

5-2016

Vocabulary Studies in Primary Grades: A Review of the Literature

Randi Zentner

St. Cloud State University, rzentner@flaschools.org

Follow this and additional works at: https://repository.stcloudstate.edu/ed_etds

Recommended Citation

Zentner, Randi, "Vocabulary Studies in Primary Grades: A Review of the Literature" (2016). *Culminating Projects in Teacher Development*. 15.

https://repository.stcloudstate.edu/ed_etds/15

This Starred Paper is brought to you for free and open access by the Department of Teacher Development at theRepository at St. Cloud State. It has been accepted for inclusion in Culminating Projects in Teacher Development by an authorized administrator of theRepository at St. Cloud State. For more information, please contact rswexelbaum@stcloudstate.edu.

Vocabulary Strategies in Primary Grades: A Review of the Literature

by

Randi Zentner

A Starred Paper

Submitted to the Graduate Faculty of

St. Cloud State University

in Partial Fulfillment of the Requirements

for the Degree

Master of Science in

Curriculum and Instruction

April, 2016

Starred Paper Committee:
Ramon Serrano, Chairperson
Stephen Hornstein
Mary Beth Noll

Table of Contents

Chapter	Page
1. Introduction.....	4
Finding an Answer to My Question.....	7
Definitions.....	8
2. Review of the Literature	10
Importance of Vocabulary Instruction	10
Vocabulary Development	12
Word Selection.....	14
Types of Vocabulary Instruction	17
Incidental Exposure	18
Vocabulary Flood.....	19
Direct Instruction	20
Shared Reading.....	21
Extended Instruction.....	24
Extended Instruction for Beginner/Early Readers	25
Older Primary Students.....	26
Semantic Organization.....	27
Special Population Learners	30
Chapter 2 Summary	32
3. Discussion.....	34
Recommendations.....	35

	3
Chapter	Page
Conclusion	39
References.....	40

Chapter 1: Introduction

During my 4 years of teaching I have taught three different grade levels and worked with at risk students scoring below the 25th percentile on standardized tests. The more I worked with elementary students, the more I began to make connections among the areas of struggle. Regardless of age level or subject matter, their inability to comprehend and understand written language interfered with student learning.

Reading skills such as decoding, fluency, and comprehension all draw upon a known bank of words (Berne & Blachowicz, 2008). Emergent readers often have difficulty decoding words because they lack a bank of vocabulary words to pull from to make sense of the word that they were decoding. For instance, if students were trying to decode the word “cot,” he or she would have the ability to segment the sounds in the word and put the sounds together. However, when they would read the word, they would think they read it incorrectly because they were unfamiliar with the word and it did not make sense to them as a correct word choice. This shows that even though students were able to apply the correct letter sounds to help decode and potentially understand the word, they were unable to because the word was not in their vocabulary. “Benefits in understanding text by applying letter-sound correspondences to printed material come about only if the target word is in the learner’s oral vocabulary” (National Institute of Child Health and Human Development [NICHD], 2000)

The same is true for more experienced readers who have decoding strategies and are not beginning to learn to read. More experienced readers can experience difficulty comprehending text because unknown vocabulary words interfere with their understanding (Neuman & Wright, 2014). They may not have the background or vocabulary knowledge to make sense of unfamiliar

texts. “Without vocabulary knowledge, words are just words without much meaning” (Neuman and Wright, 2014, p. 6).

There are vocabulary words associated with all subject areas that require student understanding of these terms in order to show success. I began to notice that students were struggling in mathematics because they were having difficulty understanding concepts such as *less, more, altogether, equal, before, and after*. Students had trouble understanding words specific to science and social studies topics, which then interfered with their understanding of topics and concepts. With all of these experiences, I wanted to understand the cause of this vocabulary gap and determine what I could do to help my students improve their comprehension skills.

The type of home in which a student lives influences his or her readiness to learn. Some children come with a head start because of their socioeconomic circumstances (Ravitch, 2013). Many of the students in the rural community I teach come from low socioeconomic families and lack exposure to everyday experiences and language that can assist with reading comprehension. Over half of the students qualify for free and reduced lunch. The quality of speech heard in the homes of families on public assistance is less than that of working class and high socioeconomic households. These families have fewer resources and parents focus on daily survival concerns that limit interactions with their children (Jalongo & Sobolak, 2011).

Many students have English as their second language (ELL) and due to their young age have not had the time to develop their English vocabulary to help them understand the text they read at school. Ravitch (2013) indicated that some children hear many words and have a large vocabulary; others do not. Several studies indicate that first-graders from higher socioeconomic

status backgrounds know at least twice as many words as lower-socioeconomic status children (Beck & McKeown, 2007). ELL students come to school with more limited vocabulary knowledge than native English-speaking students and fall further behind in vocabulary as they move through school (Kelley, Lesaux, Kieffer, & Faller, 2010). Students enter school with these gaps in vocabulary, and the gap continues to widen over the years as texts become more complex and as vocabulary knowledge becomes a more critical determinant of successful comprehension (Coyne, McCoach, & Kapp, 2007). As children fall behind their peers in developing vocabulary knowledge, they are at a significant risk for experiencing serious reading and learning difficulties and being identified as having a language or reading disability (Coyne et al., 2007).

The NICHD's research review of vocabulary studies revealed that reading ability and vocabulary size are related (NICHD, 2000). The struggling students with whom I work are coming in with vocabulary deficits, and the current instruction they had received was not effectively addressing their vocabulary deficits. Children who enter school with fewer experiences with academic language will need skillfully developed instruction to improve and accelerate their word knowledge and vocabulary development in order to maximize their limited time in school (Neuman & Wright, 2014).

I believe that understanding vocabulary is important to help all readers comprehend what they are reading, not only in the subject of reading, but in all academic areas. Many students come to school with adequate amounts of social language but demonstrate lack of instructional language that serve the purpose of expressing opinions, interacting in discussions, questioning, seeking information, and sharing ideas (MacDonald & Figueredo, 2010).

I feel it is my responsibility as an educator to investigate other vocabulary approaches designed to improve students' vocabulary growth. My students motivated me to research vocabulary instruction and determine what research is available on the topic.

Finding an Answer to My Question

As I start this journey I am hoping that I will find an answer to my question on “What strategies are effective for teaching vocabulary in the primary grades?”

According to the NICHD (2000), vocabulary plays a critical role in comprehension and learning to read. The more I work with students, the more it becomes clear to me that vocabulary instruction is something that is important in all grade levels and subject areas. However, primary vocabulary instruction does not play a key role in schools, and schools are not developing language with attention to vocabulary (Kelley et al., 2010).

“There is a great need for information regarding how to provide effective vocabulary instruction in the early primary grades to children at risk for reading failure” (Pullen, Tuckwiller, Konold, Maynard, & Coyne, 2010, p. 113). With regard to increasing student vocabularies, I wanted to explore several questions:

1. Is some vocabulary instruction better suited for specific learning groups? (e.g., ELL learners, low socio-economic learners, special education students, and low readers)?
2. Are specific interventions better for different age levels?
3. Is it developmentally and educationally appropriate to be concerned about vocabulary instruction at the primary level?

Definitions

Background information refers to previous knowledge that a learner processes for a word or subject.

Cognates are words that look similar and have similar meanings across languages; an example would be *problema* and *problem*.

Comprehension refers to a readers' understanding of a text or word.

Context clues provided by the author and illustrator to understand unknown words (Fisher, Frey, & Lapp, 2008).

Direct instruction refers to explicit teaching word definitions (Kelley et al., 2010).

Embedded definitions refer to word meanings that are written after the word in a given text.

Expressive language refers to producing language through speech or writing (Jalongo & Sobolak, 2011).

Extended instruction refers to additional word activities after shared reading. It can include writing, word walls, or acting out words.

Incidental exposure refers to teaching vocabulary words without giving a direct definition (Coyne et al., 2007).

Morphology refers to the study of word forms.

Morphemes word parts such as "ed," "un," "ing."

Productive vocabulary is what we use in writing or when speaking to others (NICHD, 2000).

Receptive vocabulary is the vocabulary we understand when it is presented in text or we listen to others speak (NICHD, 2000).

Resources refers to additional ways to look up word definitions, such as the use of a dictionary.

Semantic mapping is the organization of words into families or clusters (Kieffer & Lesaux, 2007).

Shared reading is an instructional technique that pairs story books with direct instruction of word definition.

Vocabulary flood is the immersion of students in vocabulary instruction (Labbo, Love, & Ryan, 2007).

Chapter 2: Review of the Literature

For this starred paper I examined research on vocabulary strategies aimed at students in the elementary grades, specifically from kindergarten through third grade. I explored the research on different types of vocabulary instruction in the primary grades and their effectiveness on students with low vocabulary development, English language learners (ELL), and learners with special needs. I also explored the effectiveness of the instruction on receptive, expressive and productive vocabularies of students, as well as the influence on student comprehension.

Importance of Vocabulary Instruction

“Vocabulary is one of the most important areas within comprehension and should not be neglected” (NICHD, 2000). Neuman and Dwyer (2009) defined vocabulary as the words we must know to communicate effectively: words in speaking (expressive vocabulary) and words in listening (receptive vocabulary). Students’ vocabularies play important roles in their lives and future possibilities. Before children even enter school their reading ability can be almost predetermined by their vocabulary knowledge (Beck & McKeown, 2007). Experts agree that when a reader knows at least 90-95% of the words in a text, that reader can achieve acceptable levels of comprehension (Pullen et al., 2010).

It is difficult for children to understand what they read without a strong oral vocabulary foundation (Neuman & Wright, 2014). “Vocabulary’s connection to better reading ability and understanding is that vocabulary is more than just words, it is knowledge” (p. 384).

Understanding a word’s meaning is the knowledge of what a word represents; it is understanding the concepts that are connected to that word, and it is the interconnection of knowledge that

drives comprehension (Neuman & Dwyer, 2009). Thus, developing a large and rich vocabulary is central to effective reading.

The importance of vocabulary instruction becomes more apparent as we realize that children are not entering school with the same vocabulary knowledge. “Some children enter school with thousands of hours of exposure to books and a wealth of rich and supportive oral language experiences; others begin school with very limited knowledge of language and word meanings” (Coyne et al., 2007, p. 74). The importance of vocabulary and the gaps in word knowledge between children from economically advantaged and disadvantaged homes has been well documented for decades (Beck & McKeown, 2007; Brabham, Buskist, Henderson, Paleologos, & Baugh, 2012). By the age of 4 students from high-income families are exposed to an average of 30 million more words than children from low-income families (Neuman & Wright, 2014). These students come to school with significant vocabulary gaps that contributed to reading failures before they entered the school doors (Neuman & Wright, 2014).

Over the years vocabulary instruction has been more of a priority for older age groups, but research indicates that students are beginning school with these vocabulary gaps. The NICHD (2000) identified vocabulary as one of the pillars for comprehension and noted how little research had been conducted on vocabulary instruction outside of third and eighth grade. This is, possibly due to little emphasis on vocabulary instruction in early grades (NICHD, 2000).

Neuman and Wright (2014) argued that vocabulary intervention can ameliorate later reading difficulties. Children with resolved vocabulary delays can go on to achieve grade-level expectations in fourth grade and beyond.

A survey completed by Berne and Blachowicz (2008) indicated that many teachers expressed concerns about a lack of district- or building-wide consistency in vocabulary practices. Teachers understand the benefits of vocabulary instruction on student comprehension, but they had little knowledge as to what instruction is best practice for student growth and understanding. “Classroom teachers suggest they are not confident about best practice in vocabulary instruction, and at times they do not know where to begin to form an instructional emphasis on word learning or to change one that they feel is ineffective” (Berne & Blachowicz, 2008, p. 315). Educators recognize the importance of vocabulary development in school-age children through targeted and teacher-supported instruction and other intervention efforts, but not a consistent understanding of what that instruction should look like (Coyne, McCoach, Loftus, Zipoli, & Kapp, 2009).

Vocabulary Development

“Words may seem like simple entities, but they are not” (Jalongo & Sobolak, 2011, p. 423). Words connect experience and knowledge, and their meanings vary depending on the linguistic contexts in which they can be found, including in literal and figurative contexts (Jalongo & Sobolak, 2011). When examining strategies used to teach vocabulary, it is important to first understand how vocabulary is learned. It is often believed that learning vocabulary happens in an “explosion,” referring to the time in a child’s life during the toddler years where children begin to orally express new words in a 2- to 3-week period (Neuman & Wright, 2014). This explosion can seem as though the learning of all these new words happened in a relatively short amount of time; however, this is not true for the development of vocabulary. As children grow, they are storing and making meaning of the words they hear, before they are able to verbally express these words. Children can understand the meaning of a word long before they

are able to express that word verbally. Much is the same of learning a new language; it is usually easier for individuals to understand a new language as it is spoken before they are able to speak or write the language. “The language development of young children is unique in that it is estimated that their receptive vocabulary is four times greater than their expressive vocabulary” (Jalongo & Sobolak, 2011, p. 422).

Virtually all early vocabulary development occurs through incidental learning by way of the child’s early oral context, which ideally includes a language-rich environment in the home where the child engages in reciprocal verbal exchanges with others, listens to others speak, and listen to books read aloud (Pullen et al., 2010). Vocabulary learning is also incremental and not an all or nothing approach (Coyne et. al., 2009). According to Coyne et al. (2009), students’ knowledge of word meaning develops from no knowledge, through varying levels of partial knowledge, to more full and complete knowledge” (p. 5). Coyne et al. also observed that how well a word is known is determined by whether a student can discriminate a word from other words and understand it in novel contexts and in different forms. Knowing the definition of a word is not the same as knowing the meaning of a word (Fore III, Boon, & Lowrie, 2007). The knowledge of a word’s meaning becomes gradually more refined with every new exposure to that word (Coyne et al., 2009).

In some cases partial understanding of a word is sufficient to have understanding of a text, but when reading expository texts a more in-depth and a thorough understanding of vocabulary is needed (Wood, Vintinner, Hill-Miller, Harmon, & Hendrick, 2009). A well-developed oral vocabulary is a prerequisite for becoming a proficient reader, because when readers see a word for the first time it helps them understand what they are reading. Over time

their print vocabulary increases so their reading becomes more automatic (Morgan & Meire, 2008).

According to research completed by MacDonald and Figueredo (2010), the most effective way to improve language is for children to engage in many conversations with language proficient adults, who are the most effective role models. Unfortunately, not every child has access to a positive and rich early oral vocabulary environment, and the lack of a vocabulary development can have measurable short- and long-term effects on children (Pullen et al., 2010). “Students with limited vocabulary knowledge know fewer words and have more narrow knowledge of words with which they were familiar” (Beck & McKeown, 2007, p. 254). Intervention is critical for students with smaller vocabularies and the window of opportunity closes quickly (MacDonald & Figueredo, 2010).

Word Selection

Conversation is the primary source for young children to learn new words, but when children reach school-age, oral contexts are less effective because everyday conversation rarely contains words beyond common ones (Beck & McKeown, 2007). With this understanding of vocabulary development, there is the realization that children should be immersed in new words for extended periods in oral and written vocabulary experiences as early as possible and throughout their instructional years (Neuman & Wright, 2014).

When thinking about words for instruction, teachers should select target words in advance and plan instructional support based on those particular words. Specifically, books should be chosen based upon vocabulary (Kindle, 2009). Beck and McKeown (2007) suggested to focus on words that are partially learned, those that between 20% and 70% of a target group of

students know because students can make gains on these words. Kelley et al. (2010) recommended teaching a relatively small number of words, their elements, and related words in rich contexts. Most researchers agree that the number of word meanings in a student's lexicon is important, and how well students know word meanings is a significant dimension of vocabulary (Coyne et al., 2009). Kindle (2009) emphasized the importance of the quality of words that students are learning.

There are three different types of words: Tier 1, Tier 2 and Tier 3 words. "Tier 1 words are the easiest for children to acquire as part of everyday language, words such as car and house would fall under this category" (Kindle, 2009, p. 202). Researchers believe that instructional focus does not need to be placed on these types of words, because most children will pick them up without explicit vocabulary instruction of these words. Tier 1 words need to be taken into consideration when working with ELL students who may be unfamiliar with words that native speakers naturally acquire in their everyday language. The overall push for vocabulary instruction is to focus more on academic words.

Tier 2 words are high-frequency words for mature language users found across a variety of domains (Kelley et al., 2010). Many studies suggest the focus of vocabulary instruction should be on Tier 2 words, because children are less likely to acquire and become proficient using Tier 2 words independently, and they are less likely to learn these words through grade-level materials (Beck & McKeown, 2007). Tier 2 words are often referred to as *academic vocabulary*. Tier 2 words are less common in everyday conversation, but appear with high frequency in written language making them ideal for instruction during read-aloud (Kindle,

2009). “Tier 2 words often focus on more abstract or complex ideas, and include words such as courage, confused, or intentional” (Jalongo & Sobolak, 2011, p. 422).

Academic vocabulary instruction should be incorporated into standard practice to improve language skills and consequently boost reading comprehension for struggling readers (Neuman & Dwyer, 2009). Neuman and Wright (2014) contended academic thinking through oral vocabulary must begin early on to enhance the ability of children’s communication. A key aspect of teaching young children sophisticated words is that the earlier word meanings are learned, the more readily they are accessed later in life (Beck & McKeown, 2007).

Tier 3 words include more content-specific words that are taught in subjects such as math, science, and social studies. Some researchers believe that these words do not require extensive teaching because they are content-specific (Jalongo & Sobolak, 2011). Other researchers argue that content-related words must be considered early because these words are critical for developing knowledge in key subject areas (Neuman & Wright, 2014). They argued that introducing students to content-related vocabulary helps students build word knowledge and concepts essential for developing knowledge systematically from texts (Neuman & Wright, 2014).

The findings suggest educators need to be more proactive in selecting words with greater application to academic text and complex concepts (Neuman & Wright, 2014). Word selection is important when teaching students with low vocabularies because students need to know the deeper meaning of words in order to access the content-specific words they encounter (Kelley et al., 2010).

Types of Vocabulary Instruction

Pullen et al. (2010) observed that students as young as kindergarten, including students with low vocabularies, can develop and understand complex vocabulary. Vocabulary instruction will enhance a student's literacy development, if it provides word knowledge connections to be formed and it allows those connections to be flexible in their definition to help make sense of new words (Beck & McKeown, 2007). Vocabulary instruction must be more than identifying or labeling words; it should be about helping children build word meaning and form ideas about words representations. Vocabulary instruction must be more than having students looking up words in a dictionary; learning a definition is not enough for development of word knowledge (Kindle, 2009). Dictionaries are organized with abbreviated definitions and often lack relevant examples with familiar language (Kelley et al., 2010).

Children develop skills that will help in comprehending text by understanding words and their connections to concepts and fact (Neuman & Dwyer, 2009). Children need planned, sequenced, and systematic vocabulary instruction (Neuman & Wright, 2014). A focus on vocabulary development during reading instruction leads not only to a greater ability to infer meanings, but also to an increased ability to comprehend what has been read (Fore III et al., 2007). This is particularly important for low-income children who are more likely to begin school with fewer word concepts than children from middle- and upper-socioeconomic classes (Labbo et al., 2007). The following sections examine various forms of vocabulary instruction and discuss their effectiveness in promoting word understanding for different types of learners.

Incidental Exposure

Incidental exposure refers to teaching word learning by saying the word and not giving explicit meaning to the word (Coyne et al., 2007). This is often accomplished through the use of shared stories with rich vocabulary content in a large group setting. The theory suggests that if the conditions in a classroom provide spontaneous opportunities for vocabulary development, then it will be learned. Incidental exposure creates a word rich environment and maximizes intentional and incidental word learning, which assists students to learn new word meanings (Brabham et al., 2012).

A prior vocabulary can make a difference in how children respond to learning activities. Children with larger vocabularies may have more efficient retrieval processes that enable greater word-learning gains from incidental exposure to novel words (Justice, Meier, & Walpole, 2005). Fast mapping the notion that words can be learned based on a single exposure is not how children learn; they learn by predicting relationships between objects and sounds over time in an incremental fashion (Neuman & Wright, 2014).

Neuman and Wright (2014) indicated that researchers have begun to question whether incidental instruction through book reading may be substantial enough to significantly boost children's oral vocabulary development. Children at risk for reading disabilities and students with lower initial vocabularies are less likely than their peers with higher vocabularies to learn words incidentally while listening to stories, because these children are less able to make use of context to infer word meanings on their own (Coyne et al., 2007).

Teaching a large group of words at once is not sufficient enough to help students with low vocabularies make gains (Gillam, Olszewski, Fargo, & Gillam, 2014). For most students,

word learning requires multiple exposures to new words over an extended period of time. With each new exposure, the word becomes incrementally closer to being learned (Neuman & Wright, 2014). Exposure to words through storybooks is not likely to be potent enough to narrow the substantial gap for children who may be at risk for reading difficulties. Teachers need more intentional strategies that require students to process words at deeper levels of understanding (Neuman & Wright, 2014).

Vocabulary Flood

Students who come to school with gaps in their vocabulary are well behind their peers and most in need of added vocabulary words (Brabham et al., 2012). The immersion of students in vocabulary is referred to as a “vocabulary flood,” with the focus being on helping children notice and reuse words (Labbo et al., 2007). The ideas behind the vocabulary flood is that children are most likely to learn the words they hear the most. In a study of 4-year-olds, it took 24 repetitions for 80% of children to successfully remember a new word, which demonstrates that the frequency of exposure strongly predicts word learning and seems to have long-term effects for later language and reading levels (Neuman & Wright, 2014). Immersing students in an environment that provides instruction on rich vocabulary helps students develop greater depth and breadth of vocabulary knowledge (Brabham et al., 2012).

Research has proven that the flood of words each day has a more significant effect on word learning than teaching 10 to 12 words a week (Brabham et al., 2012). Rather increasing the amount of words students are exposed to may not be enough to result in accelerated and lasting word learning. Techniques of how words are taught need to be organized in a way to help children retain the amount of vocabulary taught (Brabham et al., 2012).

Direct Instruction

“Teachers need to provide more explicit vocabulary instruction for children with smaller vocabularies” (Coyne et al., 2007, p. 75). The goal of direct vocabulary instruction is to introduce students to as many new words as possible (Coyne et al., 2009). Direct instruction is often practiced through an interactive read aloud, which defines target vocabulary words in child-friendly language and uses strong text and picture clues. Direct instruction approaches are based upon the theory that in order for students to work through more challenging text, they need direct explicit teaching of word-learning strategies regularly and have frequent review of these strategies (Kelley et al., 2010).

Students who receive interactive read alouds focusing on explaining vocabulary words made larger vocabulary gains than those who received no explanation of words (Brabham et al., 2012). Neuman and Wright (2014) showed that vocabulary gains were significantly higher when words were identified explicitly rather than implicitly. Direct instruction of vocabulary words is most beneficial to students when it focuses on both definitional and contextual explanations of words (Pullen et al., 2010). When teachers integrate new word concepts with known concepts and provide frequent opportunities for students to apply new words in meaningful ways, explicit instruction is most effective (Wood et al., 2009).

However, direct instruction is not sufficient for increasing word knowledge for students with learning disabilities (Kim & Linan-Thompson, 2013). In their study of students with learning disabilities, Kim and Linan-Thompson indicated that the high levels of intensity of direct instruction showed low levels of acquisition of word meanings (Kim & Linan-Thompson, 2013). Every single word cannot be taught through direct instruction, and it is not effective for

all types of learners. Therefore, other methods need to be taught. Students need more or less intensive instruction depending upon their learning abilities (Kim & Linan-Thompson, 2013). When teachers provide both implicit and explicit instruction, students made large gains (Neuman & Wright, 2014).

Shared Reading

Immersion and implementation of words can occur through multiple exposures to unfamiliar, interesting words in daily read alouds, time for self-selecting books, independent reading, interactions with words, and exploration of words through writing and literature circles (Brabham et al., 2012). Shared reading is an instructional technique that pairs children's story books with direct instructional vocabulary techniques. Trade books, or storybooks, are often used for read alouds and are excellent resources for vocabulary development because they use more complex vocabulary than vocabulary found in conversation. Storybooks usually have engaging stories and interesting pictures to hold students' attention and motivate them to pay attention to words and their meanings (Coyne et al., 2007).

Shared reading also goes beyond whole group vocabulary instruction and incorporates various word learning techniques and extended word learning activities. Research demonstrates that a standard shared reading experience begins with a whole class read alouds where teachers model various word learning techniques, such as embedded definitions, context clues, activation of background information, and resource use. Texts are selected with vocabulary in mind, and words are preselected and practiced by teachers before teaching. After 10-14 min of the large group portion of the instruction, students are then usually given discussion or writing activating based on the story (Fisher et al., 2008, p. 555).

Studies have shown that the manner in which adults read to children make a considerable difference to children's language during reading interactions (Justice, Meier, & Walpole, 2005). Students in primary grades can learn the meanings of unknown words when provided with embedded definitions while listening to stories read aloud (Coyne et al., 2007, p. 75). Teachers also share think aloud to demonstrate how they would solve unknown words, by using word clues, picture clues, and context clues. Adults can elaborate new words when they come to them in a storybook to help accelerate children's word learning. Through large-group shared reading, effective teachers will teach a range of literacy skills and knowledge of the word, sentence and text level (Fisher et al., 2008).

Context clues are one aspect of shared reading that teachers model and that students practice in collaborative groups with ability-appropriate text. The author and illustrator provide context clues to help understand unknown words. These could include embedded definitions, synonyms, antonyms, comparisons, contrasts, descriptions, and examples (Fisher et al., 2008). Context clues look for clues before or after a hard word, and can be strong or weak clues (Baumann, Ware, & Edwards, 2007). Context clues give students tools to help figure out an unknown word in a text.

Context clues can also include looking at the word itself for word parts to help with the understanding of a word. "Word parts can be described as inside-the-word strategies to figure out word meanings such as prefixes, suffixes, roots, bases, word families, and cognates" (Fisher et al., 2008, p. 551). The morphology instruction helps students focus on finding familiar patterns in unfamiliar words in an effort to help students make sense of the way words work and improve understanding (Kelley et al., 2010). In small, collaborative groups, teachers talk about

these word parts and make chart to show how the addition of them changes the form and part of speech of the word (Kelley et al., 2010). Teaching context clues shows students how to solve words independently in addition to knowing definitions (Fisher et al., 2008).

The use of context clues independently is beneficial only after numerous encounters with words, and would be best geared toward students who have developed word part understanding most likely in third grade and above (Fisher et al., 2008). Context clues also do not work every time. When looking at the word or the clues given by an author does not work, then students must use additional resources (Fisher et al., 2008).

Shared reading allows students an opportunity to work collaboratively to practice word decoding strategies for text more at their level, or to work independently on writing activities that give opportunities to use new words in writing. By giving students opportunities to practice using the different forms of words in different contexts, students will increase their understanding of how words work and have strategies in their toolkit for when they encounter unfamiliar words, especially while reading independently (Kelley et al., 2010). Read alouds approaches have demonstrated promise for improving student knowledge, but research indicates they lack the intensity to close the early vocabulary gap without extended instructional support for students that need it (Fien et al., 2011). “Story book reading intervention gains are significantly higher for high-ability students than for low-ability students” (Pullen et al., 2010, p. 113). This shows that although shared reading includes components that help students with vocabulary development, it is not the best instructional technique for all types of learners. Students from special populations such as ELL, low-vocabulary students, and special education students may require even more focus and extended instruction in addition to shared reading.

Extended Instruction

Extended instruction provides students with opportunities to interact with words beyond a shared reading experience (Coyne et al., 2009). “It is necessary for teachers to do more than simply read aloud lots of books to children who have low vocabulary knowledge because they are likely to remain low in vocabulary knowledge unless additional instructional activities are implemented” (Labbo et al., 2007, p. 587). Activities that encourage deeper processing challenge students to move beyond memorizing definitions to understanding words at a richer, more complex level (Coyne et al., 2007).

According to Coyne et al. (2007), extended vocabulary instruction provides explicit teaching that gives multiple exposures to target words in varied contexts to encourage deep processing. The research supporting extended instruction indicates children must be provided with plenty of opportunities to use words in the classroom (Neuman & Dwyer, 2009). Educators must determine if enough opportunities are provided for students to learn through hands-on primary experiences (MacDonald & Figueredo, 2010). “Rich instruction promotes excellent vocabulary learning outcomes for both high- and low-achieving students and is an effective way in which to teach vocabulary in the primary grades” (Pullen et al., 2010, p. 114). Extended instruction can come in a variety of contexts, and should be tailored to the age and vocabulary needs of learners.

Coyne et al. (2007) found that on expressive, receptive definition, and context measures students scored significantly higher on words that received extended instruction than on words that received embedded instruction. Extended instruction results showed that it is better method to use for students who have entered school with higher vocabularies. “The primary limitation of

extended vocabulary instruction is the amount of time required to teach each target word”

(Coyne et al., 2009, p. 3).

Extended Instruction for Beginner/ Early Readers

Read alouds are a common form of vocabulary instruction for young children. However, research shows that students in Kindergarten and first grade, benefit more from a rich instruction of interacting with words (Sobolak, 2011). “Young children learn vocabulary most effectively when they are able to explore the word in multiple contexts and receive information about words and how they are used” (Pullen et al., 2010, p. 112).

When teachers make children aware of the meaning of words and engage them using those words in meaningful context, children achieve greater gains than from explicit instruction alone (Neuman & Wright, 2014). “Kindergarten students require more support to learn words during read-alouds than their older schoolmates” (Kindle, 2009, p. 209). For example, teachers may need to use facial expressions, sounds, or physical movements to demonstrate word meaning (Kindle, 2009). Restructuring and altering a passage by substituting easy words for hard words, and clarifying definitions by selecting relevant words is another way for teachers to support early readers (NICHD, 2000). Familiar songs, chants, and poems provide authentic, engaging, language-rich activities that give students the opportunity for phonemic awareness (MacDonald & Figueredo, 2010).

Children need varied opportunities to demonstrate their learning and to create a bridge between play and learning (Jalongo & Sobolak, 2011). Vocabulary tasks should be restructured to meet the needs of learners, specifically for low-achieving or at-risk students (NICHD, 2000).

Older Primary Students

Jalongo and Sobolak (2011) advocated active involvement on the part of the learner for all age levels to promote greater learning. For older primary students in second to third grade, vocabulary instruction should use collaborative learning activities, more in-depth learning of words, and the opportunity to practice with words (Kelley et al., 2010). Older primary students may benefit from rich explanations of newly encountered words that include as much information about the words as possible (Neuman & Wright, 2014). This may include defining words, providing synonyms, pointing to illustrations, and using the words in other contexts.

Extended activities for older primary students move more toward independent daily writing workshops to provide opportunities to develop expressive vocabulary and demonstrate intertextual links in their word choice (Baumann et al., 2007). Writing workshops after shared reading experiences give students opportunities to practice new vocabulary words and demonstrate understanding of those words. This extended opportunity to manipulate and create understanding for new vocabulary, gives students practice to use new words appropriately in their writing. “When students can accurately use new vocabulary in writing, they have a sound understanding of the word’s definition and usage” (Kelley et al., 2010, p. 11). Another extended activity for older primary students and a resource during writing workshop is a Word Wall of interesting vocabulary. Word Walls can be created by teachers and students where students offer words from books they read or content area vocabulary words (Baumann et al., 2007). “Word Walls can be organized by different word structure parts, such as prefixes and suffixes, and can be used to teach word structure or a reading and writing resource for students” (Baumann et al., 2007, p. 114). Students need to be allowed to hear and practice words in many contexts so that

they can practice and understand shades of meaning and acquire knowledge of all the ways words can be used (Kelley et al., 2010).

Many older primary students may be ready for beginning word-learning activities that focus more on word parts and meanings. Research shows that students need to be instructed on how to figure out unfamiliar words instead of a relying on dictionaries because students are constantly encountering unfamiliar words in texts (Fisher et al., 2008). Older primary students need to learn how to pull words apart, find helpful context clues, think of a related word that looks the same, or think about when they heard the word prior to this reading (Kelley et al., 2010). A previously discussed strategy to assist with word learning would be context clues, discussed with shared reading strategies. Another way for older primary students to encounter new word parts is through semantic organization.

Semantic Organization

“When confronting a new word, students often have a vague notion of what the word means, but they lack specific understanding of it, or may not recognize the words at all” (Kieffer & Lesaux, 2007, p. 134). When words are organized into families or clusters, students are using semantic organization sometimes referred to as semantic mapping. This approach promotes learning of high-frequency prefixes and suffixes (Baumann et al., 2007, p. 114). Looking at word parts and relationships among words and their meanings refers to the morphology of words.

Understanding morphology can help students broaden their vocabularies, and it follows a relatively predictable progression and sequence (Kieffer & Lesaux, 2007). In other words, students will understand and have knowledge of certain word parts before others. In older

primary grades most students would be working on basic morphemes such as “ed,” “ing,” “s,” “un,” and “re” and would move on to more complex morphemes when they are ready or in higher grades. The morphemes or word parts can be bound or unbound. Bound morphemes, include prefixes and suffixes and cannot stand alone as a word; unbound morphemes such as root words can stand alone (Kieffer & Lesaux, 2007). There are two types of bound morphemes: inflection morphemes that change the tense of a word or number of a word, such as “ed” and “s” and derivational morphemes that change the word’s part of speech, such as “-ity” and “-tion” (Kieffer & Lesaux, 2007). The more students learn and explore these types of morphemes, the greater understanding of words they will have to assist in understanding text and academic vocabulary that shows up in later school years (Kieffer & Lesaux, 2007).

Semantic word organization teaches word meaning in groups or clusters. This technique includes extending understanding and meanings of known words by teaching new words for known concepts and new meanings for already known words (Brabham et al., 2012). Many texts contain many complex but decipherable words; if children have the abilities to attack and dissect them, it is essential to their understanding of text (Kieffer & Lesaux, 2007).

Another way to instruct using morphology and semantic mapping is to design activities that emphasize semantic relatedness and how words are conceptually related to other words and concepts (Zipoli, Coyne, & McCoach, 2011). The thinking behind this technique is that students cannot be expected to learn new words unless they have already established a concept or schema that those words can be assimilated and attached (Brabham et al., 2012). Teaching words in categories aids in the retention of these words by facilitating children’s comprehension of using

what they already know (Neuman & Wright, 2014). “The more words you know, the easier it is to learn more words” (Neuman and Dwyer, 2009, p. 384).

Children learn best when words are presented in integrated contexts that make sense to them, so using the base knowledge of words that children already know provides a framework for learning new words (Neuman & Wright, 2014). One way to use semantic mapping is to relate words to a category. For instance, a set of words connected to a category such as *energy* can help children remember not only the words themselves but the linkages in meaning between them (Neuman & Wright, 2014).

Another semantic mapping activity would have children look at two picture cards with words on them and make inferences, and comparison about how these words work together (Neuman & Wright, 2014). Kindle (2009) asserted that extended mapping is required to achieve complete word knowledge, because initial learning of word meanings tend to be incomplete. “Knowing a word means not only knowing its literal definition but also knowing its relationship to other words, its connotations in different contexts, and its power to transformation into various other forms” (Kieffer & Lesaux, 2007, p. 136).

Semantic mapping is beneficial not only for not only older primary students, but also learners from special learning groups such as ELL and students with learning disabilities. Neuman and Wright (2014) found that clustering words into categories accelerated word learning and comprehension. Zipoli et al. (2011) found semantic grouping to be effective for students with disabilities. Research has also shown significantly improved word knowledge and comprehension for native English speakers and students learning English (Brabham et al., 2012).

Special Population Learners

Special population learners refers to ELL students, students with low vocabularies, and students with learning disabilities. These students need more intensive vocabulary instruction in order to be proficient readers (Jalongo & Sobolak, 2011; Purdy, 2008). However, minimal research is available regarding vocabulary instruction techniques for primary students with learning disabilities.

Students with limited vocabularies especially ELL students are unaware that words can carry different meanings (Brabham et al., 2012). Tiered instruction, which was discussed previously, is especially important for ELL students. All three vocabulary tiers are crucial for word understanding. Typically these students are not going to have the same exposure to words as native English speakers. Therefore, it is even more important to explain Tier I words in order for ELL students to be successful. It is important for ELL learners to learn the labels for many words that native English speakers already know (August, Carlo, Dressler, & Snow, 2005). It is best not to assume that students know the same conversational vocabulary as their native English-speaking peers. ELL students benefit from a social environment in which they are given opportunities to interact with proficient English speakers and also have a desire to communicate and to be understood in authentic ways (Purdy, 2008).

For ELL students and other students with limited vocabularies, it is necessary to activate prior knowledge with illustrations before moving to new words (Brabham et al., 2012). “ELL students learn a word best by trying it out for themselves, explaining its meaning in their own words and connecting it to their own background knowledge” (Purdy, 2008, p. 48). August et al. (2005) described three methods for building ELL students’ vocabulary.

1. Capitalizing on a student's first language knowledge if it shares cognates with English (Spanish is a language that would be appropriate) (August et al., 2005).
"Teaching Spanish-speaking students to recognize and use cognates-words with similar spelling and meaning in two languages helps students use their first language as an asset to improve their English reading comprehension" (Kieffer and Lesaux, 2007, p. 142).
2. Breaking down words into meaningful parts is important (Kieffer & Lesaux, 2007).
Low-vocabulary knowledge students have a more difficult time getting past their prior understandings of words as concrete nouns to the more abstract nouns they are less familiar. For example, students have a hard time understanding *welfare* as meaning *well-being*, instead of their concrete concept of welfare as government assistance (Kelley et al., 2010).
3. ELL students particularly benefit from review and practice (August et al., 2005).
"ELL students take 5 to 7 years to become proficient in the academic language of school" (Purdy, 2008, p. 45). Research shows that repeated practice is not only beneficial for EL students' vocabulary development, but for all special population learners (Kindle, 2009).

Electronic visuals and sounds in video, accompanied by informational books, provide ELL children with multiple strategies for acquiring word knowledge. Neuman and Wright (2014) highlighted that frequency of exposure in a variety of meaningful contexts over an extended period of time to enhance word learning for students may significantly narrow the gap between ELL learners and native English learners.

Unfortunately, research in vocabulary instruction for students with learning disabilities is lacking (Jitendra, Edwards, Sacks, & Jacobson, 2004). Jitendra et al. emphasized the need for additional research.

Chapter 2 Summary

Vocabulary instruction is an important aspect of reading, and is critical for student understanding. There is a need for more professional development related to vocabulary instruction, which should cover the development of vocabulary and effective instructional practices. The types of vocabulary words that are used are important to consider for instruction and words can be separated into three different tiers. A variety of vocabulary strategies have been researched which some have shown greater results and success than others. Common instructional strategies for primary students include incidental exposure, vocabulary flood, direct instruction, shared reading, and extended instruction. Extended instruction includes extension activities that build upon vocabulary after the initial vocabulary lesson. Extension activities include practice with writing vocabulary, vocabulary word walls, small-group instruction, and practicing context clues.

There are some strategies that are effective for certain students based on their age and vocabulary knowledge level. ELL students require more word repetition, a focus on vocabulary relationships to their native language, and learning even the lowest level of tiered vocabulary words. Younger primary students require more support with vocabulary instruction and extended activities should be more play-based. Older primary students should focus on word parts and how they change the meaning of words; they can begin to use context clues, writing activities, and semantic organization. Research on vocabulary instruction for primary students is

still relatively new and more studies need to be conducted to find effective instruction with lasting results.

Chapter 3: Discussion

The purpose of this starred paper was to determine which strategies are effective for teaching vocabulary in the primary grades. Specifically, I reviewed research conducted with specific learning groups and primary grade students to evaluate whether vocabulary instruction produced promising and long-lasting effects.

Two studies demonstrated that gains in oral vocabulary development can predict growth in comprehension and later reading performance (Beck & McKeown, 2007; Neuman & Wright 2014). These researchers supported the need for vocabulary instruction and that instruction should happen as early as possible. “There is emerging consensus that schools need to focus on enhancing children’s vocabulary from the beginning of schooling” (Beck & McKeown, 2007, p. 408).

When reviewing effective interventions for students, I kept guidelines in mind that would deem an intervention successful. Vocabulary interventions that have demonstrated promising effects on comprehension include teaching word definitions and structural forms of words, deep processing of words, and multiple exposures to words (Fien et al., 2011). “An intervention program must be specific and focused, not just more of the same thing over a longer period of time” (MacDonald & Figueredo, 2010, p. 408). Vocabulary intervention must address not just a lack of knowledge or skill, but also take into consideration the experiences of the learner to help guide instruction (Hart & Risley, 2003).

In this review of the research, extension activities appear to be a promising approach to developing primary students’ vocabulary knowledge. The opportunity to work with words and their meanings are needed to improve the effectiveness and efficiency of vocabulary instruction

(Zipoli et al., 2011). Extended instruction paired with shared reading provides a more comprehensive approach to vocabulary instruction and allows the flexibility to tailor the types of activities and duration of activities more easily than incidental exposure, word immersion, and direct instruction alone. Extended instruction that focuses on word learning and an opportunity to explore words in a developmentally appropriate way appears to benefit all types of learners. This type of instruction, paired with more specific approaches to special populations such as small group learning, word mapping, and immersion of words, seemed to produce promising, however, not lasting effects. “Small-group vocabulary instruction is a promising mechanism to close the vocabulary achievement gap for students at risk for comprehension difficulties” (Fien et al., 2011, p. 308).

Recommendations

Reading vocabulary is critical to the comprehension process of skilled readers (NICHD, 2000). After reviewing the research on vocabulary instruction strategies in the primary grades, I have a few recommendations for vocabulary instruction. My first recommendation is that more emphasis must be placed on early childhood educational support and programs available to the families of children prone to having low vocabularies. These would include children from low socioeconomic homes and ELL students. My belief for this type of instruction comes from the evidence in research showing the large vocabulary gaps of children entering school and the lack of effective evidence of vocabulary instruction. It is apparent from research that current instruction does not create lasting vocabulary growth or show growth at a rate fast enough to catch low vocabulary students up to their higher vocabulary peers. Hart and Risley (2003) found in their study of children they could easily increase the size of the children’s vocabularies by

teaching them new words, but they were unable to accelerate the rate of vocabulary growth so that it would continue beyond their developmental trajectory of word learning and have word learning results be permanent. “Even the best of intervention programs could only hope to keep the children in families on welfare from falling still further behind the children in the working-class families” (Hart & Risley, 2003, p. 117). As an educator, the lack of research showing significant lasting vocabulary growth caused me to worry for the future of low-vocabulary students and makes me realize that we are not implementing vocabulary strategies early enough.

Until we put money into early childhood programs and provide struggling families with the education and resources they need, the vocabulary gap is never going to close. Parents have been assigned the task of socializing their children by society, but some parents are not equipped with the education and skills necessary to equip their children with successful vocabularies (Hart & Risley, 2003). “Three-year-old children from families on welfare not only have smaller vocabularies than children of the same age in professional families, but they also add new words more slowly” (Hart & Risley, 2003, p. 114). Hart and Risley also found that for the children they observed at ages 1 and 2, their vocabularies were predictors of their language skills at ages 9 and 10. If students are already behind by age 1, something needs to be done before they enter primary school because, as of right now, we do not have the tools and interventions necessary to catch students up to their higher vocabulary peers.

I know that I cannot control the home lives of my students or intervene when they are young. My students come to me with vocabulary gaps and it is up to me to help them catch up the best that I can. After reading research it appears there is no magic fix that lasts forever, but there are tools and strategies I can use to hopefully help them continue to succeed. As sobering

as that thought is, as an educator it is my responsibility to take what I know about vocabulary instruction and interventions and give my students the best instruction and intervention that I can. If I do nothing, it does not help them grow. Rather than comparing them to their peers, I will concentrate instead on giving students the skills and tools to be as successful as they can and to focus on their individual growth. “With the large vocabulary gap among students, teaching vocabulary has become an issue of equity” (Berne & Blachowicz, 2008, p. 208).

I believe the best vocabulary approaches with the most research are shared storybook reading with extended instructional vocabulary activities that are designed with learners’ vocabulary needs and previous backgrounds in mind. A mixture of vocabulary instructional approaches works better than any one approach used alone. Students should learn words in many different contexts and through a variety of exposures. Words should be found useful in many different contexts and come from content learning materials. Younger primary students can use and explore words beyond storybooks by acting words out, labeling pictures, and creating simpler definitions. Promising effective instruction for older primary students would be the use of semantic mapping, cumulative word wall with prefixes and suffixes grouped by meaning to reinforce parts of speech, and writing opportunities to use words (Kieffer & Lesaux, 2007).

For students in special populations, research focused more on the nature of vocabulary development and instructional practices to try to support that development. However, evidence was lacking due to limited research in these areas. Preliminary support shows that small group instruction appears to enhance the vocabulary knowledge and expository retellings of students with low vocabulary and language skills (Fien et al., 2011). Vocabulary programs for ELL

students should include new words taught in meaningful contexts, words encountered in a variety of contexts, word knowledge focused on depth of meaning, as well as spelling, pronunciation, morphology, and syntax, and access to the text's meaning in Spanish (Kieffer & Lesaux, 2007).

Vocabulary instruction should also be driven by assessment to allow the focus to be on students' needs and have the opportunity for review of words. Instruction should provide a good deal of practice that is active, guided, and extensive for all learners (Neuman & Dwyer, 2009). Instruction should include observation and progress-monitoring assessments to inform further instruction and allow for re-teaching if necessary (Neuman & Dwyer, 2009).

I believe vocabulary instruction must be emphasized and supported with professional development on strategies. Content-area textbooks should not be the only source of information for effective vocabulary knowledge, and if the only knowledge about vocabulary development has come from textbooks that is insufficient in aiding classroom effective instruction (Wood et al., 2009). Repeated exposure to vocabulary material is important for learning gains, as well as extended and rich instruction of vocabulary (NICHD, 2000). "Many researchers agree that for students to have the best chance of achieving ownership of a word, the instructional encounters provided to students must be rich, interactive, and multi-faceted" (Sobolak, 2011, p. 14).

Vocabulary instruction leads to gains in comprehension. Vocabulary can be learned incidentally in the context of storybook reading or from listening to the reading of others. Repeated exposure to vocabulary items is important for learning gains. The best gains were made in instruction that extended beyond single class periods and involved multiple exposures in authentic contexts beyond the classroom. Pre-instruction of vocabulary words prior to reading

can facilitate both vocabulary acquisition and comprehension. “The restructuring of the text materials or procedures facilitates vocabulary acquisition and comprehension” (NICHD, 2000).

Conclusion

Vocabulary instruction is important to reading comprehension of students (Baumann et al., 2007; Pullen et al., 2010). Students begin school with a variety of vocabulary experiences and until students receive the same type of vocabulary instruction from their home experiences, it is up to educators to provide effective vocabulary instruction through a variety of extended instructional activities based on students’ developmental needs. “Various inquiries document that when teachers engage students in word play and promote their metacognitive knowledge about word use, students acquire an interest in words, develop an appreciation of word choice, and expand their vocabulary” (Baumann et al., 2007, pp. 116-117).

I suggest that further research needs to be conducted regarding vocabulary development instruction that produces lasting effects. “There is little chance of closing the gaps between students who have adequate and limited vocabulary knowledge until there is success in developing and implementing a research-based vocabulary development program” (Jalongo & Sobolak, 2011, p. 423). The hours of intervention needed to equalize children’s early experience makes clear the enormity of the effort that would be required to change children’s lives, and the longer the effort is put off, the less possible the change becomes (Hart & Risley, 2003).

References

- August, D., Carlo, M., Dressler, C., & Snow, C. (2005). The critical role of vocabulary development for English language learners. *Learning Disabilities Research & Practice, 20*(1), 50-57. doi:10.1111/j.1540-5826.2005.00120.x
- Baumann, J. F., Ware, D., & Edwards, E. C. (2007). "Bumping into spicy, tasty words that catch your tongue:" A formative experiment on vocabulary instruction. *Reading Teacher, 61*(2), 108-122. doi:10.1598/RT.61.2.1
- Beck, I. L., & McKeown, M. G. (2007). Increasing young low-income children's oral vocabulary repertoires through rich and focused instruction. *Elementary School Journal, 107*(3), 251-271.
- Berne, J. I., & Blachowicz, C. L. Z. (2008). What reading teachers say about vocabulary instruction: Voices from the classroom. *Reading Teacher, 62*(4), 314-323.
- Brabham, E., Buskist, C., Henderson, S. C., Paleologos, T., & Baugh, N. (2012). Flooding vocabulary gaps to accelerate word learning. *Reading Teacher, 65*(8), 523-533. doi:10.1002/TRTR.01078
- Coyne, M. D., McCoach, D. B., & Kapp, S. (2007). Vocabulary intervention for kindergarten students: Comparing extended instruction to embedded instruction and incidental exposure. *Learning Disability Quarterly, 30*(2), 74-88.
- Coyne, M. D., McCoach, D. B., Loftus, S., Zipoli, J., Richard, & Kapp, S. (2009). Direct vocabulary instruction in kindergarten: Teaching for breadth versus depth. *Elementary School Journal, 110*(1), 1-18.

- Fien, H., Santoro, L., Baker, S. K., Park, Y., Chard, D. J., Williams, S., & Haria, P. (2011). Enhancing teacher read alouds with small-group vocabulary instruction for students with low vocabulary in first-grade classrooms. *School Psychology Review, 40*(2), 307-318.
- Fisher, D., Frey, N., & Lapp, D. (2008). Shared readings: Modeling comprehension, vocabulary, text structures, and text features for older readers. *Reading Teacher, 61*(7), 548-556. doi:10.1598/RT.61.7.4
- Fore III, C., Boon, R. T., & Lowrie, K. (2007). Vocabulary instruction for middle school students with learning disabilities: A comparison of two instructional models. *Learning Disabilities--A Contemporary Journal, 5*(2), 49-73.
- Hart, B., & Risley, T. R. (2003). The early catastrophe. *Education Review, 17*(1), 110-118.
- Hawkins, R. O., Musti-Rao, S., Hale, A. D., Mcguire, S., & Hailley, J. (2010). Examining listening previewing as a classwide strategy to promote reading comprehension and vocabulary. *Psychology in the Schools, 47*(9), 903-916. doi:10.1002/pits.20513
- Jalongo, M., & Sobolak, M. (2011). Supporting young children's vocabulary growth: The challenges, the benefits, and evidence-based strategies. *Early Childhood Education Journal, 38*(6), 421-429. doi:10.1007/s10643-010-0433-x
- Jitendra, A. K., Edwards, L. L., Sacks, G., & Jacobson, L. A. (2004). What research says about vocabulary instruction for students with learning disabilities. *Exceptional Children, 70*(3), 299-322.
- Justice, L. M., Meier, J., & Walpole, S. (2005). Learning new words from storybooks: An efficacy study with at-risk kindergartners. *Language, Speech & Hearing Services in Schools, 36*(1), 17-32. doi:10.1044/0161-1461(2005/003)

- Kelley, J. G., Lesaux, N. K., Kieffer, M. J., & Faller, S. E. (2010). Effective academic vocabulary instruction in the urban middle school. *Reading Teacher, 64*(1), 5-14. doi:10.1598/RT.64.1.1
- Kieffer, M. J., & Lesaux, N. K. (2007). Breaking down words to build meaning: Morphology, vocabulary, and reading comprehension in the urban classroom. *Reading Teacher, 61*(2), 134-144. doi:10.1598/RT.61.2.3
- Kim, W., & Linan-Thompson, S. (2013). The effects of self-regulation on science vocabulary acquisition of English language learners with learning difficulties. *Remedial & Special Education, 34*(4), 225-236. doi:10.1177/0741932513476956
- Kindle, K. J. (2009). Vocabulary development during read-alouds: Primary practices. *Reading Teacher, 63*(3), 202-211.
- Labbo, L. D., Love, M. S., & Ryan, T. (2007). A vocabulary flood: Making words "sticky" with computer-response activities. *Reading Teacher, 60*(6), 582-588. doi:10.1598/RT.60.6.10
- Gillam, S., Olszewski, A., Fargo, J., Gillama, R. B., Nippold, M., & Hoffman, L. (2014). Classroom-based narrative and vocabulary instruction: Results of an early-stage, nonrandomized comparison study. *Language, Speech & Hearing Services in Schools, 45*(3), 204-219. doi:10.1044/2014_LSHSS-13-0008
- MacDonald, C., & Figueredo, L. (2010). Closing the gap early: Implementing a literacy intervention for at-risk kindergartners in urban schools. *Reading Teacher, 63*(5), 404-419.
- Morgan, P. L., & Meier, C. R. (2008). Dialogic reading's potential to improve children's emergent literacy skills and behavior. *Preventing School Failure, 52*(4), 11-16.

- National Institute of Child Health and Human Development. (NICHD). (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction (NIH Publication No. 00-4769)*. Retrieved from the Eunice Kennedy Shiver National Institute of Child Health and Development website: <https://www.nichd.nih.gov/publications/pubs/nrp/documents/report.pdf>.
- Neuman, S. B., & Dwyer, J. (2009). Missing in action: Vocabulary instruction in pre-K. *Reading Teacher, 62*(5), 384-392.
- Neuman, S. B. & Wright, T. S. (2014). The magic of words: Teaching vocabulary in the early childhood classroom. *American Educator 38*(2) 4-11.
- Pullen, P. C., Tuckwiller, E. D., Konold, T. R., Maynard, K. L., & Coyne, M. D. (2010). A tiered intervention model for early vocabulary instruction: The effects of tiered instruction for young students at risk for reading disability. *Learning Disabilities Research & Practice 25*(3), 110-123. doi:10.1111/j.1540-5826.2010.00309.x
- Purdy, J. (2008). Inviting conversation: Meaningful talk about texts for English language learners. *Literacy, 42*(1), 44-51. doi:10.1111/j.1467-9345.2008.00479.x
- Ravitch, D. (2013). *Reign of error: The hoax of the privatization movement and the danger to America's public schools*. New York, NY: Random House LLC.
- Sobolak, M. J. (2011). Modifying robust vocabulary instruction for the benefit of low-socioeconomic students. *Reading Improvement, 48*(1), 14-23.

Wood, K., Vintinner, J., Hill-Miller, P., Harmon, J. M., & Hedrick, W. (2009). An investigation of teachers' concerns about vocabulary and the representation of these concerns in content literacy methodology textbooks. *Reading Psychology, 30*(4), 319-339.

doi:10.1080/02702710802411562

Zipoli, R. P., Coyne, M. D., & McCoach, D. B. (2011). Enhancing vocabulary intervention for kindergarten students: Strategic integration of semantically related and embedded word review. *Remedial & Special Education, 32*(2), 131-143. doi:10.1177/0741932510361262