skill. The results of the tests allowed me to evaluate the effectiveness of teaching reading through the instruction of phonics by analyzing quantitative results. It was evident on the pre-test that second grade students were not exposed or not heavily instructed on prefixes and suffixes because many students scored below a three in these areas. That data showed me that more instruction needed to focus on prefixes and suffixes.
Instruction was delivered on what prefixes and suffixes were and what meaning they give a word. The results on the post test validate the findings on the pre-test because students preformed better on both prefixes and suffixes. The results show that not one student scored a zero.

Table 1

Results of the pretest

<table>
<thead>
<tr>
<th>Students</th>
<th>/oo/</th>
<th>Contractions</th>
<th>Prefixes</th>
<th>Suffixes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>B</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>D</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>E</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>F</td>
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<td>4</td>
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<td>4</td>
</tr>
<tr>
<td>H</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>I</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>J</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>K</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>L</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>M</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>N</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

The data shown on Table 1 was significant because it showed that students in second grade had a good understanding of sounds of letters because nine out of fourteen students knew the /oo/ dipthong. The results led me to focus more on word manipulation in my study then. As stated above the table, students did not understand prefixes and suffixes because seven students scored below a three on prefixes and
four students scored zeros on suffixes. Surprisingly, students scored great on contractions because ten students received fours on the pretest.

Table 2

Results of the posttest

<table>
<thead>
<tr>
<th>Students</th>
<th>/oo/</th>
<th>Contractions</th>
<th>Prefixes</th>
<th>Suffixes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
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<tr>
<td>C</td>
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<td>4</td>
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<td>4</td>
</tr>
<tr>
<td>D</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>E</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>F</td>
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<td>3</td>
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<td>G</td>
<td>4</td>
<td>4</td>
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<td>H</td>
<td>4</td>
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<td>2</td>
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</tr>
<tr>
<td>I</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
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<tr>
<td>J</td>
<td>4</td>
<td>4</td>
<td>4</td>
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<tr>
<td>K</td>
<td>3</td>
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<td>3</td>
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<tr>
<td>L</td>
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<td>4</td>
<td>4</td>
</tr>
<tr>
<td>M</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>N</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

The data on the above tables show improvement of many students. Most improvement was made on prefixes. The test considers a three or four as a mastery of the skill. The students that continue to struggle have been classified with mental retardation and find language difficult. This strategy of collecting data allowed me to evaluate skills that students needed to continue work on and skills that students had mastered.
Students were also given a phonemic awareness sound checklist. On the checklist were single consonants on vowels, consonant blends, and vowel diphthongs. Students had to identify the sounds each made. They were given the checklist during the first week of the study in a one-on-one setting with the teacher. I then reviewed the checklist and the students were identified as advanced (missing two or less questions), intermediate (missing between three and six questions), or beginners (missing six or more questions). The students were given the checklist again during the sixth week of the study. Table 3 identifies the number of students in each category.

Table 3
Results of phonemic awareness sound checklist (number of students)

<table>
<thead>
<tr>
<th>Level</th>
<th>Week 1</th>
<th>Week 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Intermediate</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Advance</td>
<td>4</td>
<td>8</td>
</tr>
</tbody>
</table>

The above table displays gains by a number of students. Only one student remained a beginner after the six-week intervention. Three students moved into the intermediate level that was categorized as beginners at the start of the study. The one student that remained a beginner was classified with mental retardation and was performing adequately for his cognitive ability. He made gains but not enough to
move him to the intermediate level. One student remained at the intermediate level and five students moved up to the advanced level. Eight students moved up one level on the checklist. Students that tested advanced at the beginning of the study remained advanced when the checklist was given the second time. The important finding is that there was not one student that went down a level and that thirteen out of fourteen students' phonemic awareness was at grade level or higher because they were in the category of intermediate or advanced on the checklist.

Qualitative Analysis

The second part of the evaluation was more subjectively based. They were my daily anecdotal records about the effectiveness of my small group phonics instruction and guided reading groups. I wrote the records in a spiral notebook at the conclusion of each day. There were a total of eighteen entries. I kept records only on the day the new phonics skill was introduced to each group.

The results of my records were mixed. I found that my above grade level guided reading group benefited the least from the study. Phonics instruction was not necessary to focus instruction on because all the students scored a perfect score on their pre-test on the phonics skills. As a result of this finding, after the first week of instruction I just focused on their leveled guided reading book for that week. Phonics instruction was more informal. When the readers came in contact with a word that was unfamiliar and could not sound it out then phonic instruction was taught. I made this change due to the writing of my anecdotal records. For example I wrote on the third day:
Student A appears to be bored because he has yawned several times and I have to remind him to keep focused... Student D knows the answers to my questions and has said that this is “too easy” several times.

This was important because it told me that the students were bored and needed instruction to be more engaging or the information being taught was too easy and they needed to be challenged. I changed both aspects of instruction and I then heard more positive results.

The grade level and below grade level guided reading groups observations were close to the same. I found that each group benefited from the phonic instruction. They were actively engaged and gains were noted every week. Evidence of the gains was noted in my anecdotal records of each group. For the group at grade level I noted:

The group as a whole are making gains, on the second week we reviewed sounds from the first week and everyone except student F remembered the sound, I even had one student ask “what sound are we learning today.”

This excerpt is important because it showed that some students enthusiasm for phonic instruction. I interpreted the statement to mean that this student felt successful in what he/she was learning and wanted to continue to learn how to read more effectively. Students enjoyed learning about contractions, the below level group really responded positively. Student L stated:

I love moving words together.

Based on this statement I made a hands-on activity for contractions. This excerpt is significant because I was able to adapt teaching in order to allow for more
learning to take place. I also discovered a significant phrase that I use a lot in my
classroom now based on taking these records:

What is our rule?

I say this now when a student is struggling to sound out a word because I
noted in my records that I was saying this and students were responding by trying to
remember the rule. The significance of this expert is that it made me aware of a
saying that I was using a great deal with the students. This saying also made students
slow down and think of different phonic rules that had been taught to them in order to
decode a word.
Chapter 5: Conclusions and Recommendations for Future Research

Discussion

Both the quantitative and the qualitative results showed a benefit of teaching phonemic awareness skills through small group instruction with struggling readers. The instruments of study also showed the benefits of phonemic awareness instruction on students reading at grade level. One aspect of teaching that this study demonstrated early on is that teaching these important reading skills in small group is extremely beneficial because instruction can be tailored to each reading level. For example, the group reading above grade level did not need explicit phonemic awareness instruction and therefore instruction could be reexamined and made to fit the needs of the students.

The results of the pre and post test model were very important to student achievement and to my instructional strategies. I found that almost every child made gains each of the presented phonic skills. New skills are introduced to the students every six weeks. I will continue to use the pre-and post test model to assist me in planning my individual phonic lessons, as well as guided reading groups. I also see this model positively impacting student achievement because now my instruction is based on individual needs. I will not have to teach students skills they already have and I will be able to focus on the skills that require more instruction.

Although the results of the phonemic awareness checklist were important, the level to which they impacted this study still remains unclear. I found that the checklist was not beneficial for second graders at this time of the year. I believe that a running
record every six weeks on the specific phonemic awareness skills would benefit both student achievement and drive instruction more appropriately. Using running records as an instrument of study would also allow for more accurate and usable quantitative results. I found the phonemic awareness checklist to be too abstract for solid quantitative results.

I found great benefits in keeping anecdotal records throughout this study. The records helped keep small group instruction focused and individualized. Making notes about every group and how explicit instruction needed to be the next day geared student achievement throughout. I truly was able to note gains in every one of my students. Overall, the study was beneficial to the instruction of students. It allowed skills that students may be deficient in to be taught in greater depth because of the small group atmosphere. The study also allowed for students to read with confidence. That allowed for the teacher to scaffold instruction based on the student’s success.

Action Plan

I found that this study helped me decide what to teach and how to teach phonemic awareness. I will use this information to guide my instruction based on a pre-test that I will give every six weeks on different phonic skills. I will share this information with the other second grade teacher and with my curriculum specialist. This study gives me data to support our district’s new policy of small group instruction and guided reading groups. My principal has asked me to present my findings at the next faculty meeting. The purpose of my presentation is to share my experiences and results in using small group instruction. Some teachers are
apprehensive in believing that small group instruction is realistic in a classroom. I will present how I am able to fit small group instruction into my day, and what objectives I try to attain while instructing small groups. My audience at the meeting will be elementary classroom teachers and my principal.

Recommendations for Future Research

The next logical step based on the results of this study is to continue phonemic instruction and small guided reading group instruction. I will continue to use the pre- and post test model to help me track gains made by my students and lead my instruction. Additional research that I will conduct will includes the implementation of individual running records. This will allow for the tracking of students’ reading ability progress.

Conclusions

The benefit of small group instruction for phonemic awareness skills and reading is remarkable for both the student and the teacher. It allows for individual instruction and attainable instruction. It also allows for the teacher to truly understand each student. The teacher can understand what area of reading each student is successful in and what area of reading the students need more instruction on. It also allows teachers to discover what strategies work for each student because not every strategy is beneficial for every student. Education should allow for every child to be successful and instruction should be attainable. Small group instruction allows this to happen. Reading is a skill that is essential for lifelong success of students. I would recommend small group instruction to every teacher.
References


Appendix A: Pre-/Post Test

Decoding/Phonics Skill Assessment

| grew | bruise |

Sample

What kind of __________ do you eat?

A. hut  B. fruit  C. never  D. cake

1. I __________ the answer to the question.
   A. knew  B. grill  C. meet  D. had

2. They went on a river __________.
   A. sell  B. cruise  C. lid  D. ride

3. Tim __________ the ball to Emmy.
   A. kind  B. gave  C. greet  D. threw

4. How did you __________ your arm?
   A. tin  B. bruise  C. hurt  D. greet
Sample

I do not have the key.

A. didn’t  B. don’t  C. can’t  D. won’t

1. **He is** my teacher.
   A. What’s  B. She’s  C. It’s  D. He’s

2. **They will** help us.
   A. You’ll  B. They’ll  C. I’ll  D. We’ll

3. **I cannot** reach it.
   A. isn’t  B. doesn’t  C. can’t  D. haven’t

4. **It is** my birthday.
   A. It’s  B. Who’s  C. There’s  D. Here’s
The little mole has a home deep _________________.
A. grounded  B. underground  C. reground  D. grounding

1. We will _________ the stove so it will be hot when we put the cake in to bake.
   A. preheat  B. underheat  C. heats  D. heating

2. I lost my homework, so I had to _________ it all.
   A. did  B. redo  C. doing  D. misdo

3. Did you _________ him for someone else?
   A. mistake  B. takes  C. taking  D. retake

4. That worker did a good job, so do not _________ him.
   A. paying  B. prepay  C. underpay  D. pays
Sample

I am the _____________ of the three children in our family.

A. old  B. older  C. oldest  D. olds

1. This loaf of bread is ______________ than that one.
   A. fresh  B. fresher  C. freshest  D. freshing

2. That is the _____________ building in town.
   A. tall  B. taller  C. tallest  D. talls

3. That pup is the _____________ of all.
   A. small  B. smaller  C. smallest  D. smalls

4. This door is _____________ than that door.
   A. wide  B. wider  C. widest  D. widens
Appendix B: Phonemic Awareness Checklist

Phonemic Awareness Checklist

<table>
<thead>
<tr>
<th></th>
<th>Student Number</th>
<th>First Try</th>
<th>Second Try</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long a</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Short e</td>
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<td>Long e</td>
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<td>Short i</td>
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<td>Long i</td>
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</tr>
<tr>
<td>/ph/</td>
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</tr>
<tr>
<td><strong>What is a contraction?</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>What does a -ed suffix do to a word?</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>/ow/</td>
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</tr>
<tr>
<td><strong>What is a compound word?</strong></td>
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</tbody>
</table>