The Effects of Interactive Word Walls on the Comprehension and Vocabulary Knowledge of Kindergarten Students in Reading

by

Morgan Karr

Submitted in Partial Fulfillment of the Requirements for the

Degree of Master of Reading

July 2019

Goucher College

Graduate Programs in Education

Table of Contents

List of Tables

Abstract

The purpose of this study was to determine the impact of interactive word walls on reading comprehension and vocabulary knowledge of kindergarten students. The participants in this study consisted of nineteen kindergarten students enrolled at an elementary school in Harford County, Maryland. The participants were provided with interactive word wall instruction and practice aligned with the Common Core State Standards in reading as well as the local school system's English Language Arts curriculum. The Fountas and Pinnell Benchmark Assessment was utilized to compare the scores of students before and after receiving word wall instruction. The analysis of data revealed the interventions had a positive impact on students' comprehension and vocabulary knowledge.

CHAPTER I

INTRODUCTION

Overview

The purpose of this study is to examine the effects of word walls on the reading comprehension abilities and vocabulary knowledge of kindergarten students. A word wall is a collection of words that are displayed in large print for students. They can be content specific and used in all subject areas to help reinforce vocabulary. They are interactive tools for students to use before, during, and after reading and while writing. Word walls serve as an excellent source of information for students as they investigate unknown words, spell unfamiliar words, or define new vocabulary (Yates, Cuthrell & Rose, 2011).

Vocabulary terms are often hard for kindergarten students to spell and define, so making sure that word walls include content specific vocabulary and easy to understand definitions is vital in the classroom. As opposed to the traditional word wall, interactive word walls provide visual aids that illustrate word meanings and organize words to improve comprehension. Word walls can be used in all subject areas, but for the purpose of this study, the focus is on word walls in reading classes to help build up vocabularies and comprehension.

For students to become successful readers, it is imperative for them to learn the foundational skills of reading in kindergarten. Students who enter first grade without the advantage of kindergarten foundational skills may be lacking literacy skills. Interactive word walls can help support those foundational skills and provide students with the tools to succeed.

This study examines several interactive word wall strategies to determine if one strategy, or a variety of strategies, will help students be more successful in the learning and retention of

vocabulary and therefore, improve comprehension. With the proper implementation of word wall strategies, students will become more successful readers.

Statement of Problem

Many students have difficulty retaining vocabulary knowledge and comprehending what they read. Will interactive word walls increase reading achievement for kindergarten students?

Hypothesis

The null hypothesis is that the results of this study will indicate that there is no significant gain in the average achievement level of kindergarten students on the Fountas and Pinnell Benchmark Assessment after receiving interactive word wall instruction.

Operational Definitions

Achievement- The level students reach on the Fountas and Pinnell (F&P) Benchmark posttest at the end of the unit when compared to the F&P pre-test administered prior to instruction.

Homogeneously-Grouped- Students are grouped by reading level to ensure that they are given texts on their reading level and are being taught the appropriate skills that they need based on their reading abilities.

Vocabulary Knowledge- Knowing words and their meanings and is one of the best predictors of reading comprehension. Vocabulary knowledge grows and expands over time and with experience.

Comprehension- The ability to understand what is being read. Reading comprehension is an intentional and interactive process that occurs before, during and after reading.

Interactive Word Wall - The interactive word wall was utilized during reading instruction that contains vocabulary terms and definitions, pictures, artifacts, and student writing samples from the unit.

Instruction – The instruction during reading included activities that required students to use the word wall as a reference to complete various activities and display their work.

Fountas and Pinnell Benchmark Assessment- A resource to accurately and reliably identify each child's instructional and independent reading levels and document their progress through one-on-one formative and summative assessments. The assessments provide teachers with tools and texts to observe and quantify specific reading behaviors and check for vocabulary and reading comprehension and then interpret and use the data to plan meaningful instruction.

CHAPTER II

REVIEW OF THE LITERATURE

This literature review seeks to explore the effects of word walls on the reading comprehension abilities and vocabulary knowledge of kindergarten students. Research on this topic is related to student growth in the areas of vocabulary and reading comprehension when word walls are utilized across content areas and in various forms. The first section defines what kindergarten students are expected to be able to do as beginning readers. The second section defines vocabulary knowledge and how word walls can affect and help develop vocabularies. The third section defines reading comprehension and the various ways in which readers understand and makes connections to the text being read. The fourth section defines word walls and explores different ways that word walls can be utilized in the classroom. The fifth section looks at the effects word walls have on vocabulary and reading comprehension. The final section summarizes the importance of incorporating word walls in the classroom to improve reading comprehension and student vocabularies.

Kindergartners as Beginning Readers

What are kindergarten students expected to know and be able to do as beginning readers? If a 6-year-old student only knows a few printed words, it is hard for him or her to read even the simplest of stories. But if the child can't read the story, how does he or she learn new words? One out of four children struggles with beginning reading (Morris, 2015). During their first year of formal schooling, kindergarten students are expected to reach many milestones. Students not only learn their letters and letter sounds, but also learn to read. Children in kindergarten often recognize words by sight, known as sight words. High-frequency words are also learned, as well as content-specific vocabulary, so that simple texts can be read by the students. Kindergartners

can understand more than just the plot of a story. They are able to extend their thinking, make connections to what they read, and discuss why events happened and how characters can change throughout a text. They can also make reasonable predictions about what will happen next and relate the events of the story to their own lives. Discussing what is read helps students build up their comprehension abilities and grow into more independent readers.

Kindergarten places an emphasis on academic performance, especially providing the literacy foundation children will need for success in first grade (O'Connor, 2012). Children who do not have a kindergarten experience before first grade are often lower academically, and the academic gap becomes larger and more significant as the year progresses. Kindergarten is an important year for children to adapt to the rigors of school emotionally, socially, and academically. By the end of kindergarten, children should have basic concepts about print, be able to name all of the letters, have phonemic awareness, and be able to retell stories (Carrier, 2016). "Reading requires the mastery, integration and application of numerous skills and knowledge" (Brown, 2014, p. 35). Today, first grade teachers have expectations that children will enter their classrooms with basic literacy skills already established. The kindergarten year also teaches children the rules of attending school, as well as social skills and other foundation knowledge to support learning in first grade. The result is that children who enter first grade without the advantage of kindergarten may be lacking some foundational literacy skills.

Definition of Vocabulary Knowledge

Vocabulary is the knowledge of words and their meanings. Vocabulary knowledge is not something that can ever be fully mastered but, instead, grows over the course of a lifetime. Instruction in vocabulary involves more than looking up words in a dictionary and using the words in a sentence. Vocabulary is acquired incidentally through indirect exposure to words and

intentionally through explicit instruction in specific words and word-learning strategies (Boyer, 2017).

Using word walls in instruction is a useful tool to reinforce vocabulary terms being addressed in specific content areas and among different units of study. Fostering vocabulary growth is an effective strategy for increasing comprehension in beginning readers. Reading comprehension cannot be fully understood without having knowledge of how vocabulary development and vocabulary instruction impacts an understanding of what is read (Boyer, 2017). Learning new concepts and vocabulary is an essential part of reading comprehension.

Definition of Reading Comprehension

Reading comprehension is the ability to understand what is being read. Reading comprehension is an intentional and interactive process that occurs before, during and after reading. Readers must be able to construct meaning and make connections based on their prior knowledge and the words in a text. The more knowledge students possess about a topic, the better able they will be to make connections to what they read. Encouraging students to discuss what they read is another strategy to help increase comprehension and engage students in meaningful conversation. Limited vocabulary knowledge can result in poor reading comprehension because children are not able to understand what they have read. Vocabulary knowledge is one of the best predictors of reading comprehension (Boyer, 2017).

Definition of Word Walls and the Effects of Their Usage

A word wall is a collection of words that are displayed in large print for students. Word walls can be content specific and used in all subject areas to help reinforce vocabulary. They are interactive tools for students to use before, during, and after reading and while writing. Word walls serve as an excellent source of information for students attempting to investigate unknown

words, spell unfamiliar words, or define new vocabulary (Yates, et al., 2011). In addition to being used independently by students, word walls can also be utilized in small group and whole group settings. Students should be shown how to use a word wall, as modeled by the teacher, so that whenever they need a word they may not know, but know it is on the word wall, they can use cues and other visual clues to locate it (Frey & Fisher, 2010). Word walls provide students with a model of high frequency words and are a wonderful reference when reading and writing.

Word walls can be used in the classroom in a multitude of ways and across subject areas. It is important to put word walls in an easily visible and accessible place for students and to make sure that the words are written in large black letters (Jackson, Tripp, & Cox, 2011). Wall space and room arrangement often determine the placement of word walls. Word walls can be placed on cabinet doors or classroom walls or hung from the ceiling with wire and string. Maximum instructional potential is achieved when interactive word wall construction is aligned with lessons and students participate in the process. As a result, walls are usually built over many days. Word walls support units and are changed or replaced as units change.

Word walls should be used daily. There are a variety of ways to practice the words on the word wall, such as by clapping, cheering, tracing the words, and writing them (Jackson, et al., 2011). Content area material should be used when choosing words, as opposed to selecting random words. When students use the words from the word walls, it is imperative that they are spelling the words correctly and are made aware of any errors in their spelling. Word walls can be used in subject areas such as math, reading, science, and writing. They can also be used for special occasions and can serve as differentiated instruction. Word wall uses are endless and can be helpful for all students, in any grade.

It is important to make word walls interactive and not simply a list of words for students to use. “Teachers should not only have a word wall but, more importantly, also do the word wall by involving the students actively in both creating and interacting with the words on the wall” (Yates, et al., 2011, p.32). Word walls strategically target vocabulary and include visual aids that illustrate word meanings to deepen understanding. Interactive word walls often include a visual representation of specific vocabulary words and labels (Jackson & Durham, 2016). Student achievement improves when academic vocabulary, student-generated materials, and visual supports are arranged to organize learning. Interactive word walls support the Common Core Language Arts standards because they help students form relationships with vocabulary and learn through interactive visual literacy. Comprehension and vocabulary go hand in hand, because to comprehend the larger texts being read, readers must have knowledge of the smaller words that make up the text. The more words a reader knows and understands, the better they are able to comprehend what they have read (Boyer, 2017).

The Effect of Word Walls

Jasmine and Schiesl (2009) studied the effects of word walls on the reading fluency of first grade students. Twenty first grade students, 11 boys and 9 girls, were included in the study. Over the course of four weeks, students, in groups of four, participated in one 40-minute learning word wall station a week and a 20-minute whole class activity three times a week. The first week, a 40-word pre-running record was administered to all the students. Following the completion of the pre-running record, the entire class did a 20-minute Wordo word wall activity. The students rotated through various word wall stations throughout the four weeks, such as Word Wall Toss and Rainbow Words. At the end of the four weeks, students were given the post-running record to see if their reading fluency had increased. Students increased words read per

minute as a result of the word wall instruction. The students also enjoyed the word wall activities, which kept them actively engaged and helped them learn sight words which may have increased their reading fluency.

Another study on the effectiveness of word walls reported that scores on high-stakes tests increased across all student groups when teachers used interactive word walls and provided opportunities for students to encounter and use science vocabulary in authentic and engaging ways (Jackson, et al., 2011). An interactive word wall, as opposed to the traditional word wall, provides visual aids that assist in illustrating word meanings and conceptually organize words to deepen understanding. These word walls usually include a visual representation of the word along with a vocabulary label, with definitions optional.

Summary

Reading comprehension and vocabulary knowledge are two essential parts of literacy, and word walls are a beneficial tool to help strengthen student literacy. Interactive word walls help make organizing unit instruction easier and also help students understand connections between related words and new vocabulary they are learning. Students become more self-sufficient when they can find the information by looking at the word wall rather than asking the teacher for assistance. Word walls give students access to vocabulary, which is turn helps them identify the words quickly when reading text and understand what is read.

With the various types of word walls, and word wall activities, at teachers' fingertips, students have a multitude of opportunities to use word walls and benefit from their use. Word wall activities provide interactive ways to learn high-frequency words as students build word recognition through visual and active engagement with new and frequently used words. When used effectively and with frequency, word walls can enhance the comprehension and retention of

content area vocabulary for students of all ages. Strategies can be utilized to support teachers and help them incorporate word walls in their lessons.

CHAPTER III

METHODS

The goal of this research study is to investigate the effect of vocabulary and comprehension instruction using interactive word walls on the achievement of 19 kindergarten students in a homogeneously-grouped reading classroom.

Design

A quasi-experimental design was used for this research where a pre- and post-test were utilized to determine whether or not there was a significant difference in the students' comprehension and vocabulary development when word walls were implemented.

Participants

The research for this study was conducted in a kindergarten classroom in a suburban elementary school. The treatment group consisted of a class of 19 kindergarten students, in one of the seven kindergarten reading regrouping classes at the elementary school. The class consisted of 9 male students and 10 female students. The students in this kindergarten class have similar reading ability levels. Some students came to kindergarten with previous experience in school settings while some students had little or no experience in the school setting before attending kindergarten. The students in the treatment group are five and six years old. 12 students are Caucasian, 5 students are Asian, and 2 students are African American. The population of the class is also diverse economically.

Instruments

A pre-test and a post-test using the Fountas and Pinnell Benchmark Assessment was used in this study. The pre- and post-test evaluates students’ fluency and comprehension ability. The words in the text of the Fountas and Pinnell Assessment focus on high frequency words that

cannot be easily sounded out. After reading, students are asked a variety of comprehension questions. The pre-test was given in October and the post-test was given in January.

On the pre-test and the post-test students were asked to read a story at their beginning reading level for the year. In Part 1 of the assessment, the student reads aloud the system's original, leveled fiction and nonfiction books, while the teacher observes and notes the reader's behaviors on carefully constructed forms. Any errors or self-corrections that the students make are marked, as well as their fluency and rate of reading. In Part 2, a Comprehension Conversation is conducted by asking questions about to text. Part 3 is optional and uses a Writing About Reading prompt to elicit response to the text in written form. The comprehension errors are counted, and a score is given to identify if the level is independent, instructional, or frustrating for the student. The success of integration of word walls can be seen in how well the students perform on the post-test.

Procedures

After the first few weeks of school, in October, students were assessed on their reading fluency and comprehension using the Fountas and Pinnell Benchmark Assessment. Each student in the regrouping class received an instructional and independent reading level ranging from Level A to Level D.

After the pre-test data was collected, word walls began being implemented throughout the classroom during reading. Word walls were created, with student input, for each theme unit being covered. The word walls were created using vocabulary terms and pictures or photographs. They were located on one wall in the classroom designated to reading. The word walls were created as students were learning that theme unit or reading skill and contained pictures that helped students have a better understanding of the vocabulary words.

Word walls for content vocabulary were used, as well as a wall for sight words. The class created word walls about story elements. They also created a word wall for fiction and nonfiction stories, as well as for other reading themes and skills. Before vocabulary terms were added to the word wall, they were introduced and defined during class discussions and activities. Using pictures helped the students understand the vocabulary more fully and allowed them to easily rely on the word wall when responding to questions, engaging in discussions, or writing responses. As the students rely on the word wall for spelling, as well as comprehension, less questions are directed toward the teacher as the students are better able to support themselves. Since classroom space is limited, copies of the word walls were placed in folders for the students so that they could look back on at any point throughout the year or even take home if desired.

In January, students were given the post-test with the Fountas and Pinnell Benchmark Assessment. The same procedures were used for both the pre and post-test. Students were asked to read a story on their instructional reading level determined from the pre-test in October. Any errors or self-corrections made as the student was reading were marked. Their fluency and rate of reading was also documented. After reading through the text, the students were asked a series of questions to test their comprehension of what was read. Once the errors were counted and comprehension score was given, student growth from the beginning of the year was measured. Student progress was also monitored through the use of classroom observation during whole and small group instruction, as well as through collected reading assessments.

Analysis Plan: The paired t-test will be used to determine if the mean change from pre-to-post is statistically significant at the .05 level. That is, if the change observed in the study kindergarten class would likely occur in other similar classrooms using the same method. In

addition, a standardized effect size will be calculated. Effect size measures the amount of change regardless of sample size and is especially useful with small sample studies.

CHAPTER IV

RESULTS

The purpose of this study was to investigate the effect of vocabulary and comprehension instruction using interactive word walls on the achievement of 19 kindergarten students in a homogeneously grouped reading classroom. The null hypothesis of no significant gain in the average achievement level of kindergarten students on the Fountas and Pinnell Benchmark Assessment after receiving interactive word wall instruction was formulated as the statistical hypothesis for testing.

The pre-test and post-test results for the students following interactive word wall vocabulary instruction were analyzed. The student scores are reported in Table 1. The statistical test of the null hypothesis is displayed in Table 2.

Table 1. *Pre-Post Data for 19 Participants*

Studid	preFP	postFP	Fppre	Fppost
1	C	F	3	6
2	C	F	3	6
3	B	E	2	5
4	C	G	3	7
5	B	F	2	6
6	B	E	2	5
7	C	F	3	6
8	C	F	3	6
9	C	F	3	6

Studid	preFP	postFP	Fppre	Fppost
10	B	E	2	5
11	C	E	3	5
12	D	G	4	7
13	C	F	3	6
14	C	F	3	6
15	B	E	2	5
16	C	F	3	6
17	C	F	3	6
18	B	D	2	4
19	B	E	2	5

Table 2. *Paired t-Test Pre-to-Post*

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
fppre	19	2.684211	.1336101	.5823927	2.403506	2.964915
fppost	19	5.684211	.171894	.7492686	5.323075	6.045346
diff	19	-3	.1081476	.4714045	-3.22721	-2.77279

```
    mean(diff) = mean(fppre - fppost)                             t = -27.7399
Ho: mean(diff) = 0                              degrees of freedom =       18

Ha: mean(diff) < 0           Ha: mean(diff) != 0           Ha: mean(diff) > 0
Pr(T < t) = 0.0000         Pr(|T| > |t|) = 0.0000          Pr(T > t) = 1.0000
```

Table 3. *Normative Gains of Students When Tested Using Fountas & Pinnell*

INSTRUCTIONAL LEVEL EXPECTATIONS FOR READING

	Beginning of Year (Aug.–Sept.)	1st Interval of Year (Nov.–Dec.)	2nd Interval of Year (Feb.–Mar.)	End of Year (May–June)
Grade K		C+	D+	E+
		B	C	D / E
		A	B	C
				Below C
Grade 1	E+	G+	I+	K+
	D / E	F	H	J / K
	C	E	G	I
	Below C	Below E	Below G	Below I
Grade 2	K+	L+	M+	N+
	J / K	K	L	M / N
	I	J	K	L
	Below I	Below J	Below K	Below L
Grade 3	N+	O+	P+	Q+
	M / N	N	O	P / Q
	L	M	N	O
	Below L	Below M	Below N	Below O
Grade 4	Q+	R+	S+	T+
	P / Q	Q	R	S / T
	O	P	Q	R
	Below O	Below P	Below Q	Below R
Grade 5	T+	U+	V+	W+
	S / T	T	U	V / W
	R	S	T	U
	Below R	Below S	Below T	Below U
Grade 6	W+	X+	Y+	Z
	V / W	W	X	Y
	U	V	W	X
	Below U	Below V	Below W	Below X
Grade 7	Z	Z	Z+	Z+
	Y	Y	Z	Z
	X	X	Y	Y
	Below X	Below X	Below Y	Below Y
Grade 8+	Z+	Z+	Z+	Z+
	Z	Z	Z	Z
	Y	Y	Y	Y
	Below Y	Below Y	Below Y	Below Y

KEY

- Exceeds Expectations
- Meets Expectations
- Approaches Expectations: Needs Short-Term Intervention
- Does Not Meet Expectations: Needs Intensive Intervention

The Instructional Level Expectations for Reading chart is intended to provide general guidelines for grade-level goals, which should be adjusted based on school/district requirements and professional teacher judgement.

Note. Adapted from Fountas & Pinnell Literacy. Retrieved from https://www.fountasandpinnell.com/resourcelibrary/resource?id=334.

On average, the 19 students in the study gained three reading levels from pre- to post- (the negative difference in Table 2 is due to subtracting post- from pre-). The gain translates to a t-test standard score of 27.74. Even with a small sample size, the gain is statistically significant at $p=0.0000 < 0.05$. There is sufficient evidence to reject the null hypothesis of no pre-to-post change in population reading levels. In addition, Cohen's standardized effect size (d) adjusted for small samples equals 4.17 placing it in the category of "huge" on a scale of "very small" to "huge." This indicates a strong treatment effect in addition to a statistically significant mean

growth, especially unusual for a sample of 19 students. In Table 3, the normative gains of student can be seen over a years' worth of instruction, which further indicates that the 19 students in the study made significant gains having only received instruction for three months. The normative growth provides a comparison group for the sample's pre-to-post results since the study was a one-group pre-post design.

For analysis, the F&P reading levels (lowest=A, B, C, D…) were converted to numbers (1, 2, 3, 4…). See Table 1. The pretest mean was between reading levels B and C. The posttest mean was between reading levels E and F.

Therefore, the evidence from the action research study indicates that vocabulary instruction using interactive word walls was effective in increasing reading achievement by an average of three levels, using F&P. Moreover, based on the t-test, we would expect that using the interactive word walls would result in significant reading gains for similar kindergarten classes.

CHAPTER V

DISCUSSION

The null hypothesis stated that there would be no significant gain in the average achievement level of kindergarten students on the Fountas and Pinnell Benchmark Assessment after receiving interactive word wall instruction. However, the null hypothesis was rejected because students made significant growth in comprehension and vocabulary after receiving instruction using word walls.

Implications of the Results

These results suggest that using word walls in reading instruction is worthwhile to students and benefits their reading comprehension and vocabulary knowledge. 19 out of the 19 students in the study made growth on the Fountas and Pinnell Benchmark assessment, and many of the students reached their end-of-year reading goals in just three months. In addition to supporting words on the word walls themselves, pictures can be placed around the classroom with labels to accompany the word wall words. Adding pictures to help support words in books, across content areas, and even in daily schedules and board plans would be beneficial for kindergarten students and would help reinforce those words being taught. Creating interactive word walls is an easy, inexpensive intervention that can be used for any subject area and with any class. Including pictures with the word walls can support kindergarten students by building up their vocabularies and fluency.

Word walls have so many purposes, whether teaching students about the letters of the alphabet and the sounds they make, to learning about text features and reading strategies. The uses for word walls are endless, and the results of this study show just how beneficial they are to the reading success of young children.

Threats to Validity

Although the data shows that there was an increase in the students' scores on the Fountas and Pinnell Benchmark Assessment after receiving instruction using word walls, the sample selection was a threat to the validity of the study. The sample was selected from students in the same regrouping class from the same school. The participants were all considered to be "average" regarding their reading skills, including their vocabulary knowledge and rates of fluency. Although these students provided a good representation of average kindergarten readers, the results cannot be generalized to other populations such as preschoolers, first grade students, and below average or above average kindergarten readers. The sample of students was very specific.

Another possible threat to the validity of this study is repeated testing. The Fountas and Pinnell Benchmark Assessment is used three times a year to test all students from kindergarten and up. Sometimes, students will read the same text more than once throughout the year. As students repeatedly take the same test over a period of time they better understand the format and expectations of the assessment, which can affect their scores.

A final threat to the internal validity of this study was an inconsistent schedule. School closings, early dismissals, and assemblies interrupted the daily schedule of the students, which could have affected their scores. During these events, the students did not regroup, and therefore, did not receive instruction using interactive word walls. This affected the students' abilities to learn new words and apply them to their reading. Nevertheless, the results were consistent, statistically significant, and the gains were beyond those expected from the Fountas and Pinnell national norms.

Connections to Prior Research

Jasmine and Schiesl (2009) studied the effects of word walls on the reading fluency of first grade students. Twenty first grade students were included in the study. Over the course of four weeks, students, in groups of four, participated in one 40-minute learning word wall station a week and a 20-minute whole class activity three times a week. The first week, a 40-word pre-running record was administered to all the students. Following the completion of the pre-running record, the entire class did a 20-minute word wall activity. The students rotated through various centers throughout the four weeks that focused on using the word walls. At the end of the four weeks, students were given the post-running record to see if their reading fluency had increased.

The researchers in the study concluded that the treatment group did demonstrate an increase in words read per minute, and the word wall and activities may have helped build students' high-frequency word vocabulary. The results of this study suggest that word walls may be an effective strategy to help increase reading fluency and comprehension. The students in the study also enjoyed the word walls and interactive word wall activities, which may also have impacted the post-running record scores. Since the Jasmine and Schiesl (2009) study focused on first grade students, the current findings help broaden the grade range for this intervention proving effective.

Implications for Future Research

In the future, further research could be conducted using more participants of varying academic skills and demographics. This study could also be expanded to other grade levels such as first grade, second grade, and beyond. A full school year of data using word wall instruction would be a beneficial contribution to the study because it would allow for more instruction and more words to be included throughout the year. It would also be important for further research to

provide consistent instruction with word walls, as this study had multiple occasions where students missed instruction due to scheduling conflicts.

Conclusion/Summary

The null hypothesis formed for this research study was rejected. Participants in the study made significant gains on the Fountas and Pinnell Benchmark Assessment after receiving word wall instruction over the designated timeframe. Using interactive word walls is a beneficial tool to help support students' retention of new vocabulary that can, in turn, benefit their reading comprehension. Additional research should be conducted to study the effectiveness of word walls since it is a simple and inexpensive instructional tool that can be utilized across grade levels and content areas.

References

Boyer, K. (2017, May 5). *The Relationship Between Vocabulary and Reading Comprehension in Third Grade Students Who Are English Language Learners and Reading Below Grade Level* [Scholarly project]. In *Maryland Shared Open Access Repository*. Retrieved October 2, 2018, from https://mdsoar.org/handle/11603/3895

Brown, C. S. (2014). Language and literacy development in the early years: Foundational skills that support emergent readers. *Language and Literacy Spectrum*, 24, 35-49. Retrieved from http://search.ebscohost.com.goucher.idm.oclc.org/login.aspx?direct=true&db=eric&AN=EJ1034914&login.asp&site=ehost-live&scope=site

Carrier, J. (2016, July). *The Effect of Sight Word Learning Strategies on Kindergarten Students' Retention of Sight Words* [Scholarly project]. In *Maryland Shared Open Access Repository*. Retrieved October 5, 2018, from https://mdsoar.org/handle/11603/3094

Frey, N., & Fisher, D. (2010). Identifying instructional moves during guided learning. *The Reading Teacher, 64*(2), 84-95. Retrieved from https://goucher.idm.oclc.org/login?url=https://search-proquest-com.goucher.idm.oclc.org/docview/757915422?accountid=11164

Jackson, J., & Durham, A. (2016). Methods & strategies: Put your walls to work. *Science and Children*, *54*(3), 78–84. Retrieved from https://goucher.idm.oclc.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1119294&site=ehost-live&scope=site

Jackson, J., Tripp, S., & Cox, K. (2011). Interactive word walls: Transforming content vocabulary instruction. *Science Scope, 35*(3), 45-49. Retrieved from

https://goucher.idm.oclc.org/login?url=https://search-proquest-com.goucher.idm.oclc.org/docview/900315422?accountid=11164

Jasmine, J., & Schiesl, P. (2009). The effects of word walls and word wall activities on the reading fluency of first grade students. *Reading Horizons*, *49*(4), 3 01-314. Retrieved from https://goucher.idm.oclc.org/login?url=https://search-proquest-com.goucher.idm.oclc.org/docview/236476343?accountid=11164

Morris, D. (2015). Preventing Early Reading Failure. *Reading Teacher*, *68*(7), 502–509. https://doi-org.goucher.idm.oclc.org/10.1002/trtr.1346

O'Connor, E. A. (2012). Missing the kindergarten year. *Encounter*, *25*(4), 45–49. Retrieved from https://goucher.idm.oclc.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=87764734&site=ehost-live&scope=site

Yates, P. H., Cuthrell, K., & Rose, M. (2011). Out of the room and into the hall: Making content word walls work. *Clearing House*, *84*(1), 31–36. https://doi-org.goucher.idm.oclc.org/10.1080/00098655.2010.496810