

Using the Peabody Picture Vocabulary Test IV: Data-Driven Vocabulary Instruction in the

Kindergarten Classroom

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Abstract

The purpose of this study was to investigate the use of the Peabody Picture Vocabulary Test IV (PPVT-4) in order to determine the instructional needs, increase word knowledge, and measure vocabulary gains for kindergarten students. Vocabulary development is critical to the success of young readers, and teachers must be prepared to meet the vocabulary needs of their students in order to help them develop good reading skills. Two research questions guided this study: To what extent can data from the Peabody Picture Vocabulary Test affect vocabulary instruction in kindergarten? And Using data from the PPVT-4, what strategies are beneficial for promoting vocabulary development in the kindergarten classroom? The researcher hypothesized that the Peabody Picture Vocabulary Test would provide data to inform about students' current vocabulary development. The researcher also hypothesized that using this data, along with research-based strategies of vocabulary instruction would support increased word knowledge and assessment outcomes in kindergarten. Eight students from the researcher's kindergarten class participated in the six-week study. All participants were assessed using the Peabody Picture Vocabulary Test IV as an overall pre- and post-test, along with weekly vocabulary focus word pre- and post-tests. All participants received the same vocabulary instruction using research-based strategies. Participant scores on weekly vocabulary post-tests increased by 40% from weekly pretests. Scores on the PPVT-4 increased by 7.49%, and participant age-equivalent vocabulary increased by an average of 8 months after six-weeks of intervention.

Keywords: vocabulary development, Peabody Picture Vocabulary Test, early childhood

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Young children enter school with varying levels of acquired vocabulary. The inconsistencies can be attributed to the influence of the child's family, specifically the education level of the child's mother. They can also be attributed to children growing up in a language minority home where little English is spoken. An ample vocabulary base provides a strong foundation for students. As students lack exposure to vocabulary in early years, they struggle with other reading skills, such as comprehension of text later in school. Vocabulary development is critical in developing successful readers.

Early childhood educators can see, firsthand, the language disparity in children from various backgrounds. "On average, more highly-educated parents use more word tokens and use more diverse vocabulary (word types) at each child age than parents with fewer years of education" (Rowe, 2012, p. 1767). In addition to the education of the parents, the socioeconomic status of the family should be considered. Kindergarten children living in high-poverty areas have lower vocabulary and language than their more affluent peers (Nielson et al., 2011/2012). Often, there is a correlation between the education level and the socioeconomic status of families. Teachers in low-income areas must be prepared to accept the challenge of increasing the limited vocabulary of children from low-income families with limited education levels.

"Vocabulary acquisition is a cumulative process, so a child's ability to learn more words depends in good part on his or her existing vocabulary at a given age" (Schady, 2011, p. 2305). With this in mind, it is crucial that early childhood educators put effort into increasing the vocabulary levels of their young students. Children with limited exposure to vocabulary, who enter school behind their peers, will continue to slip further behind without proper instruction.

The objective of this study was to investigate strategies to increase word knowledge, through the use of standardized tests and research-based classroom interventions. This study investigated the use of the Peabody Picture Vocabulary Test IV (PPVT-4) in order to determine instructional needs for kindergarten students. Through an understanding of the development of vocabulary, and the implementation of formative and summative assessments, the researcher used the following questions to guide the study:

1. To what extent can data from the Peabody Picture Vocabulary Test affect vocabulary instruction in kindergarten?
2. Using data from the PPVT-4, what strategies are beneficial for promoting vocabulary development in the kindergarten classroom?

The researcher hypothesized that using data from the PPVT-4 would provide information about different types of words that students understand, or have difficulty understanding. Additionally, using data from the PPVT-4 as a guiding point, research-based strategies of vocabulary instruction could increase word knowledge, as well as assessment outcomes.

As language acquisition is understood, and successful strategies are implemented, vocabulary development can be increased. Introducing the norm-referenced PPVT-4 may allow teachers to see a clearer picture of the types of words children are lacking, which in turn, can lead to a greater focus on the instruction of the types of word children need to learn.

The following literature review will further discuss factors that play a role in the early development of vocabulary and language prior to children entering school. The review includes national studies, which correspond with global research on the development of vocabulary. A number of research-based instructional strategies, used to promote vocabulary acquisition, will also be discussed.

Vocabulary Acquisition and Instructional Practices for Increased Vocabulary Development

Young children enter school with a wide range of acquired vocabulary. A rich vocabulary base offers children a strong language foundation to support future reading success. Many factors play into the wide range of vocabulary development in young children. Current research provides information about the causes and effects of limited vocabulary exposure in early childhood, including the education, and mental health of the child's mother (Baydar et al., 2014), family socioeconomic status (SES), (Greenwood et al., 2017), the quantity and quality of parent interactions (Rowe, 2018), and how parent education and training affects vocabulary development (Leung et al., 2018). In consideration of these factors, Early Childhood teachers must possess a strong understanding of methods to support vocabulary instruction in order to bridge the learning gap for students who begin school with an insufficient vocabulary.

This review will outline research relevant to the study of vocabulary development. The review will provide successful strategies to increase vocabulary acquisition, comprehension, and retention. The learning gap can be narrowed through practices of encouraging language through conversations, providing rigorous instruction, and practicing interactive reading. Additionally, engaging students in vocabulary activities, planning numerous opportunities to practice new words, implementing direct and explicit instruction, and incorporating sophisticated words in classroom conversations (Dashiell & DeBruin-Parecki, 2014) can increase vocabulary acquisition. Finally, the use of informational texts (Neuman & Kaefer, 2016) allows deeper understanding of topics, leading to increased reading success for young students.

Impact of Family

Even within a single home, children rarely share the exact learning experiences as their siblings prior to entering the classroom. Each child's unique experiences contribute to their

development prior to entering school. Rowe (2018) suggests that the quantity, as well as the quality of parent language can positively impact the rate of a child's vocabulary growth. Infants and young children learn language most successfully when their caregivers offer conversations centered around daily events and experiences outside of the home. Older toddlers and preschoolers benefit from discussions regarding past or future events, which are more abstract concepts for young children.

The quality and quantity of language at home, as well as types of language at different age intervals correlated with a positive impact on language acquisition and cognitive abilities in another study by Rowe (2012). The longitudinal study found that exposure to a large number of words during a child's second year, use of rare or sophisticated words during the third year, and narratives and explanations during the fourth year of life are valuable practices to increase vocabulary and understanding (Rowe, 2012).

Parent Education Level

Parents from highly educated backgrounds generally engage in more vocal exchanges with their children than parents from less educated and less advantaged backgrounds. Increased knowledge of child development is also credited to a higher amount of parent language use. Families who are living in poverty, or those with lower incomes tend to experience increased hardships, have greater household sizes, increased material hardships, and elevated mental health problems, which lead to fewer interactions with their children (Rowe, 2018).

In a study in Ecuador, Schady (2011) also found a connection in vocabulary development in the language experiences children receive at home. Among children living in low-income, rural areas, between the ages of three and five, vocabulary scores correspond with the rich or poor vocabularies of their mothers. "Vocabulary acquisition is a cumulative process, so a child's

ability to learn more words depends in good part on his or her existing vocabulary at a given age” (Schady, 2011, p. 2305). This leads to the realization that as children enter school with a low level of vocabulary, the learning gap becomes wider as the child continues through school. Interventions are critical for helping students catch up with their higher level peers, but this is no small task.

Other Family Factors

The socioeconomic level, amount of family support, and social and emotional health of a child’s mother had an impact of the acquisition of vocabulary in three-year-old children in Turkey, as suggested by Baydar et al. (2014). According to researchers, maternal education is an important factor in increasing the development of language in young children. High maternal vocabulary skills, regardless of economic status, led to more highly developed vocabulary in children. Strong family support also proved to nurture vocabulary development of children (Baydar et al., 2014).

Leung et al., (2018), aimed to increase the vocabulary development of children from low-SES families by providing knowledge of child language and cognitive development to caregivers. They suggest increasing the quality and quantity of caregiver interactions by promoting the use of the 3Ts Home Visiting (3Ts-HV) curriculum. The intervention was aimed at parents of 13- to 16-month-old children, and included training in specific language skills, using guided practice. After recording interactions, the caregivers were presented with specific feedback to enrich the early language environment. The 3Ts-HV increased caregiver knowledge of the language and cognitive development of young children. It provided a positive impact on the quality and quantity of interactions between the child and caregiver (Leung et al., 2018). This was a proactive study, focusing on educating caregivers to provide quality language experiences

from an early age, rather than remediating the problem as children enter school. Considering the significant amount of vocabulary children encounter before they are two years old, it is imperative that caregivers learn strategies to develop their interactions to aid in narrowing the learning gap prior to children entering the classroom.

Vocabulary Acquisition in School

The need for strategies to promote vocabulary development reaches beyond what families often provide their children before entering school. Early childhood classrooms are challenged with making an attempt to advance students who lack critical vocabulary knowledge as they enter school. Professional development to extend conversations between preschool teachers and students (Cabell et al., 2015), practices aimed at expanding vocabulary through providing additional wait time (Wasik & Hindman, 2018), shared reading activities with narrative and expository texts (Neuman & Kaefer, 2016; Snell, et al., 2015), and the implementation of listening centers (Goldstein et al., 2017) has led to the increased development of vocabulary. Increasing the number of words in a student's vocabulary is one goal. Another goal is ensuring depth of understanding through extended instruction (Goldstein et al., 2017).

Professional Development

In order to increase the number of vocal exchanges between preschool teachers and students, Cabell et al. (2015) suggest professional development opportunities for teachers. One increase was noted as teachers used novel words while prompting conversations during shared book reading. Providing students with information, during the read-aloud time, as new words were introduced, increased vocabulary growth more than using less informative speech (Cabell et al., 2015).

Silverman and Crandell (2010) offered professional development for prekindergarten and kindergarten teachers, in addition to providing books with specific target words for vocabulary focus. Their focus on target words in read-aloud and non-read-aloud times showed positive results in developing vocabulary through their assessment of the Peabody Picture Vocabulary Test III (PPVT-III), and a focus word assessment modeled after the PPVT-III (Silverman & Crandell, 2010).

Instructional Strategies

Snell et al. (2015) suggest specific strategies to be used during book reading to increase vocabulary knowledge. The authors state that quality texts provide opportunities to hear and learn words which they may not normally encounter. Parents and teachers can promote new vocabulary development by defining new words, discussing them and asking questions about them. In order to deepen understanding, they encourage rereading books several times, engaging students by retelling stories, and using the new words during other activities (Snell et al., 2015).

Similarly, Pollard-Durodola et al. (2011), offer that reading experiences must include opportunities to have discussions about books, words, concepts, and life. They note intensive shared read-aloud stories as an effective avenue for increasing students' understanding of target vocabulary words (Pollard-Durodola et al., 2011). They believe that participating in discussions on topics related to those presented in shared books allows students more opportunities to gain new vocabulary and the meaning behind new concepts. This also correlates to the importance of activating prior knowledge. As teachers help student connect their prior knowledge to new words and concepts, they form a deeper understanding of vocabulary, which leads to increased comprehension.

Dashiell and DeBruin-Parecki (2014) shared similar methods for increasing vocabulary growth through the use of the F.R.I.E.N.D.S. model. There are seven components to the model, which make up its name. **F**ostering adult/child conversations urges teachers to ask open-ended questions in order to encourage multiple back-and-forth exchanges or conversation to discuss topics that pose a challenge for students. **R**obust and motivational instruction involves direct, systematic instruction of new words, and includes interactive activities to reinforce new vocabulary. Activities including internet resources, apps, word games and puzzles allow for added practice. **I**nteractive storybook reading, including complex stories with rich language, expose students to descriptive language and sophisticated words. **E**ngaging and literacy-rich classrooms provide learning opportunities through vocabulary games, age-appropriate magazines and books representing various genres and interests. These learning environments also include computer word games, word puzzles, and word walls. **N**umerous opportunities to practice new vocabulary help students gain a deep understanding of the words. **D**irect and explicit instruction helps students comprehend stories. **S**ophisticated and rare words are used during classroom routines to increase connections to new words and provide meaningful new vocabulary (Dahiell & DeBruin-Parecki, 2014). These classroom resources and procedures immerse students in literacy opportunities in order to increase vocabulary knowledge.

Increased Wait Time. Wasik and Hindman (2018) shared strategies for extending wait time to offer students increased opportunities to process and express language. They encourage teachers to model waiting and thinking, prompt active listening by asking students to work with a partner, ask open-ended questions and extend wait time to at least three seconds, and urge students to respond with multiple words. This practice garnered positive results in elementary, middle school, and high school classrooms. Though teachers were concerned that added wait

time may cause students to lose interest or become disruptive, they determined the increase in wait time actually reduced off-task behaviors (Wasik & Hindman, 2018).

Use of Expository Text. Along with the success found in incorporating explicit instruction through multiple readings and acting out narrative books, Neuman and Kaefer (2016), investigated the effect of using shared book-reading experiences focusing on content-rich life sciences to bolster vocabulary instruction. They emphasized building connections between new words and information presented in expository texts in hopes of improving preschool students' vocabulary learning, concept knowledge, and theme comprehension. Student vocabulary scores were consistent with national norms with their initial assessment of the Peabody Picture Vocabulary Test-IV (PPVT-IV). Video clips, informational texts and picture cards were used to introduce text, and allowed students to use various contexts to promote understanding of the new words. The study noted significant results of vocabulary growth and concept knowledge. Students in the treatment group demonstrated increased comprehension of the material, and gained an understanding of the purpose for reading informational texts (Neuman & Kaefer, 2016).

Listening Centers. In a longitudinal study, Goldstein et al. (2017) tracked students from first through third grade with the use of pre-recorded interactive activities. Students were assessed with the Peabody Picture Vocabulary Test Fourth Edition (PPVT-4) at the start of the study to determine their vocabulary levels. They noticed an increase in vocabulary knowledge in those who used the intervention, though they also noted explicit instruction would benefit even more. They also noticed that students who started the intervention with a higher level of vocabulary development made greater gains than students who initially scored lower (Goldstein et al., 2017).

Conclusion

The amount of language, as well as the type of language children encounter before entering the educational setting is unique to each child. As children begin their first school experiences with varying levels of language development, a clear learning gap emerges between children from a low-SES and more affluent families. This gap presents many challenges when it comes to vocabulary acquisition and instruction. It brings up the question of how parents be encouraged to participate in programs that educate and support the language and cognitive development of their children before they enter school. Teachers have little to no influence on developing vocabulary prior to school, but they are tasked with the challenge of meeting students at their wide range of vocabulary levels to support their future reading success.

Research-based instructional methods are critical in providing the most learning benefits to students. In order to meet students at their current developmental level, assessing the students' current vocabulary knowledge may be an important first step toward expanding language and vocabulary in the classroom. Children require exposure to new terms and ideas every day. Teachers can promote increased vocabulary and language through read-aloud activities, increased interactions, and by encouraging students to expand on their thinking.

Vocabulary development is vital to the success of developing readers. As children make connections to new vocabulary, their understanding of content as well as their reading comprehension increases. As vocabulary development is increased, there is a decrease in the learning gap which separates students with rich experiences outside of school, from those who enter school with limited experiences. Teachers need to be trained in interventions that can increase new vocabulary used in the classroom each day in order to bridge the learning gap.

As a critical first step in the reading process, developing student vocabulary allows students to make connections with texts in order to aid their comprehension. Vocabulary development is crucial in the early childhood years, but is also of high importance as students progress through school. Through the use of open-ended questioning, extended wait time, increased conversations, and explicit instruction of new words, teachers provide numerous opportunities to grow student vocabulary. These practices will ultimately lead to increased success in reading skills.

Methods

The study used a quantitative approach. The researcher collected data for six weeks from one group of kindergarten participants in the researcher's classroom during the fall semester of 2020. Participants were assessed with the Peabody Picture Vocabulary Test IV (PPVT-4) as a pre-test to obtain a baseline, as well as analyze common errors in age-appropriate words. The PPVT-4 was administered again as a post-test after instructional intervention to determine student growth. Participants received vocabulary instruction using verbal explanations during shared reading, illustrations, discussions, acting out terms, and through vocabulary games. The following information details the participants, setting, data source and research materials, and data collection procedures.

Participants

The sample population consisted of eight kindergarten students in the researcher's general education classroom. Participants included three male and five female students with ages ranging from 60 – 72 months of age. One participant had an Individual Education Plan (IEP). All participants were Caucasian. Seven of the eight participants qualified for free lunch at the time of the study. One of the participants formerly attended Head Start. Seven participants previously

attended prekindergarten for one or two years. Initial scores from the PPVT-4 (see Appendix A) were used to determine student vocabulary levels. Participant scores ranged from extremely low to high average. Extremely low scores fell below the 2nd percentile, and high average scores fell in a range from the 50th to the 84th percentile. Table 1 shows the student designations from the PPVT-4 pretest.

Table 1

Participant Vocabulary Designation Level from PPVT-4. n=8

Participant	Extremely Low <2	Moderately Low 2-16	Low Average 16-50	High Average 50-84	Total
1	x				
2				x	
3				x	
4				x	
5			x		
6				x	
7		x			
8			x		
<i>N</i>	1	1	2	4	8

Note. Numerical scores ranges are represented by percentile scores.

Setting

The study was conducted in the researcher's kindergarten classroom at an elementary school in a small, rural community in south-central Illinois, with a population of approximately

6,600. The elementary school houses five kindergarten and five first grade classrooms. The school has one administrator, two administrative assistants, a nurse, two custodians, one speech and language pathologist, a reading specialist, two special education teachers, 10 general education teachers, and eight paraprofessionals. The average student population at the school is 200 students. Ninety-seven percent of the students are White, 1% Black, and 1% are represented by Hispanic and Asian Students. Less than 1% are identified as having two or more races. Approximately 65% of students are considered Low Income, and 3.5% are homeless. About 24% of the students are children with disabilities (Illinois State Board of Education, 2019). The average class size at the school was 20 students in 2019, which was higher than the time of the study. For the purpose of this study, only hybrid (in-class) students were included. All students attended two days in the first week with the district's hybrid attendance model. Beginning week two, the district switched to a four-day in-class attendance model.

Data Source and Research Materials

Data for this study was collected, initially, using the Peabody Picture Vocabulary Test IV (PPVT-4) as an overall pre-test to obtain a baseline, and as a post-test to determine growth. The PPVT-4 provides norm-referenced data. Each week, focus words were used from in-class shared reading books as well as common errors in age-appropriate vocabulary from the PPVT-4. Teacher-created vocabulary pre- and post-tests were developed with pictures representing the focus words, which modeled the PPVT-4 (see Appendix B). These pre- and post-tests were given weekly. Observational notes were kept daily (see Appendix C). Weekly checklists were also used to note student understanding and use of new vocabulary (see Appendix D). Five weekly pre-tests and five weekly post-tests were given during the study, in addition to the initial PPVT-4 assessment, and the PPVT-4 post-test. Additionally, a summative vocabulary assessment was

taken on all words introduced during the study to gauge participants' expressive vocabulary knowledge. A raw score was recorded from each weekly pre- and post-test to calculate data. Data was collected from the expressive vocabulary assessment.

Procedures of Data Collection

The six-week study occurred during the fall trimester, and covered various topics from books within letter studies and/or thematic topics. Additional words, which were common age-appropriate errors from the PPVT-4 pre-test were included as focus words. Focus words were presented and explained during read-aloud activities and discussions. Additional activities, such as questioning, acting out vocabulary words, and vocabulary games were introduced during the remainder of the week.

The first week was spent taking the pre-test with the PPVT-4. The assessment consisted of multiple pages, displaying four pictures on each page. Participants were given a target word, and asked to point to the picture that represented the word. Basal and ceiling sets were established from the pre-test in which participants missed one or fewer words to determine the basal set, and had eight or more errors to determine the ceiling set.

The second week, four new words were introduced during a read-aloud with the book, "King of Kindergarten" by Derrick Barnes. Participants were given a pre-test modeled after the PPVT-4 on day one of the second week, and the same post-test was given on day four. Each weekly test was one page with four pictures representing the new vocabulary. Songs, games, and questions were used each day to reinforce new words, including the game, "Is it behind ____?". A leaf was placed behind a picture representation of one of the new words in a pocket chart. Students took turns asking if it was behind a particular picture, using the target word, until the leaf was found. The Vocabulary 4-square (see Appendix E) was used to teach the focus word,

garments. Observational notes were taken daily, and recorded using the weekly checklist at the end of the week.

During the third week, four new focus words were introduced during shared reading with the books, “I’m Brave” by Kate and Jim McMullan and “Let’s Meet a Firefighter” by Gina Bellisario. Pre- and post-tests were given on the first and last day of attendance. Students created a diagram to label a firefighter, and a word web (see Appendix F) was used to share what students know about firefighters. The vocabulary 4-square was used to teach about the word “brave”. Songs and games were used to reinforce vocabulary. The four additional picture cards were added to the first four for the game, “Is it behind ___?”.

At the beginning of the fourth week, four additional words were introduced during shared reading of the book, “Seed, Sprout, Pumpkin, Pie” by Jill Esbaum. Pre- and post-tests were given at the beginning and end of the week using pictures to represent the focus words. A diagram was used to show the life cycle of a pumpkin, and students created individual diagrams and labeled them. The parts of a pumpkin were discussed, and students participated in a craft project and labeled the parts of a pumpkin. Four additional focus word picture cards were added to the game, “Is it behind ___?”.

Focus words during the fifth week were taken from the book, “Creepy Carrots” by Aaron Reynolds, as well as common errors from the PPVT-4 pre-test. A pre- and post-test were given on the first and last day of student attendance during the week. The picture representation of each focus word was added to the game, “Is it behind ___?”. Target words were also reinforced during songs, and actions. A word web was used to describe the main character, and a Vocabulary Four-Square was used to study the word *creepy*.

In week six, four additional focus words were introduced from common age-appropriate errors on the PPVT-4, as well as from the expository book, “Spiders” by Laura Mars. A weekly pre- and post-test was given on the first and last day of the week. A word web was used to show what students know about spiders, and additional information was added after the read-aloud and discussion of spiders. Four additional picture cards representing the focus words of the week were added to the game, “Is it behind ___?” for a total of 20 words. The PPVT-4 post-test was given to check for overall vocabulary growth. Weekly pre- and post-tests were given, and participants were asked to name each of the pictures introduced during the study as a summative assessment of expressive vocabulary knowledge.

Data Analysis and Results

Data was analyzed quantitatively using descriptive analysis. The researcher collected pre- and post-test vocabulary scores from the participants for six weeks. An initial vocabulary assessment of the PPVT-4 was conducted during the first week of the study. Data from weeks two through six were the result of pre- and post-tests of vocabulary instruction from read-aloud books, discussions, games and classroom activities. All participants were assessed with the PPVT-4 as a final post-assessment during week 6, and a summative expressive assessment of all words was given on the final day of the study. A weekly checklist was used to determine participant use of new vocabulary. The sample group consisted of eight participants in the researcher’s kindergarten classroom.

Data Analysis

Descriptive analysis was used by the researcher to analyze the data quantitatively. During week one, the researcher collected data from the Peabody Picture Vocabulary Test IV (PPVT-4). Standard scores were collected and put into Microsoft Excel to create graphs. The results of the

PPVT-4 were also analyzed by the researcher to determine a common list of words assessed to the participant group, along with the type of words, and the number of errors. Twenty-four words were commonly assessed to the participant group, and those with two or more errors (representing at least 25% of the study group) were added to weekly instruction. During weeks two through six, the researcher collected data from pre- and post-tests given on the first and last day of weekly attendance. All of the data collected from weekly tests was organized and reported as raw scores on five different bar graphs using Microsoft Excel.

The first graph shows the participant's weekly pre-test scores for the entire six-week study. The second graph displays the post-test scores of each participant during the six-week study. The third graph displays the pre-test scores from the PPVT-4 from week one. The fourth graph shows a score comparison of the PPVT-4 pre- and post-test, and the fifth graph shows the summative scores of the expressive assessment.

A table was created to compare the mean scores on weekly pre- and post-tests. Additional tables were created to compare the actual age and age-equivalent vocabulary levels of pre- and post-tests PPVT-4 scores. Another table was used to note common word errors on the PPVT-4, and two additional tables were created to compare participants standard scores and differences on the PPVT-4, and the raw scores from the summative assessment.

It was hypothesized that using data from the Peabody Picture Vocabulary Test would provide information about different types of words that students understand, or have difficulty understanding. It was also hypothesized that using data from the PPVT-4 as a guiding point would allow participants to increase their vocabulary knowledge and assessment outcomes through the classroom implementation of research-based strategies. The following discussion details the results of the study based on research questions: To what extent can data from the

PPVT-4 affect vocabulary instruction in kindergarten? And using data from the PPVT-4, what strategies are beneficial for promoting vocabulary development in the kindergarten classroom?

Results

Overall results from weekly pre- and post-tests revealed that using data from the PPVT-4, along with explicit, research-based instructional methods, participants made gains in vocabulary development. According to the data collected, and the comparison of scores from pre- and post-tests, all participants made gains in vocabulary knowledge during the intervention. Figure 1 and figure 2 show the data collected from weekly pre- and post-tests.

Figure 1

Participants' Raw Scores from Weekly Vocabulary Pretests

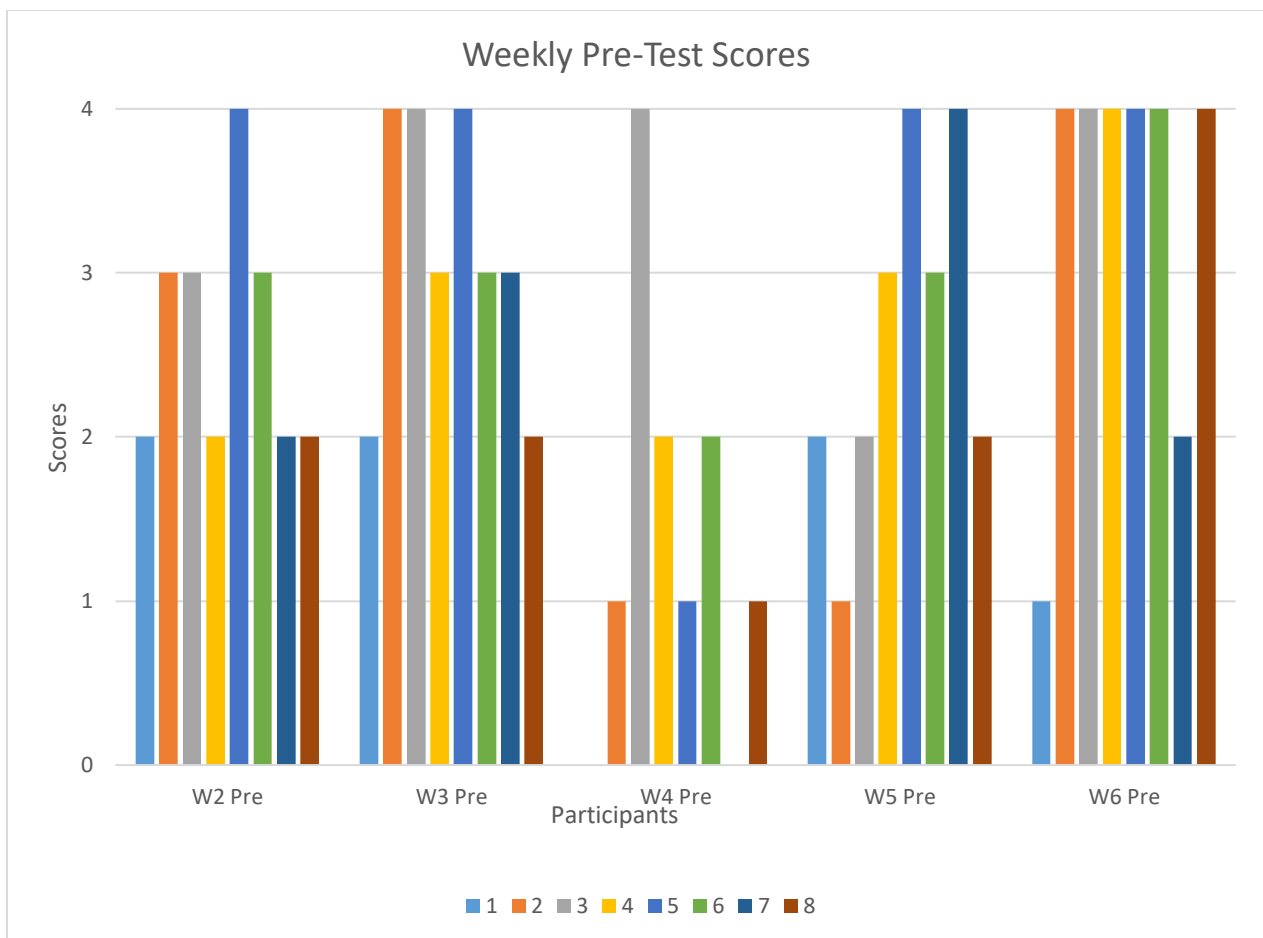


Figure 2

Participants' Raw Scores from Weekly Vocabulary Post-tests

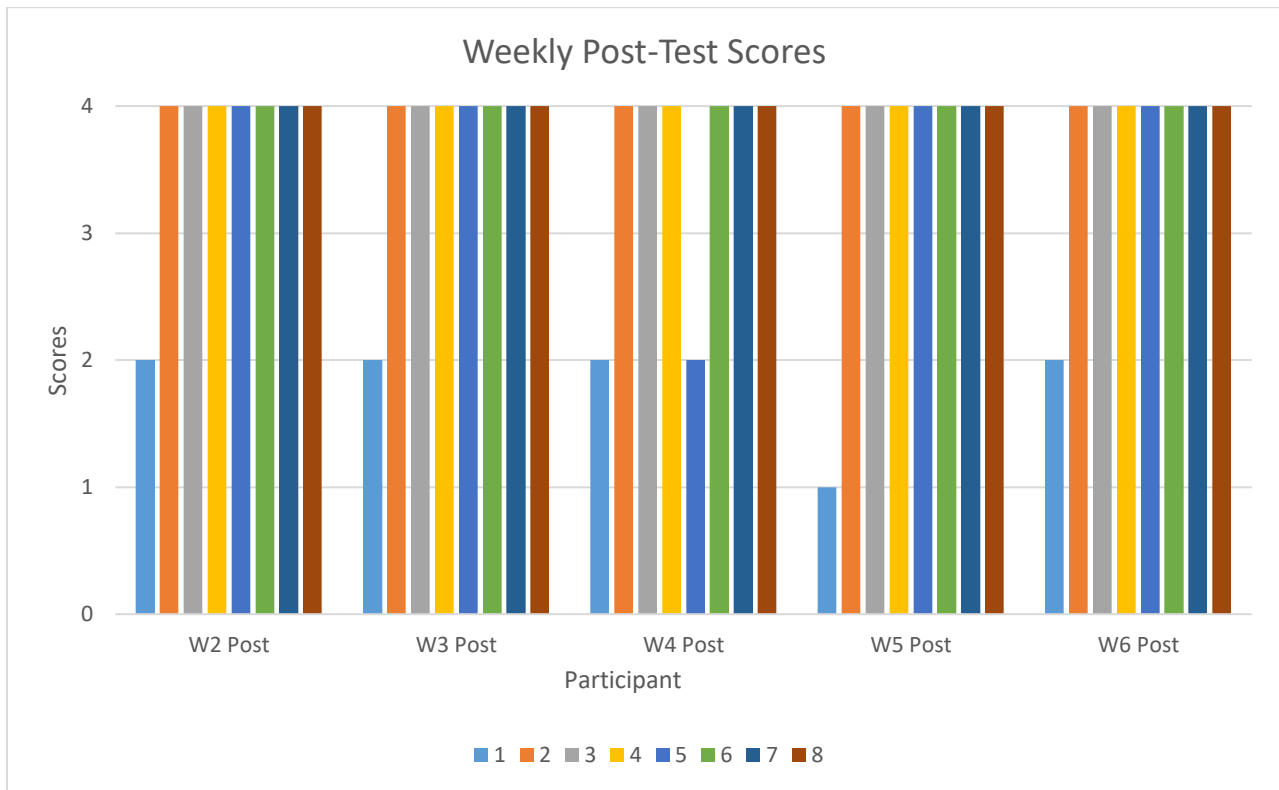


Table 2 shows a comparison of the mean scores of the weekly pre- and post-tests throughout the six-week study, as well as the difference in scores. From the beginning to the end of the study, participants made an overall mean vocabulary gain of 1.05 points. The mean pretest score was 2.63, and the mean post-test score was 3.68 for the six-week study. Participants 3 and 5 had the highest mean pretest score of 3.4. Participant one had the lowest mean pretest score of 1.4, and is a student with identified developmental delays. Participants 7 and 8 had the highest increase in vocabulary scores, both with a mean pre-test score of 2.2, and increasing to 4.0, a difference of 1.8 points. The participant with the lowest increase was participant 5 with an increase of 0.2 points.

Table 2

Participants' Mean Scores from Weekly Pretests and Post-tests. n=9

Participant	Pretest Score	Post-test Score	Difference
1	1.4	1.8	0.4
2	2.6	4.0	1.4
3	3.4	4.0	0.6
4	2.8	4.0	1.2
5	3.4	3.6	0.2
6	3.0	4.0	1.0
7	2.2	4.0	1.8
8	2.2	4.0	1.8
<i>M</i>	2.63	3.68	1.05

Note. Green scores are representative of those in the high average range on the PPVT-4 pre-test.

Blue scores represent participants in the low average range, orange represent moderately low scores, and red represents extremely low scores.

To What Extent Can Data from the Peabody Picture Vocabulary Test Affect Vocabulary Instruction in Kindergarten?

The Peabody Picture Vocabulary Test IV was chosen for this study because it can easily be administered to participants in the early childhood setting and beyond. The PPVT-4 also provides teachers with access to significant data. A baseline score helps teachers understand the prior vocabulary development of their students. The PPVT-4 provides normed age- and grade-level equivalents for students, which help teachers to gauge the level of instruction needed.

Figure 3 shows the standard pre-test scores from the initial assessment of the PPVT-4. The mean score for the pre-test was 96.75. Participant 1 scored the lowest with a standard score of 68, and

fell in the extremely low scoring bracket. Participant 3 had the highest score of 115, and fell in the moderately high scoring bracket.

Figure 3.

Participants' Pretest Standard Scores from the Peabody Picture Vocabulary Test IV

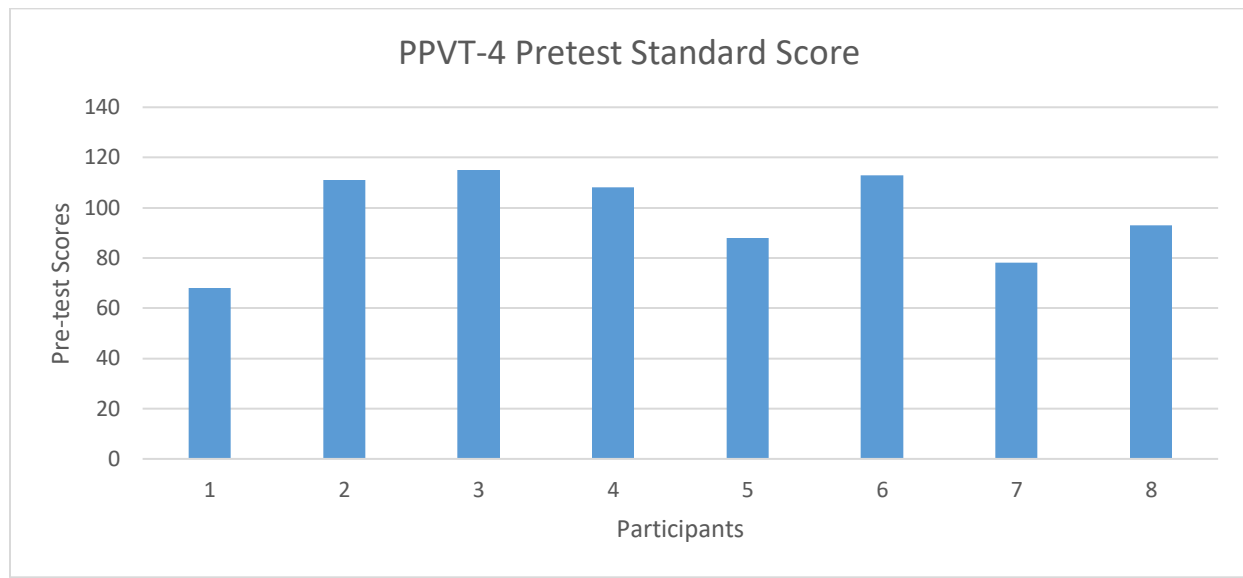


Table 3 shows the age-equivalence of participants during the pre- and post-tests of the PPVT-4, as well as the growth in months after the intervention. Four participants had age-equivalent scores below their actual age after taking the pre-test. Three of these students had the highest gain in months from the pre-test to the post-test. All participants made growth in age-equivalence, though two participants were still below their actual age. Participant actual ages range from five years, two months to six years at the time of the pre-test. Participants age-equivalence ranged from three years, two months to six years, eight months. Three participants showed a gain of 11 months during the study, which was the greatest overall age-equivalent growth. Participant 3 had the lowest age-equivalent gain with an increase of three months. This participant had moderately high scores on the pre-test, and scored high on weekly post-tests. The mean growth during the study was eight months.

Table 3

Pre- and Post-test PPVT-4 Age-equivalent vs. Actual Age. n.=8

Participant	Pre-test Age-Equivalent	Pre-test Actual Age	Post-Test Age-Equivalent	Post-Test Actual Age	Overall Age-Equivalent Growth (in months)
1	3:02	5:09	3:07	5:10	5
2	6:02	5:02	6:06	5:03	4
3	6:07	5:04	6:10	5:05	3
4	6:08	6:00	7:06	6:01	10
5	5:02	6:00	6:01	6:01	11
6	6:05	5:05	7:02	5:06	9
7	3:06	5:02	4:05	5:03	11
8	4:09	5:03	5:08	5:04	11
<i>M</i>					8

Note. Ages are noted by year and month. Differences are noted in months.

The PPVT-4 also provides a breakdown of words and word types, which allowed the teacher-researcher to focus instruction on various types of words. Table 4 shows the common list of words assessed to all participants, along with the word type, and the number of errors made for each word. This common list contained age-appropriate words for the study group, and were featured in the five-year-old and six-year-old starting sets. Of the 24 words on the common lists, four were verbs, and 20 were nouns. Words with at least two errors, representing 25% of the participants, were added to weekly focus words. From the common list, three verbs were added to the weekly focus words, and five nouns were added. The remaining twelve focus words were added from read-aloud stories.

Table 4

Commonly Assessed Words and Word Types on the PPVT-4

Word	Type	Number of Errors
farm	noun	0
penguin	noun	1
gift	noun	1
feather	noun	0
cobweb	noun	1
elbow	noun	1
juggling	verb	4
fountain	noun	0
net	noun	0
shoulder	noun	0
dress	verb	3
roof	noun	0
peeking	verb	1
ruler	noun	1
tunnel	noun	3
branch	noun	1
envelope	noun	1
diamond	noun	1
calendar	noun	2
buckle	noun	2
sawing	verb	2
panda	noun	1
vest	noun	3
arrow	noun	3

Note. The table represents two sets of words, on which each participant in the study was assessed. Words in bold text signify errors by at least two participants (at least 25% of the study group), and were included in weekly vocabulary instruction during the study.

Using Data from the PPVT-4, What Strategies are Beneficial for Promoting Vocabulary Development in the Kindergarten Classroom?

Along with data from the PPVT-4, research-based strategies from literature reviews provided quality instructional methods to support vocabulary development during the six-week study. Prior research stressed the importance of quality read-aloud stories covering both fiction and non-fiction genres. Teacher-read books, as well as books on cd were used to promote interest and variety in read-aloud activities. Interactive stories led to higher student engagement. Open-ended questioning, along with increased wait time for student language processing was implemented to encourage discussion of new terms.

Read-aloud books were shared, and target words were explained during the shared reading, and discussed after the reading. Action words were acted out, and focus words were used multiple times during the study. The vocabulary 4-square was helpful for participants to gain a deeper understanding of new words. Word webs helped students activate prior knowledge, and add to their schema after adding newly learned information to the word web. Hands-on lessons, such as the firefighter visit and the pumpkin carving activity promoted high student engagement and participation when labeling diagrams.

In an effort to maintain a play-like atmosphere, where students could demonstrate increased engagement and word knowledge, the teacher-researcher chose to use games and activities to reinforce target vocabulary words. A fly swatter game promoted student engagement as students raced to swat the word before their partner. The game, “Is it behind ___?” was introduced to promote participant use of words. Students were directed to use the target words when asking if the leaf was hidden behind the picture. This game was a generally used as a time-filler during transitions or at the end of the day before dismissal. It took little time to implement,

but students were highly engaged in the activity, and asked to play. The game ultimately led to higher word use, and repeated practice of words over time – as words were added to the chart each week, but no words were taken away. Songs also helped participants gain an understanding of new terms.

Using data from the PPVT-4, along with research-based strategies for vocabulary instruction led to an increase in each participant’s achievement on weekly vocabulary post-tests, as well as on the post-test of the PPVT-4. Table 5 shows the pre-test and post-test scores as well as the score differences for participants on the PPVT-4. Participants increased their vocabulary scores on the PPVT-4 by an average of 7.25 points with participant 5 having the greatest gain of 12 points, and participants 3 and 6 having the lowest gains of 3 points. Figure 4 shows a visual comparison of the PPVT-4 pre- and post-tests for each participant.

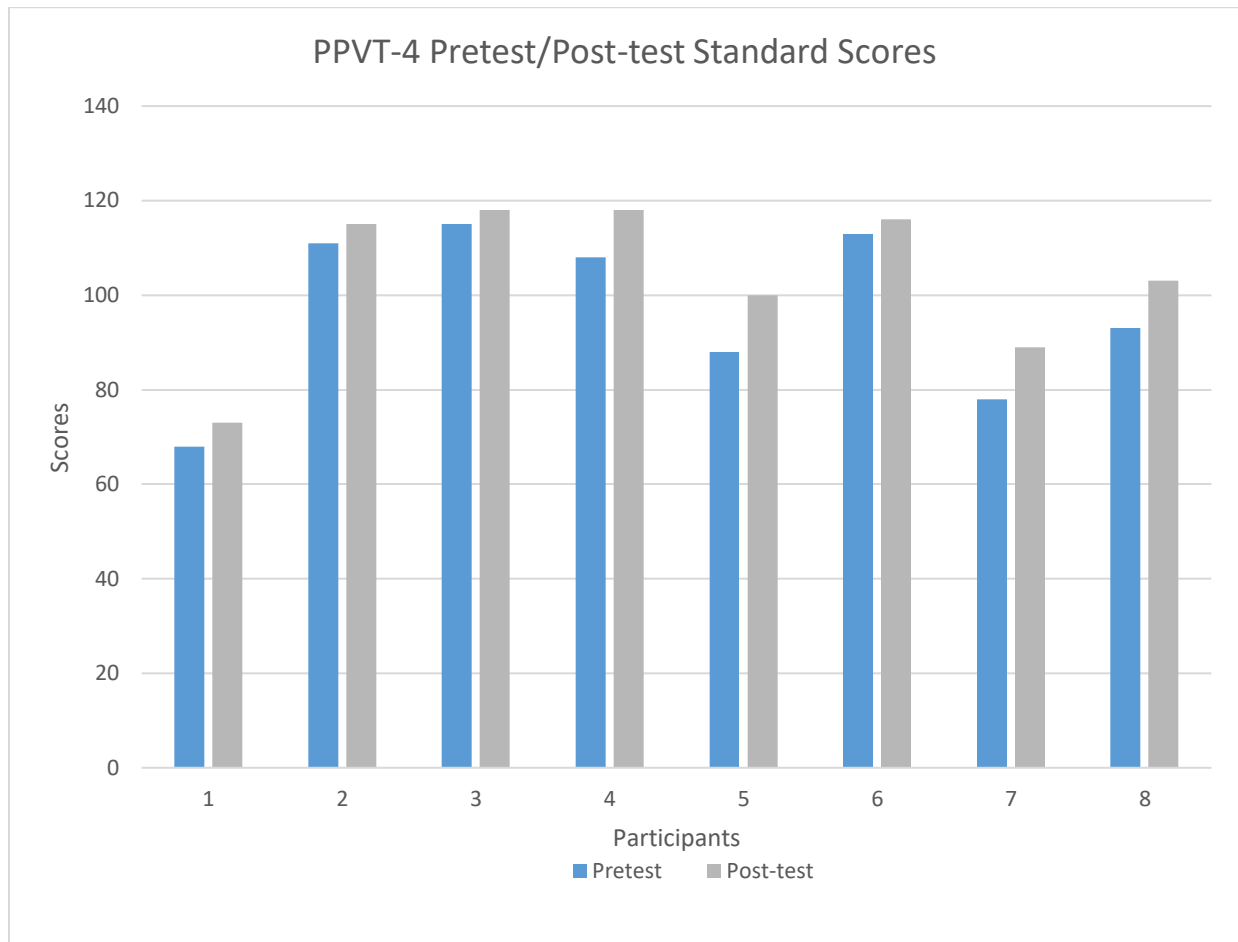
Table 5

Participants’ Standard Scores and Differences from PPVT-4 Pretests and Post-tests. n=8

Participant	Pretest Score	Post-test Score	Difference
1	68	73	5
2	111	115	4
3	115	118	3
4	108	118	10
5	88	100	12
6	113	116	3
7	78	89	11
8	93	103	10
<i>M</i>	96.75	104	7.25

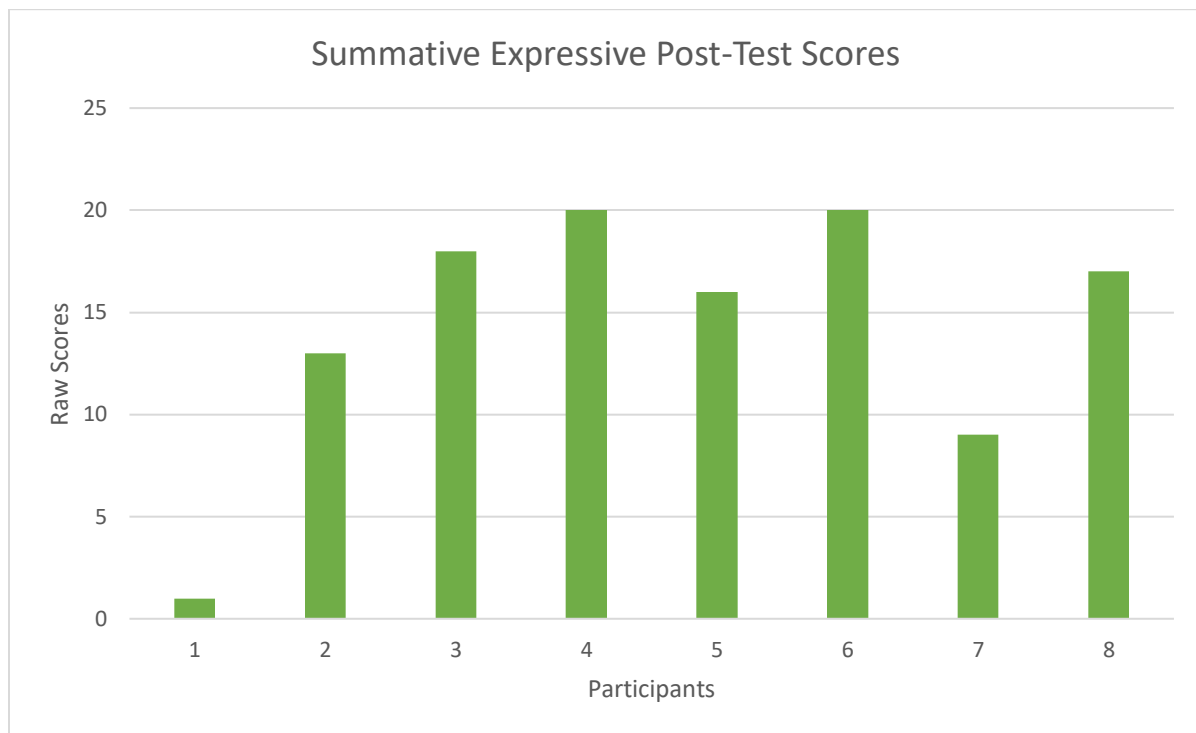
Figure 4

Participants' Pre- and Post-test Scores from the Peabody Picture Vocabulary Test IV



Activities supported by research-based instructional strategies resulted in vocabulary gains. While participants' receptive knowledge of words increased, additionally they showed increased word use. Participants' expressive word use was noted in the summative assessment of all target words introduced during the six-week study. Students were shown the same weekly pre- and post-test assessment pictures, but rather than being asked to point to a particular picture, they were asked to name the pictures. Results are shown in Figure 5, and generally correlate with the overall scores of the PPVT-4.

Figure 5

Participants' Summative Assessment Raw Scores

Participant one, a student with significant developmental delays and limited speech, scored very low on the expressive assessment. Two participants (participant four and participant six) expressively named each of the twenty target words. The remaining participants missed two or more words. As participants did not name the words expressively, the researcher provided the words, and asked the participant to point to the picture (as they did in their pre- and post-tests) to determine receptive knowledge of the word beyond the initial focus week.

Expressive knowledge of words creates a reliable prediction of the receptive knowledge of the word. Therefore, the data from the summative assessment was used to determine the summative receptive knowledge of the words introduced. This data, when compared to the weekly post-tests generally shows a close relationship to weekly post-test scores as shown in table 6, demonstrating continued knowledge of the words over time.

Table 6

Participants' Raw Scores from Summative Vocabulary Post-Test. n=8

Participant	Expressive Score	Receptive Score	Total from Summative Test	Total from Weekly Post-Tests	Difference
1	1	4	5	9	4
2	13	7	20	20	0
3	18	2	20	20	0
4	20		20	20	0
5	16	2	18	18	0
6	20		20	20	0
7	9	10	19	20	1
8	17	2	19	20	1
<i>M</i>	14.25		17.63	18.38	.75

Findings, Implications, Limitations

Findings

Based on the data collected during the study, using data from the Peabody Picture Vocabulary Test IV can help teachers understand types of words with which students commonly demonstrate difficulty. Additionally, explicit teaching of new vocabulary through shared reading experiences, discussions, games, and classroom activities increases receptive and expressive vocabulary knowledge. With this group of participants, all showed an increase in vocabulary scores from the PPVT-4, and data showed an increase in weekly scores for each student.

The purpose of this study was to investigate the use of the Peabody Picture Vocabulary Test IV in order to determine the instructional needs, increase word knowledge, and measure

vocabulary gains in kindergarten students. The research questions for the study focused on the use of the PPVT-4 as an instrument to gather useful data in order to promote and measure vocabulary development in kindergarten students, and successful strategies of vocabulary instruction with the use of the data from the assessment tool. The researcher hypothesized that using data from the Peabody Picture Vocabulary Test would provide information about different types of words that students understand, or conversely, have difficulty understanding. Additionally, the researcher hypothesized that data from the PPVT-4, paired with research-based strategies of vocabulary instruction would increase word knowledge, as well as assessment outcomes.

Implications

With the wide range of vocabulary development present in early childhood classrooms, teachers are faced with the challenge of meeting the vocabulary needs of their students. Vocabulary development is a critical component of reading success, and efforts to increase vocabulary in the early childhood classroom is often limited to exposure. Early childhood educators must be intentional with their language and vocabulary instruction. Often, with the instructional demands of the classroom, organic methods of vocabulary instruction, and classroom read-aloud activities provide introduction to new vocabulary which only scratch the surface. Students need intentional instruction and deeper understanding of words in order to understand and use the new vocabulary.

The results of this study showed that the participants in this kindergarten classroom made vocabulary gains during the six-week study through the use of explicit and intentional methods of vocabulary instruction. The PPVT-4 provided information about words which helped to guide instruction through research-based methods. While it was beneficial to

see the amount of vocabulary growth through the use of the PPVT-4 as a pre- and post-test for this study, the implementation of research-based instructional methods proved to be the most effective strategy to increase vocabulary development for this kindergarten class. These methods included the use of quality shared read-aloud books, questioning and discussions, the use of graphic organizers such as the vocabulary 4-square and word webs, songs, games and classroom activities to promote new word use. Repeated use of focus words throughout the study led to increased student use of new vocabulary during games and activities. Instruction did not take time away from other curricular demands, and was easily woven into the daily classroom schedule.

Limitations

A significant limitation to this study was that the sample group was very small, and only took place in one classroom. Small class sizes, in addition to some families choosing remote learning during the study, led to a smaller than ideal sample size. Implementing this study with a larger, more diverse sample of kindergarten students would give more accurate and reliable results. The PPVT-4 can be used with individuals from the age of two years, six months through adulthood, therefore it could be used at any grade level.

Another limitation to this study was that there were a few students who were absent due to appointments and illnesses during the intervention. One participant spent some time out of the classroom to focus on specific IEP goals, and therefore did not receive the same amount of exposure to the new words. The lessons, read-aloud books, and natural conversations about new words are difficult to recreate when a student re-enters the classroom. Repeated readings, and activating prior knowledge by recalling previous lessons are important methods to help students make connections to new terms. A third limitation is that there were a relatively small number of

words added each week. In order to further increase vocabulary development, it may be necessary to devote more time with a larger selection of focus words each week.

Reflection and Action Plan

Reflection

The PPVT-4 was a helpful assessment to gauge the vocabulary development of kindergarten students, and provided information about types of words which led to focused vocabulary instruction. It also provided norm-referenced data to determine vocabulary needs and growth over time. One challenge of vocabulary instruction is finding meaningful ways to engage students in the use of new words. Another challenge is finding a quick method of assessing student learning. For this particular kindergarten class, the game, “Is it behind...?” was a successful method to encourage the use of new words. Each week, four additional new pictures were added to the pocket chart, and participants were eager to participate in the game. The hidden leaf was placed behind newly introduced words first, to encourage students to use the new words. The game was an engaging lesson extension which took little time to implement, but seemed to have a big impact on vocabulary development and use. Students remembered the words from the earlier weeks, with few reminders, and when they made mistakes, it provided an opportunity for a brief recap of the word and meaning before moving on.

Modeling the assessment tool after the PPVT-4 was an effective and quick form of assessment for the new vocabulary words. Using a checklist to keep track of known and unknown words helped to guide classroom instruction with more in-depth lessons of certain words as needed. While the validity of this type of assessment could be questioned due to the possibility of students guessing as they point to pictures, the summative assessment with students

expressing the words orally gave a good indication of their vocabulary knowledge. Finding accurate pictures to represent the words was a challenge at times.

Action Plan

The researcher plans to present the findings and methods to kindergarten and first grade colleagues at a future faculty meeting in order to share successful methods of explicit and purposeful vocabulary instruction. The data from this study will also be presented to an action research committee at Eastern Illinois University using a Power Point Presentation and a poster.

The researcher suggests additional research with a larger, more diverse participant sample, over a longer period of time to assess vocabulary growth over time. Recruiting additional early childhood grade levels to participate would also be beneficial in determining the value of the methods. The researcher plans to continue the instructional strategies used during the study to promote further vocabulary development, and will consider using the PPVT-4 again in the spring to assess student vocabulary growth throughout the school year.

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Appendix A

PPVT-4

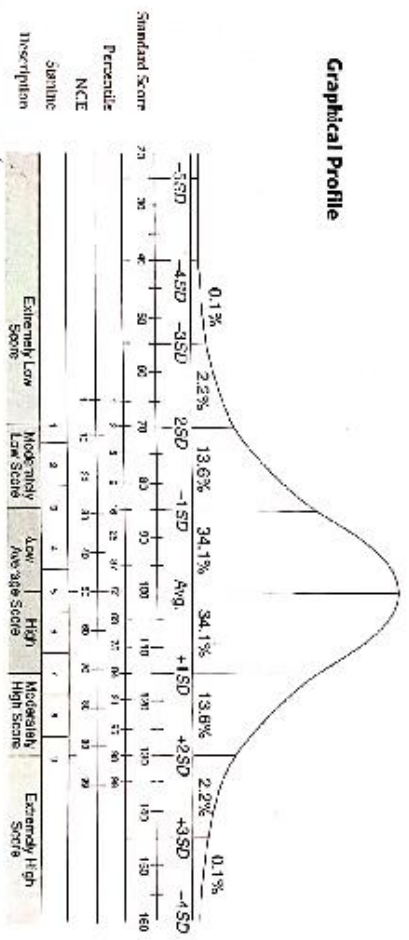


Peabody Picture Vocabulary Test, Fourth Edition
 Lloyd M. Dunn, PhD
 Douglas M. Dunn, PhD

FORM A

Name: _____ Sex: F M ID #: _____
 Address: _____
 City: _____ Current Grade: _____
 State: _____ ZIP: _____ Education Completed: _____
 Home Phone: _____ School/Agency: _____
 Language Spoken at Home: _____ Teacher/Counselor: _____
 Examiner: _____
 Reason for Testing: _____

Graphical Profile



Recommendations

Year _____ Month _____ Day _____
 Test Date _____
 Birth Date _____
 Age* _____
 Do not record on _____
 NORMS USED: Age Grade: Fall Grade: Spring

Score Summary

RAW SCORE (If available, see page 20)
 Standard Score (Scale B: 1, 63, or 83)
 Confidence Interval (Scale B: 0.2, or 0.21) -
 Percentile (Scale B: 1)
 Normal Curve Equivalent (NCE) (Scale A: 3)
 Stanine (Scale B: 4)
 Growth Scale Value (GSV) (Scale B: 5 or 10)
 Age Equivalent (Scale A: 2)
 Grade Equivalent (Scale B: 6)

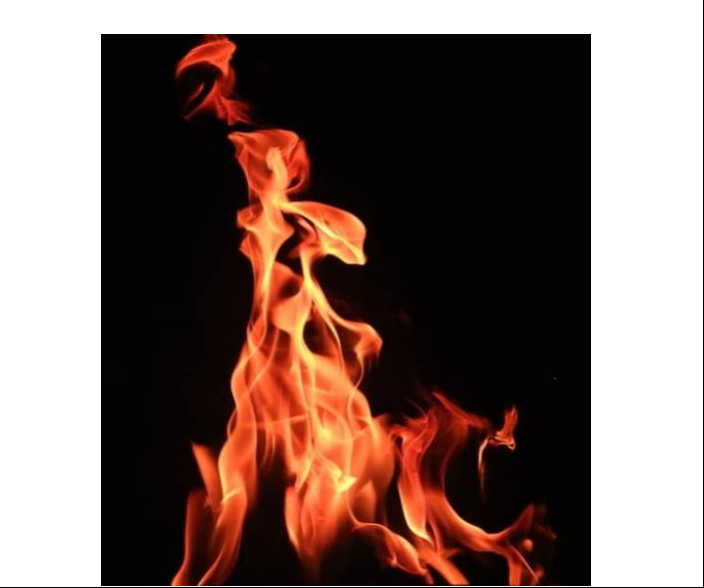
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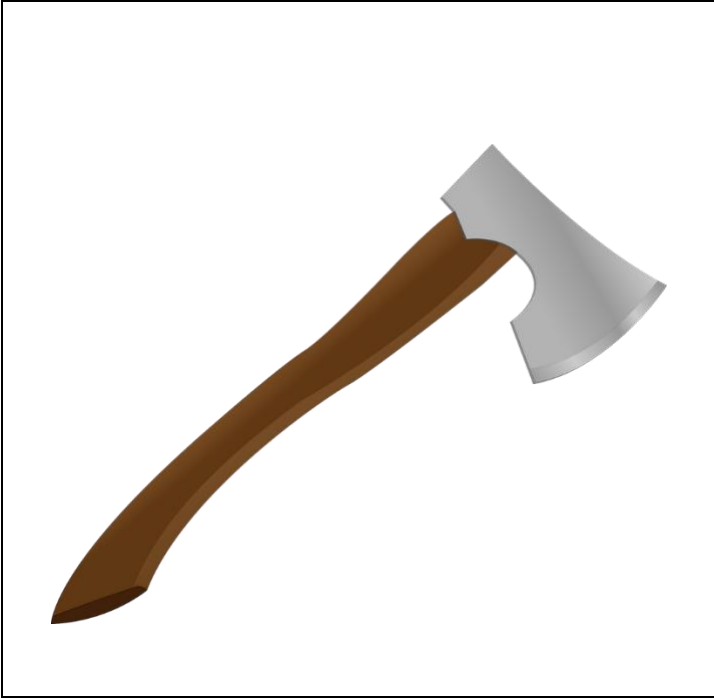
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Appendix B

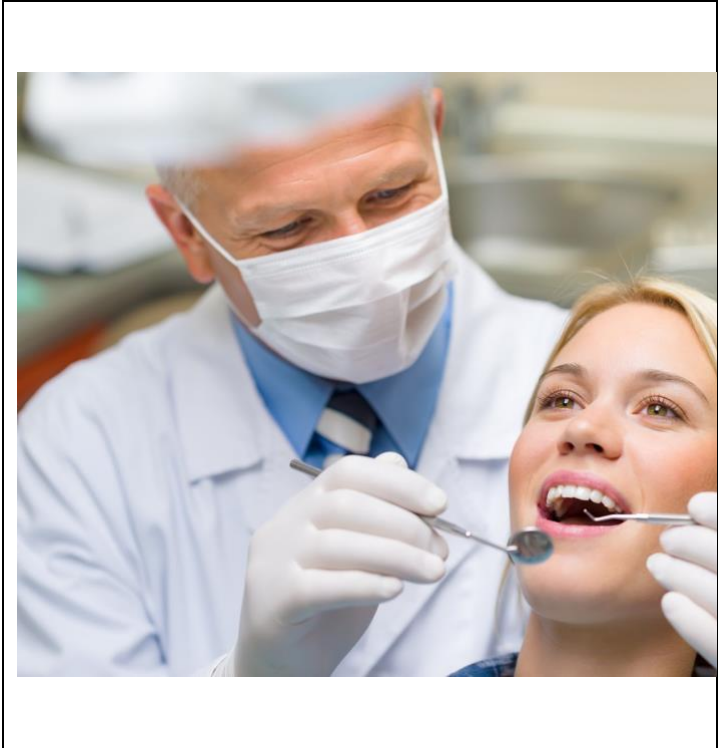
Weekly Vocabulary Pre- and Post-Tests

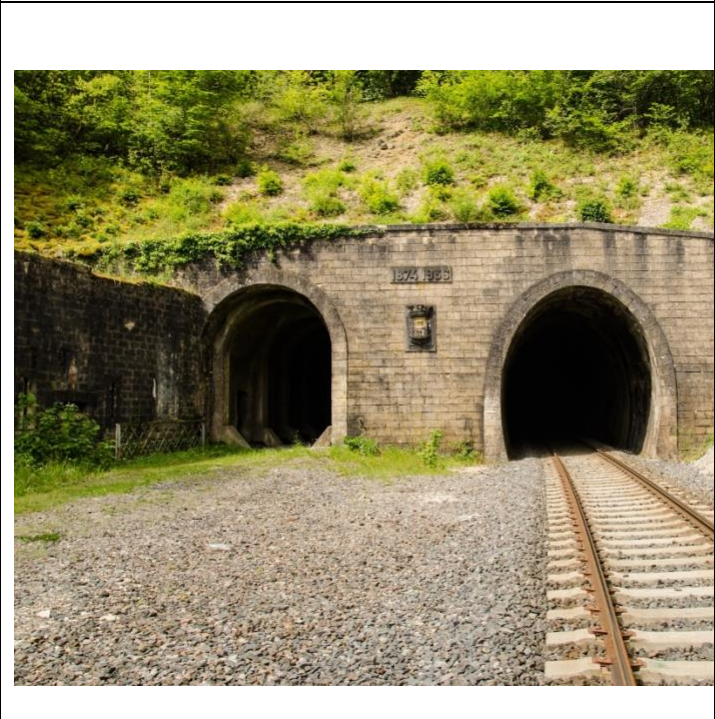
- Week 2: garments, carriage, farewell, flames
- Week 3: ax, dressing, hydrant, brave
- Week 4: bloom, vine, sprout, pulp
- Week 5: dentist, juggling, sawing, arrow
- Week 6: kiwi, vest, buckle, tunnel











Appendix C
Observational notes

Week	Intervention *Instrument/Collection	Notes
1 9/21- 9/25	<p>Focus Read-aloud: <i>Jillian Jiggs</i></p> <p>Vocabulary: mad, tidy, mess, fainted</p> <p>*PPVT-4 Pretest *Weekly observational notes</p>	<p>Cohort A – 5 students attend on Monday/Wednesday & all students were present on Monday – 3 students were tested on Monday, one student was tested on Wednesday, and 2 students were rechecked to establish a basal set.</p> <p>Cohort B – 4 students attend on Tuesday/Thursday. All students were present both days. All were tested on Tuesday.</p> <p>All students tested this week were willing to participate in the PPVT-4. Assessment was administered during quiet arrival/breakfast time, or during quiet, free choice tub time. Distractions and noise levels were very limited due to the small number of students in class.</p> <p>Student 1 unable to pretest on Wed. – limited time due to other services for this child being scheduled that day. Student also wasn't feeling well – earache & was not displaying typical behavior.</p>
2 9/28- 10/2	<p>Focus Read-aloud: <i>King of Kindergarten</i></p> <p>Vocabulary: blares, magnificent, majestic, beat, garments, carriage, farewell, flames vegetables</p> <p>*Weekly Vocabulary Checklist * PPVT-4 modeled vocabulary pre- and post-test with bold focus words *Vocabulary 4- square for focus word: garments</p>	<p>District change from hybrid attendance model to all students having 4-day in-class attendance.</p> <p>Monday - Assessed student 1 & got basal set for student 2 & 8. Student 5 was absent. Gave pre-test for focus words before we did our read-aloud. Read King of Kindergarten and introduced vocabulary during read aloud. Discussed the vocabulary – especially garments, farewell & carriage. At the end of the day, I replaced “Good-bye” in my song with farewell... “Farewell, friends, I’ll miss you so, we’ve had fun, but now it’s time to go!”</p> <p>Tuesday – Introduced vocabulary game: “Is it behind the ___?” to encourage students to use the new focus words: Garments, Flames, Carriage, and Vegetables. Pre-test for student 5.</p> <p>Wednesday - Read-aloud – <i>There Was an Old Lady Who Swallowed Some Leaves</i>. Ask students to recall what type of garments she swallowed. Play “Is it behind ___?” again.</p> <p>Thursday – Vocabulary Post-test. Played “Is it behind---?” Students are showing an understanding of the word, garments.</p>

		<p>Asked each student to tell me what type of garments they were wearing.</p> <p>Weekly checklist. Student # 4 Absent.</p>
<p>3</p> <p>10/5-10/9</p>	<p>Fire Safety – Fire truck diagram</p> <p>Focus Read-Aloud: <i>I’m Brave! & Let’s Meet a Firefighter</i></p> <p>Vocabulary: brave, ax, dressing, hydrant</p> <p>*Weekly Vocabulary Checklist</p> <p>*PPVT-4 modeled vocabulary pre- and post-test – with bold vocabulary focus words</p> <p>*Brave Word web</p> <p>*Firetruck diagram</p> <p>*Vocabulary 4 Square - brave</p> <p>*Vocabulary game: “Is it behind the ___?” (cumulative – new pictures added to previous)</p>	<p>Monday – Student # 3 left after the weekly focus word pre-test. Pre-tested students in the morning on 4 new vocabulary words following the PPVT-4 model. Several students seemed to have previous knowledge of this week’s words – only a few missed words during pre-tests today. Four pictures were added to our “Is it behind ___?” game. Students were engaged in the activity, and asked to keep playing. We played 3 times. Student #1 was out of the room for services during the game. Each student got at least 2 turns asking the question. Each student used the correct vocabulary word when asking the question.</p> <p>Tuesday – Student #3 was absent. Students were engaged in “Is it behind ___?” game again today. Student #4 asked if it was behind the clothes. I asked what our new word was & student responded “I can’t remember”. Student #6 chimed in, “Garments”. Student #8 asked if it was behind “that fire one” I asked what we call those items in the picture, and student #7 said, “Flames”. We also had a discussion about the word “dressing” as students referred to it as “the one where he is getting dressed” and “the one that is putting on clothes”. Student #2 asked if it was behind the “really super guy”. I explained that the picture was showing the term, “brave” & we discussed “brave”. At the end of the day, Student #4 said, “Farewell” when getting ready to walk out the door.</p> <p>Wednesday – Student # 3 and #4 were absent. Labeled a diagram of a firefighter. Talked about Brave again. Firefighters came to school to show their truck & equipment. Played “Is it behind ___?” again. Student #2 asked if it was behind brave.</p> <p>Thursday – Student #3 was absent. Students were given the post-test and overall did really well. We created a Brave word web with students. Participants shared the following ideas for brave - not afraid, the Batman, doctors, Spiderman, firefighter, my dad, my mom, I was brave when I broke my arm.</p>
<p>4</p> <p>10/12 - 10/16</p>	<p>Focus Read-aloud: <i>Seed, Sprout, Pumpkin, Pie</i></p> <p>Vocabulary: vine, bloom, pulp, sprout</p>	<p>Monday – NO SCHOOL</p> <p>Tuesday – All students were present – Vocab Pre-test with 4 new pictures. 4 pictures were added to our game, “Is it behind the ___?” (vine, bloom, sprout and pulp) Played a few rounds of the game. Student 5 said Pumpkin, rather than pulp. We</p>

	<p>*Weekly Vocabulary Checklist *PPVT-4 modeled vocabulary pre- and post-test *Pumpkin Life Cycle Chart *Parts of a Pumpkin diagram *Vocabulary 4 square - Pumpkin *Vocabulary game: "Is it behind the ___?"</p>	<p>discussed the pulp of the pumpkin. Later in the day student 6 said Pumpkin again rather than pulp – we again talked about pulp. Student 8 called the dentist a doctor – we talked about how a dentist takes care of your teeth. Our read-aloud book was <i>Orangutangled</i>. The orangutans were swinging from vines – we discussed vines.</p> <p>Wednesday – Read-Aloud <i>Seed, Sprout, Pumpkin, Pie</i>. Again, we discussed vine as students learned about pumpkins growing on vines – made a connection with the orangutans who swing on vines in the jungle. Played vocabulary game. "Is it behind the ___?". Student 2 asked if it was behind the garments – first time I've hear the student use one of our new words. Student 5 asked about the pumpkin again, and we discussed pulp again. (Tomorrow we will diagram a pumpkin – hopefully students will remember what the pulp is after our activity. Created a diagram of the life cycle of a pumpkin. Students drew illustrations and labeled seed, sprout, vine, bloom, pumpkin.</p> <p>Thursday – Watched & read Scholastic Let's Find Out – which discussed the parts of a pumpkin. Created a diagram of a pumpkin, and each child labeled the parts: stem, shell, flesh, pulp, seeds. During a handwashing break, student # 8 asked, "Are we going to play that behind game?" and pointed to the pocket chart game. When we played "Is it behind?", student # 7 asked if the leaf was behind pulp. Student #8 asked if it was behind the bloom – another word they frequently called "flower".</p>
<p>5 10/19 - 10/23</p>	<p>Focus Read-aloud: <i>Creepy Carrots</i></p> <p>Vocabulary: crisp, victory, yanked, sinister, ridiculous, hatched, creepy, creeping, peeking, juggling, dentist, sawing, arrow</p> <p>*Weekly Vocabulary Checklist *PPVT-4 modeled vocabulary pre- and post-test *Word Web for focus word – dentist</p>	<p>Monday – Student #4 absent. Did pre-test for this week's words taken from <i>Creepy Carrots</i> and commonly missed words from the PPVT-4. The words were also added to our "Is it behind__?" game. Played the game and students used correct words for previous week's words. Student # 5 asked if it was behind "jingle" for juggle.</p> <p>Tuesday – All students were present. Created word web for the word dentist.</p> <p>Wednesday – Read <i>Creepy Carrots</i>. Had brief discussions about words while reading. While going to the door to line up for PE, students acted out "creeping". Played "Is it behind__?" Student #4 asked if it was behind ridiculous. Student #8 asked if it was behind the guy with the hose. She finally pointed to "juggling". We discussed the word again, and she later asked the correct word.</p>

	<p>*Vocab. 4 square for: Creepy Act out: creeping *Vocabulary game: “Is it behind the ___?” Vocabulary Game: Swat the Word</p>	<p>Thursday – Students took the vocabulary post-test. Did vocabulary 4 square for the word creepy. Students offered ideas of what to draw – carrots, a sentence – The creepy carrots were a little bit scary, a non-example – a bunny, and an example, a carrot. Played a new game: Swat the Word. Picture vocabulary cards for eight words were placed on poster board and placed on the table between two students. Students were given fly swatters and asked to swat the word they hear. Teacher named one of the words and students raced to be the first to swat the picture (each child had a set of eight pictures on their side of the poster board to prevent injuries).</p>
<p>6 10/26 - 10/30</p>	<p>Spiders Focus Read-aloud: <i>Are You a Spider?</i> Vocabulary: tunnel, buckle, kiwi, vest, spinneret, spinning, thread, forest *Weekly Vocabulary Checklist *PPVT-4 modeled vocabulary pre- and post-test *Spider Word Web *Vocabulary game: “Is it behind the ___?” *Swat the picture game *PPVT-4: Post-test</p>	<p>Monday – Weekly vocabulary pre-test was given. Read <i>The Little Old Lady Who Was Not Afraid of Anything</i>. Discussed forest. Started PPVT-4 Post-tests (completed students 7 & 8)</p> <p>Tuesday – Student 6 came in late. Completed Word Web for Spiders. Read <i>Are You a Spider?</i> Added to the spider word web. Read <i>I Love My Hair!</i> Before our writing lesson. Recalled the word forest from the day before. Reintroduced the pumpkin to the class as we prepared to carve it – student #6 said “Oh! Will we get to see the pulp?” Students recalled the shell, stem, seeds and pulp from our previous lessons on the parts of a pumpkin. Continued post-tests for PPVT-4 (completed students 4, 5 & 6) Students are showing good progress from pretest.</p> <p>Wednesday – Continued post-tests for PPVT-4</p> <p>Thursday – Completed weekly post-tests, and Summative assessment</p>

Appendix D

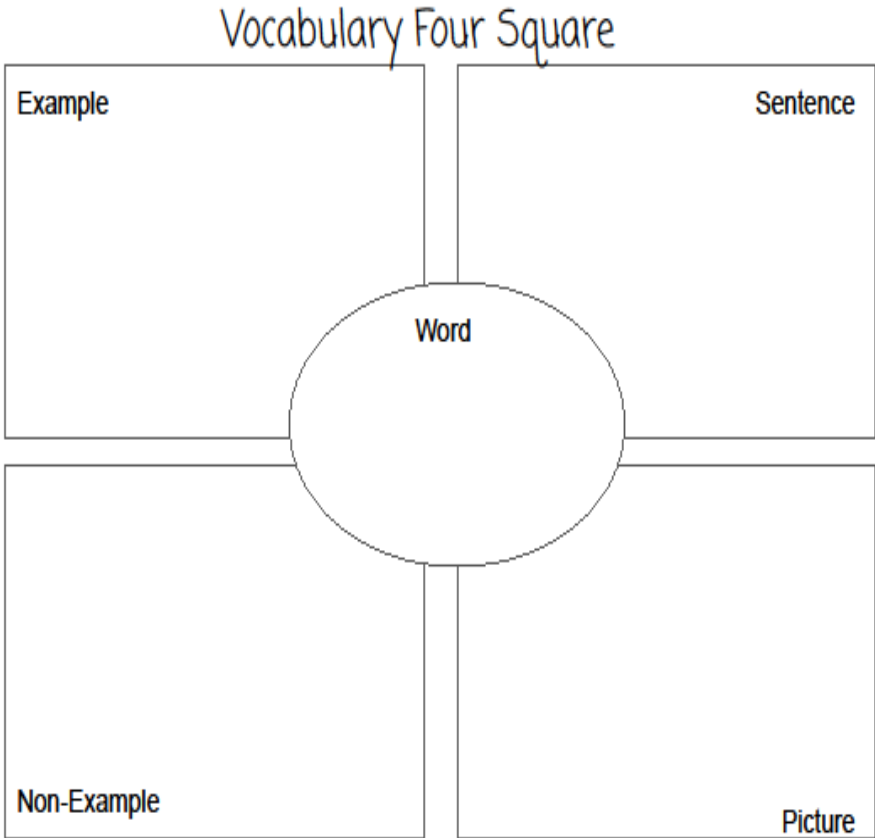
Weekly Checklist

1	Yes	No	Notes
Understands meaning of new words when used by others			
Uses new words during vocabulary activities			
Asks and answers questions about new words			
Uses new vocabulary in conversations with others			
2			
Understands meaning of new words when used by others			
Uses new words during vocabulary activities			
Asks and answers questions about new words			
Uses new vocabulary in conversations with others			
3			
Understands meaning of new words when used by others			
Uses new words during vocabulary activities			
Asks and answers questions about new words			
Uses new vocabulary in conversations with others			
4			
Understands meaning of new words when used by others			
Uses new words during vocabulary activities			
Asks and answers questions about new words			
Uses new vocabulary in conversations with others			
5			
Understands meaning of new words when used by others			
Uses new words during vocabulary activities			
Asks and answers questions about new words			
Uses new vocabulary in conversations with others			
6			
Understands meaning of new words when used by others			
Uses new words during vocabulary activities			
Asks and answers questions about new words			
Uses new vocabulary in conversations with others			
7			
Understands meaning of new words when used by others			
Uses new words during vocabulary activities			
Asks and answers questions about new words			
Uses new vocabulary in conversations with others			

8			
Understands meaning of new words when used by others			
Uses new words during vocabulary activities			
Asks and answers questions about new words			
Uses new vocabulary in conversations with others			

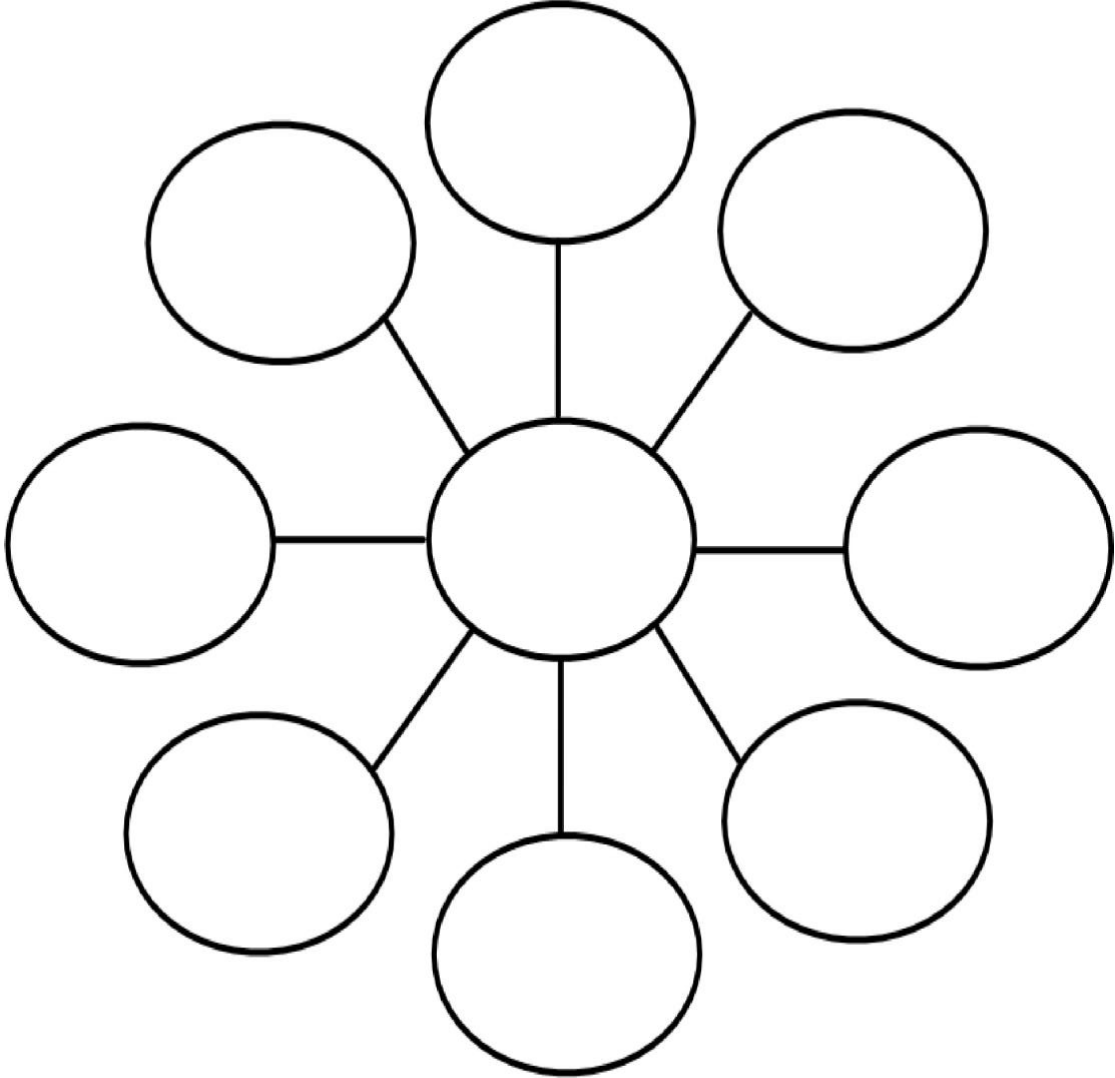
Appendix E

Vocabulary 4-Square



Appendix F

Word Web



NAME _____

September 15, 2020

Cheryl Frerichs
Sham'ah Md-Yunus
Teaching Learning and Foundations

Thank you for submitting the action research protocol titled, "Using the Peabody Picture Vocabulary Test: Data-Driven Vocabulary Instruction in the Kindergarten Classroom" for review by the Eastern Illinois University Institutional Review Board (IRB). The protocol was reviewed on 9/15/2020 and has been certified that it meets the federal regulations exemption criteria for human subjects research. The protocol has been given the IRB number 20-099. You are approved to proceed with your project. The classification of this protocol as exempt is valid only for the research activities and subjects described in the above named protocol. IRB policy requires that any proposed changes to this protocol must be reported to, and approved by, the IRB before being implemented. You are also required to inform the IRB immediately of any problems encountered that could adversely affect the health or welfare of the subjects in this study. Please contact me in the event of an emergency. All correspondence should be sent to:

Institutional Review Board
c/o Office of Research and Sponsored Programs
Telephone: 217-581-8576
Fax: 217-581-7181
Email: eiurb@eiu.edu

Thank you for your cooperation, and the best of success with your research.

Compliance Coordinator
Office of Research and Sponsored Programs
Telephone: 581-8576
Email: eiurb@eiu.edu

Thank you,
Mary Mattingly
Research and Sponsored Programs

Appendix H

Parent Letter

Dear Families,

September 2, 2020

As part of my graduate work in Curriculum and Instruction at Eastern Illinois University, I am conducting an Action Research project in my classroom this semester. This research project is a requirement to fulfill my master's degree course work. The title of my action research project is "Using the Peabody Picture Vocabulary Test: Data-driven Instruction in the Kindergarten Classroom".

I will be conducting an assessment of the Peabody Picture Vocabulary Test IV to determine the students' level of vocabulary development. The data from the test will help me to provide appropriate instruction in order to expand the students' vocabulary by engaging them in various activities to introduce and reinforce their understanding of new words. Students will be continuing in our curriculum as planned and receive the same instruction as the rest of the kindergarten classes.

The time allotted for this research project is six weeks. The results gathered from this study will be used solely for the purpose of this project. All data that I collect will be confidential. In sharing the results of my data, no identifying information will be shared. I am planning for all students to participate in this research project, but as parents or guardians you have the option to exclude your child from the study. Please contact me if you want your child to be excluded from this research. I have been granted approval by the school to conduct this research project in my classroom.

Mrs. Cheryl Frerichs
Kindergarten Teacher
217-324-2851

If you have any questions or concerns about this research, please contact:

John H. Bickford III, Ph.D.
Associate Professor of Social Studies Education
Department of Early Childhood, Elementary, and Middle Level Education
Eastern Illinois University
2205 Buzzard Hall
Charleston, IL 61920
217-581-7885
jbickford@eiu.edu

Or, you may call or write:

Institutional Review Board at Eastern Illinois University
600 Lincoln Ave.
Charleston, IL 61920
Telephone: (217) 581-8576
E-mail: eiuirb@www.eiu.edu

Appendix I

Principal Approval Letter



LITCHFIELD PRE KINDERGARTEN MADISON PARK ELEMENTARY



601 South State Street
Litchfield, Illinois 62056

800 N. Chestnut
Litchfield, Illinois 62056

Ph: (217)-324-3514 - Fax (217)324-2129

Ph: (217)-324-2851 - Fax (217)324-5562

Adam D. Favre, Director Principal afavre@litchfieldpanthers.org

September 3, 2020

Re: Action Research Project Approval

Dear Mrs. Frerichs,

This letter serves as approval by the school district for you to move forward with your action research project for your master's program. You have satisfied the requirements of notification to families as well as outlining the project for students. The district understands the project and is comfortable with what you are doing.

I would appreciate being informed as you move forward with your project and that you would share any findings or results when your project when it is complete. Please also keep me informed regarding any major alterations to the project in case I have questions from parents or district level administration.

This letter should fulfill the requirements of your university for district approval. Please present them a copy.

Best of luck on your project. You will be busy! I look forward to hearing about your results.

Sincerely,

cc: [redacted]

A handwritten signature in blue ink that reads "Adam D. Favre".

Adam D. Favre, Principal