Literature Review: Word Study to Increase Reading Achievement

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Within guided reading, word study is used to further understanding of phonological awareness (manipulating oral language), phonemic awareness (manipulating individual sounds) and phonics (written language). The purpose of my study was to determine if the use of word study activities in guided reading would increase reading achievement. For the purpose of this paper and my study, the term "word study" represents any activities that involved phonological awareness, phonemic awareness, and/or phonics within guided reading. These activities were solely oral, or a combination of oral and written language.

It was the goal of my study to increase overall reading achievement. In kindergarten, the foundation of all learning begins with reading and the fundamental skills necessary to read. In order to improve reading achievement with my students, I worked on skills such as sound discrimination, rhyming, blending, segmenting, and more. If these skills were not mastered within their first year of school, my students would, potentially, struggle in reading, writing, and beyond.

When implementing any word study activities, it has been shown that one approach is not enough. Teachers need a variety of research-based approaches to teach these skills to students. Teaching only one approach will most likely not address all the needs of the students in any given classroom (Rule, Dockstader & Stewart, 2006). In order to provide the best experience for my students, I have collected and synthesized various articles regarding word study and their related activities in order to expand my knowledge and confidence. This paper is organized into various subjects such as the importance of teaching word study, strategies and common themes found among literature, and strategies that are less effective.

Why teach phonics, phonemic awareness, and phonological awareness?

The implementation of phonics, phonemic awareness, and phonological awareness is the foundation of reading, especially when a child is first learning to read. In order to increase spelling accuracy, efficient phonics instruction is necessary in the early years of reading such as kindergarten and first grade (Bradley & Noell, 2018; Noltemeyer, Joseph & Kunesh, 2013). Unfortunately, some word study activities are not effective with all students and some students are in need of intervention and changes in activities. An estimated 10%-15% of students continue to struggle after some sort of phonological instruction (Bowers & Bowers, 2017). It is vital to research and implement research-based strategies within the classroom in order to yield best results. Also, without early reading instruction and intervention, the reading gap between low performers and high performers widens over the years (Noltemeyer, Joseph & Kunesh, 2013).

Word study has shown to be a prediction of literacy success in the future (Cunningham, 2012; Noltemeyer, Joseph & Kunesh, 2013; Ouellette & Haley, 2013). The fundamental skill of phonological awareness and phonics has shown to increase fluency and comprehension (Bradley & Noell, 2017). Not only is word study a fundamental skill and predictor, it also is an effective tool with children who are at risk of failing reading (Noltemeyer, Joseph & Kunesh, 2013; Rule, Dockstader & Steward, 2006; Shapiro & Sholity, 2016). Various intervention activities have shown an increase in phonological and phonemic awareness when implemented with students who are defined as "at-risk."

Strategies for Implementation

Systematic, Synthetic, and Analytic Instruction

There are several different types of instruction when it comes to phonological awareness, phonemic awareness, and phonics. Some of these methods include systematic, synthetic, and

analytic instruction. Each hold a specific purpose and benefits. Systematic instruction refers to letter-sound relationships (Shapiro & Solity, 2016). Analytic instruction refers to phoneme segmentation, or the ability to break apart words into different sounds, while synthetic instruction refers to blending or combining sounds together to create words (Ouellette & Haley, 2013). All methods of instruction are important, and analytic and synthetic instruction have shown to be equally effective (Bowers & Bowers, 2017). All methods of instruction are necessary in order to provide a balanced learning experience.

All three of these instruction types (systematic, synthetic, and analytic) are methods that are included in various strategies within word study. It was important for me to understand these different methods so that when implemented, I could provide balanced activities that included all methods. By incorporating activities that included all three of these instructional types I provided balanced instruction that met all critical points of phonological awareness, phonemic awareness, and phonics.

Within my study, I incorporated phonics activities that focused on letter-sound relationships. These activities included systematic instruction by building that relationship between letters as symbols and sounds. This was achieved by whiteboard activities, clay activities, magnets, and more. Students were asked what sounds they heard in a word such as "cat" and wrote the sounds (letters) that they heard. By asking a child for the sounds rather than the letters, this strengthened that phonics knowledge.

I also incorporated activities that included analytic and synthetic instruction. This portion fell under phonemic awareness. These activities were used separately for some groups and simultaneously for higher-ability learners. Through oral activities, such as giving students a

segmented word with the sounds separated (/c/ /a/ /t/, what is the word?) students practiced

blending sounds together through synthetic instruction. Conversely, students were given a word

and asked, "What are the sounds in "cat"?" to which students broke apart the sounds by applying

analytic instruction.

Small Group Settings

Word study activities can be implemented in whole group, small group, or one-on-one

settings. A portion of guided reading includes a word study component which occurs within

small groups. For children who are struggling with basic reading skills, large group instruction

may be too rapid, not provide appropriate intensity levels, lack sufficient opportunities for

practice, and may not be targeted for specific needs of students. Small group instruction,

however, can better meet the needs of students and can be just as effective as one-on-one

instruction (Noltemeyer, Joseph & Kunesh, 2013). Small group instruction can also address

specific needs of those "at risk" students (Noltemeyer, Joseph & Kunesh, 2013). Cristin Fischer,

a reading specialist in my building, emphasized the importance of small group work with an

adult as most effective as opposed to whole group instruction or students working independently

(C. Fischer, personal communication, November 26, 2018).

Small group instruction also holds the ability to target specific needs of all students in an

easier fashion. It is an opportunity for more differentiation and gave better insight into individual

students and their progress. As stated, small group instruction is a method that can increase

achievement with "at-risk" students. By purposefully incorporating word study activities, my

students showed an increase in overall reading achievement.

Small group instruction cannot always replace whole group instruction. Small groups are a supplemental instructional method to further develop the skills of the group. With small group and differentiated instruction, the educator is required to take more time to develop lessons that are developmentally appropriate for each group. The weakness of small group instruction does not impact the students, but rather the educator and the amount of time necessary to develop adequate instruction.

My study was conducted through small group instruction within guided reading. After reviewing the research, I believe it was best practice to implement word study activities within a small group in order to provide adequate instruction to all students in my classroom. It was important for my students to receive differentiated instruction, which was easier to achieve through small groups. It was also important for my students to receive individualized attention. My students also worked best in small groups due to our large class size of twenty-five students. With fewer students came fewer distractions and an increase in focus.

Kinesthetic and Tactile Integration

Kinesthetic and tactile activities can be integrated into word study activities and show an increase in word acquisition and decoding skills (Carson & Storin, 2018; Rule, Dockstader & Stewart, 2017). Rule, Dockstader, and Stewart implemented two strategies within word study (2017). First, kinesthetic and bodily movements were implemented through pantomime, "stepping stone" activities, and more. Next, tactile instruction occurred through "object boxes" which included printed word cut from various food boxes, objects such as small toys, and more. The "object boxes" each had activities that provoked phonemic awareness, phonics, vowel changes, vocabulary, and more. When used with lower-performing students, both methods

showed an increase in achievement and matched the control group of average performing peers. This is an indication that kinesthetic and tactile activities can show an increase in performance. (Rule, Dockstader & Stewart, 2017).

Clay can also be incorporated into word study activities. Carson and Storin discuss that phonics is "rarely, if ever, viewed as an artistic process or a creative one" (2018, p. 15). Spelling and phonics are often taught through spelling "rules" and these practices are generally unsuccessful with students who are dyslexic, or with "Three Dimensional Visual Thinkers" or 3DVT (Carson & Storin, 2018, p. 15). By using clay, students were gaining a multisensory approach to learning vocabulary through an instructional strategy called "symbol mastery." Through this process, students used clay to spell words and create pictures of their definitions. Due to the transition from abstract to concrete, students showed an increase in understanding, recall, and recognition (Carson & Storin, 2018).

It is known that all students are unique in their learning style. By incorporating kinesthetic and tactile activities, I met the needs of the students who learned best through movement and manipulatives. Work with clay also provided opportunity for fine motor control and showed an increased ownership of learning and confidence (Carson & Storin, 2018).

Many kinesthetic and tactile activities require a lot of time for instruction, space, and materials. Due to the constraints of many classrooms, some activities may not be feasible. Again, educators also need to devote even more time to creating and supervising these activities.

Within my study, I implemented kinesthetic activities. I had many students that loved (and needed) movement. Research has shown an increase in learning when kinesthetic activities are utilized. I included gross-motor and fine-motor movement into word study in order to meet

the needs of all students and increase engagement. It was critical that my students experienced a variety of activities that appealed to them. By incorporating a fun, and new, activity, I saw students engaged and actively participating.

Hypotheses and Structured Word Inquiry (SWI)

Other methods of word study instruction include analysis and inquiry into the English language and how words are created and why. Structured Word Inquiry (SWI) is an instructional method that emphasizes that the English spelling system includes a combination of morphology, etymology, and phonology which emphasizes sublexical grapheme-phoneme parts (Bowers & Bowers, 2017). SWI includes "generating and testing hypotheses about how the system works" with the goal of increasing a child's awareness of why words are spelled the way they are (Bowers & Bowers, 2017, p. 125). In this instance, typical phonics instruction can be insufficient in teaching children word pronunciation when considering various "rule breakers" as well as morphological families (Bowers & Bowers, 2017).

By looking at the English language in a scientific manner, students may begin to take more interest in the system of spelling. It may also help those students who need more explanation as to *why* some words are spelled in regards to a "rule" while others are not. SWI also may include a "hierarchy of definitions" that highlights the meaningful relationships between words with visuals and causes an increase in spelling accuracy (Bowers & Bowers, 2017, p. 132).

This method may serve best with middle and upper grades with students who are struggling in phonics. In the younger years, students do not yet have the basic phonological

understanding to generate and test hypotheses. Due to this, this method may not be suitable for children who are classified as beginning readers.

Due to the complexity of this instructional method, I did not utilize SWI in it's exact form with my kindergarten students. However, research had exposed me to the idea that some students may wish to investigate spelling and understand why things are spelled a certain way. I incorporated these ideas at a kindergartener's ability level within guided reading through some simple investigation and testing with spelling patterns.

Within my study, one way I implemented this involved providing a word such as "hat," modeling the sounds and letters, breaking apart and blending them. Then, I asked students about another word such as "that." If we had learned about the phoneme "th," we could use that phoneme knowledge to predict how the word would be spelled if we knew the -at spelling pattern that appears in words such as hat, cat, and bat. This served as a way for students to investigate novel words and created a bond between known words and unknown words through the investigation of spelling patterns such as "-at," "-ot" and "-og."

With some of my higher students, this was applied to compound words. By breaking apart words like lipstick, fishbowl, or mailbox, we could understand the meaning of each smaller word and how it impacted the meaning of the new compound word. This helped students see the relationships between smaller and larger words and helped students recognize that words could be combined based on definitions.

While this was not an exact replica of the SWI theory, the structure and overarching ideas were implemented with my students. I believe by incorporating an aspect of inquiry, my students expanded their thinking beyond rote memorization of word and spelling patterns. This was

important for students because I wanted them to understand why and how things are spelled as well as the relationships between words.

Constant Time Delay and Wait Time

Constant Time Delay (CTD) is an instructional strategy that includes a purposeful time delay from an instructor after a given prompt. This method begins with immediate response by the educator (no time delay) and eventually progresses to 3-10 seconds of delay between the instructors prompt and the students response (Bradley & Noell, 2018). By giving wait time to students so that they can process the information, this method showed to be an effective intervention for phonics and was also effective with complex phonemic constructions (Bradley & Noell, 2018).

When a student is asked a question, they are required to think about the question, their answer, and the words needed to communicate their response. This process usually takes longer than the second or less that can be provided by some teachers (Wasik, 2018). Not only is wait time important for processing, but it is "critical in supporting their language development" (Wasik, 2018, p. 369). With wait time, feedback should also be provided on the student's answer. By creating a dialogue between a teacher and student with wait time and purposeful feedback, this can improve a child's language and vocabulary (Wasik, 2018).

This instructional method is simple to implement within a small group setting. It gives students processing time and the opportunity to answer, or attempt to answer. The immediate response of the educator serves as a model for the students. This method shows positive results and requires little to no planning. Wait time is also beneficial to students as it allows for them to

utilize the language skills that they are practicing, such as vocabulary, letter sounds, phonemes, and more.

While this method shows an increase in literacy success, time delay may not show improvements with students who are at-risk. 10 seconds of time delay may be too much for a student and can cause them to become distracted or feel defeated if they do not answer correctly. This strategy would need to be implemented strategically to increase accuracy as well as confidence with these students.

CTD was an instructional method that I easily implemented with my students immediately. CTD allowed students more processing time and was also a way for me to work on my wait time with my students. I incorporated this method with my students in order to give them appropriate wait time and improve my comfortability with wait time. I wanted to give all of my students a chance to answer questions as some students needed more time than others. This was an important method to include as it served as a strategy that utilized the understanding that all children learn in different ways, and students needed differentiated experiences to meet their needs.

Less Effective Strategies

Flashcard Drills

One method to avoid when conducting word study activities is the sole use of flashcard drills. Flashcards create a lack of engagement and encourages rote memorization rather than phonological and phonemic awareness (C. Fischer, personal communication, November 26, 2018). While flashcard drills can be effective when used in moderation, research suggests that the sole use of flashcard drills did not increase a student's word retention (Noltemeyer, Joseph &

Kunesh, 2013). Due to the tediousness and lack of engagement students may also show a lack of

interest, be reluctant, or refuse to participate (C. Fischer, personal communication, November 26,

2018; Noltemeyer, Joseph & Kunesh, 2013).

After reviewing literature and interviewing Cristin Fischer, I came to the conclusion that

flashcards could be used as a small portion of any activity. I did not use flashcards on their own

as their use was not supported by research and I did not believe my students would have stayed

engaged or retained knowledge. I utilized flashcards through a memory game that required more

focus and engagement from my students rather than flashing the cards and promoting

memorization over actual reading.

Only Decodable Texts

A second method that should be avoided is utilizing only decodable texts in reading.

While decodable texts provide opportunities for students to apply their skills to decode words, no

research has stated that decodable text should be used in solitude. Children should be exposed to

a variety of texts; "some more sight word oriented, some more decoding oriented, and some

more meaning-cue oriented" (Cunningham, 2012). In order to provide ample opportunities for

practice, texts should be of varying difficulty in order for children to use all word identification

cues and increase fluency (Cunningham, 2012).

While my study focused on word study and those activities, the texts children are reading

within guided reading were also important for their phonological awareness, phonemic

awareness, and phonics skills. By including a variety of texts, I promoted decoding skills and

allowed my students to apply the knowledge we were practicing within word study.

Conclusion

In my study I determined if the use of word study activities in guided reading would increase reading achievement. As stated, phonological awareness, phonemic awareness, and phonics are all fundamental skills that are vital to a student's literacy success. I chose to research available literature in hopes to increase my knowledge, awareness, and abilities to implement research-based strategies with my students to show an increase in reading achievement. After reviewing literature and conducting an interview with an expert, I discovered many instructional strategies to implement (and avoid). While some strategies were easier to implement than others, all showed an increase in achievement as well as confidence and ownership of learning. While increasing overall achievement was the main goal of my study, I also wanted my students to be more confident in their reading and word study.

It has been stated that word study activities predict literacy success, and are effective when implemented with "at-risk" students. Within my classroom, I have students who I defined as "at-risk" and without immediate intervention (on top of outside intervention within the school building) would not be adequately prepared for first grade and beyond.

The sources reviewed exposed many similarities in regards to word study. It is known that word study cannot be just one activity. A variety of activities should be incorporated in order to boost achievement and engagement. Kinesthetic activities assisted children who learn best through movement. There were also many strategies that allowed children to identify the patterns and meanings related to spelling and words. By systematically investigating words and their phonology, morphology, and etymology, my students grasped a deeper understanding of the structures within the English language's spelling system. Constant Time Delay was an easily implemented strategy that provided students with more processing time and more opportunities

to answer questions correctly. Sources also revealed strategies that were not as effective such as

flashcard drills and the sole use of decodable texts. After considering the research, I avoided

flashcard drills and ensured that my students read a variety of texts.

By incorporating some of the aforementioned methods, I hoped to see an increase in

reading achievement as well as confidence regarding reading and word study. More specifically,

by implementing a variety of strategies that promoted phonological awareness, phonemic

awareness, and phonics, I hoped to see an increase in letter identification, letter-sound

relationships, blending and segmenting, decoding skills, and more. It was my personal goal to

see an increase in achievement in order to better prepare my students for first grade and beyond.

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