

The Effects Vocabulary Instruction has on Third Graders’
Reading Comprehension Skills

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Table of Contents

List of Tables	I
Abstract	II
Chapter 1: Introduction	1
Statement of the Problem	1
Statement of Research Hypothesis	2
Operational Definitions	2
Chapter 2: Literature Review	4
Incidental and Explicit Vocabulary Instruction	5
Using Context Cues	6
Read Alouds	6
Summary	6
Chapter 3: Methods	8
Design	8
Participants	8
Instrument	8
Procedure	9
Chapter 4: Results	11
Chapter 5: Discussion	13
References	17
Appendix A	1

ABSTRACT

The purpose of this research was to examine whether direct vocabulary instruction affects the reading comprehension of third grade students. Study participants were 23 third grade reading students. The study took place over a five week period, during which all students completed one reading assessment under both the treatment and control conditions each week. To accomplish this, the first test of each week was given under the control condition, and the second was given under the treatment condition. In the treatment condition, direct instruction regarding new vocabulary was provided. The teacher used a five step plan to teach students new vocabulary words prior to completing a five item comprehension assessment. In the control condition, the students were given parallel passages to read and assessments which they completed independently without any teacher instruction. The scores earned in the treatment condition were significantly higher than those earned in the control condition. The study provides evidence that vocabulary instruction can have a positive effect on reading comprehension.

CHAPTER 1

OVERVIEW

Comment [T1]: Capitalize both

Many students in third grade have a difficult time determining the meaning of unknown words while reading. Many tend to skip over words that can be crucial to the text and then misunderstand what the author is trying to say. According to Elbro and Gellert (2013), teaching vocabulary skills and strategies may assist students in their reading and result in stronger comprehension skills.

To assist students with limited vocabulary, teachers often model how to use context and other cues while reading. According to Moore and Thompson (2011), students can benefit from direct vocabulary instruction. Teachers should develop a plan as to how they want to present new words to students. The Six Step model for explicitly teaching vocabulary is one such intervention which may be helpful to students. To use this direct vocabulary instruction method, the teacher describes and explains target words in a conversational manner, then asks students to describe the target words in their own words, draw pictures that represent the words, write sentences using the target words correctly, and use the words in conversation with peers. These steps are intended to help students recognize and relate to new vocabulary words and consequently improve their reading comprehension.

Statement of Problem

This study was developed in response to observed deficits in vocabulary skills of third grade students reading new texts. Many of the students did not have any strategies to help them understand the meaning of the unknown words. When they were unfamiliar with the words, they did not fully understand the texts they were reading.

The main research question addressed in this study was, “How does direct vocabulary instruction affect the reading comprehension of third grade students?”

Hypothesis

The following null hypothesis was tested.

There will be no significant difference between mean reading comprehension scores earned after students receive direct vocabulary instruction and mean reading comprehension scores earned without direct vocabulary instruction.

Operational Definitions

The independent variable for this study was the vocabulary instruction provided (or not) to the students prior to reading passages with new vocabulary words and taking a comprehension assessment.

In the treatment condition, students received direct vocabulary instruction using part of the Six Step plan. Students received a list of new vocabulary words and reviewed them with their teacher and class. The teacher then defined each word using different examples of the word in context. Students then drew pictures and wrote definitions and sentences related to each new word to show they understood the meaning of each new vocabulary word. After the direct vocabulary instruction, students completed a reading of an on grade level passage and a were administered a five item comprehension assessment.

In the control condition, the same students did not receive any direct vocabulary instruction. They each read a parallel reading passage and completed a parallel five item comprehension assessment related to the passage.

The dependent variable was the students' reading comprehension, which was assessed by the five-item assessments.

For the treatment condition, students received a passage to read that included the new vocabulary words that were previously taught during the week. They were asked to answer questions based on what they read to assess their comprehension of the passage.

In the control condition, students took a parallel test after instruction related to a similar passage but they had not received the specific vocabulary instruction regarding the new words in those passages.

CHAPTER II

Comment [T2]: Capitalize and where is the title

LITERATURE REVIEW

The importance of vocabulary instruction and how it can affect comprehension skills of elementary school students was reviewed. Vocabulary instruction is often dull, repetitive and boring and therefore will not engage students in the learning of vocabulary words. Teachers often fail to provide stimulating vocabulary instruction because of time constraints and the lack of knowledge of vocabulary teaching strategies. Brabham & Villaume (2002) found teachers frequently resort to traditional vocabulary instruction that usually involved copying definitions from dictionaries or using the words in a written sentence. Other common vocabulary instructional practices include vocabulary lists, teacher explanation, discussion, memorization and quizzes. These common practices do not allow the students to have ownership of new words; the students are unable to apply the studied words to their daily reading or writing. Recently there has been a focus on improving vocabulary instruction in today's classrooms (Berne & Blachowicz, 2008). "The depth of students' understanding of words and meanings plays an enormous role in his or her ability to comprehend content area concepts and read academic texts. As we work with students to build academic vocabulary we create routes to comprehension and enable academic success" (Moore & Thompson, 2011, p.2) Studies are showing that the more hands on approach the students have in their vocabulary enhances their skills, as well as having a broader vocabulary.

Students who are at the third grade reading level are having difficulty understanding the meaning of unknown words while reading a variety of texts. These students do not have the tools needed to try and figure out the meaning of vocabulary words. In order to promote strong

vocabulary growth, educational practices are needed in the classroom, and that could be the cause and result of successful reading (Apthorp, Clark, Clemons, Igel, McKeown & Randel, 2011). Teachers need to provide a variety of strategies for the students to use to assist them in figuring out the meaning of new words. Students at the elementary level who are struggling with reading, may not develop adequate vocabularies and therefore are not reading well. This is affecting their reading comprehension skills. Elementary age students do not have the tools needed to figure out the meaning of new words on their own. Research has shown that students who receive strategic instruction tend to have the “tools” needed to figure out meaning of words as they are reading, and then have a better understanding of the text.

Incidental and Explicit Vocabulary Instruction

Vocabulary instruction can be incidental and/or explicit (Blachowicz & Fisher, 2000). Incidental vocabulary instruction includes the learning of words from experiences such as independent reading, read-alouds, games and an exposure to a rich vocabulary environment. Research studies indicate that enhancing read-alouds with comprehension strategies and text based discussions make a positive difference in student performance. Students from classrooms using the read-aloud curriculum demonstrated higher levels of comprehension and vocabulary knowledge (Baker, Chard, Howard & Santoro, 2008). Say-Tell-Do- Play, is a strategy that is used in lower grade level classrooms. Prior to reading the text, the teacher selects a group of words that are key words from the text and then she presents each target word with a prop or illustration. The teacher says the word, and the students repeat the word to solidify phonological presentation of the word. Then the teacher provides a simple definition to the class, and then each child in the class needs to repeat it to a friend. During reading, when they approach one of the target words, she asks the students to repeat the definition and make a connection of the word

to the text. After reading, the children are encouraged to use the new words in their play (Kindle, 2010).

Using Context Cues

Students are immersed in words through listening, speaking, reading, and writing. Another approach for finding out meaning of new words is teaching the students how to use context clues while they are reading (Credo, 2010). This strategy is a self-help strategy and does not require the teacher to pre-teach the words or discuss the words in read-alouds prior to reading a new text. Students are less able to remember words that are presented to them in isolated formats such as lists. Students acquire vocabulary best when it is used in a meaningful, authentic context. Teaching words in context is more beneficial than just listing off words and memorizing definitions. When rich discussions are provided in class, the students may understand what they are reading better (Moore & Thompson, 2011). When students are asked to draw pictures of words, it can promote retaining the meaning of the new words.

Read-Alouds

Research has shown that read-alouds are commonly found in the primary classrooms to promote oral language development, comprehension, build background knowledge, and to expand vocabulary (Kindle, 2010). Reading out loud to students, promote discussions with students which can encourage students to connect to the text better. Reading out loud provides a supportive context for learning through gestures and facial expression which provides the students clues about word meaning.

Summary

The literature regarding vocabulary instruction and reading comprehension suggests there is a correlation between the two. If teachers provide the proper instruction to their students, or make instruction more engaging it can benefit the students' reading skills. When students have an expanded vocabulary, they will comprehend their text better.

CHAPTER 3

DESIGN

The purpose of this study was to determine the effect of direct vocabulary instruction on students' reading comprehension. The study used a quasi-experimental design to compare mean comprehension scores for a group of students after receiving and not receiving targeted vocabulary instruction regarding unfamiliar words in their reading passages.

Participants

The participants in this study were 23 third grade students in one class, all of whom were reading on grade level and attended an all-girls private school. The ages of the girls ranged from 8.5 to 9.5 years of age.

Instrument

The instruments used were teacher-created comprehension tests with parallel items to assess comprehension of passages. Each contained vocabulary words which had not been taught previously to the students. Students were given a variety of parallel passages to read and assessments to complete. Half of the assignments were completed after students received specific direct instruction regarding the new vocabulary words in the passages and half were completed without any specific instruction regarding the new vocabulary in the passages. An example of the assignments offered appears in Appendix A.

Comment [T3]: Actually take this out

Procedure

Each week, students took part in readings and comprehension assessments, once with and once without the intervention. Initially, all 23 students were given a short third grade level passage to read independently with five vocabulary words that had not yet been taught. After reading the passages, the students were given five selected-response questions related to the vocabulary words to complete. While the items required understanding of the vocabulary, they did not directly assess students' knowledge of the target words' definitions. They did reflect their comprehension of the passage, which was influenced in part by students' knowledge of the vocabulary words in the passage. For the treatment condition, the students participated in a mini lesson during which the teacher taught a list of five new words that were included on an assessment after the lesson was taught. The teacher used the following strategies to teach the students the new vocabulary words. The teacher listed the words, and then had the students read the words. The teacher orally used the word in a sentence to determine if the students (as a group) could determine the meaning of the word. If so, the teacher wrote the student-provided definition of the word on the board. If the students were unable to determine the meaning of the word when the teacher gave it in context, the teacher then provided other examples and then gave the definition to the children. The students were asked to illustrate the word, and then write the word in a sentence that showed meaning of the word. Next, the students were given a passage to read independently that contained the words which were just taught in context. The

students finally were asked to complete five selected-response questions based on the passage they just read.

Students were given two parallel assignments per week, one on Mondays and one on Fridays. Both of the assignments contained the same directions and format.

Control condition:

Each Monday and without prior instruction, the students received a short passage to read with five new vocabulary words within the text. The students read the passage independently and then answered the selected response questions that followed.

Treatment Condition:

On Tuesday, Wednesday and Thursday the teacher provided direct instruction using a variety of strategies to teach the students the five new vocabulary words which they had encountered in the passage on Monday. The students did not see the passage until it was time for them to complete their independent work assignment. After the teacher had taught the five new words, the students read the passage and then answered the questions about it.

As noted, the two assessments were parallel; however, the first assessments were given without any vocabulary instruction and the second ones were given after the initial assessment and direct instruction regarding the five new vocabulary words. After five weeks, the mean results of the five assignments from each condition were compared to determine if the vocabulary instruction techniques affected the students' reading comprehension of the passages.

CHAPTER IV

RESULTS

The purpose of this study was to determine whether direct vocabulary instruction would affect reading comprehension of third grade students. The null hypothesis tested was that there would be no significant difference in students' mean reading comprehension scores for the five passages when they received direct vocabulary instruction compared to their mean comprehension scores for the five passages when they did not receive direct vocabulary instruction.

To test this hypothesis, the participants' five scores in each condition were averaged to yield means for both the direct instruction and control conditions. (Three students were absent for one day each in the control condition, so their average scores for the four assessment days which they attended were used as their control condition means.) Descriptive statistics for each condition's mean and the differences between the means follow in Table 1. Data in Table 1 indicate that the mean for the treatment condition was higher than that of the control condition by 1.513 points.

Table 1

Descriptive Statistics for Participants' Mean Test Scores in Each Condition and the Mean Differences between Them

	N	Mean	Minimum	Maximum	Std. Deviation
Mean CONTROL SCORE	23	3.278	2.40	4.00	.4345
Mean TREATMENT SCORE	23	4.791	4.40	5.00	.1952
Difference in Treatment and Control Condition Means	23	1.513	1.00	2.20	.3372

The significance of the difference between the conditions' means was then tested using a T Test for paired samples. Results follow in Table 2 and indicate that the mean difference of 1.513 between the test scores when students received direct instruction (mean = 4.791) and when they did not (mean = 3.278) was statistically significant ($t=21.521$, $p<.000$). Therefore, the null hypothesis that the comprehension scores would not differ depending on the intervention provided was rejected.

Table 2

Results of the Paired-Samples T Test Comparing Mean Treatment (Direct Instruction) and Control (No Direct Instruction) Intervention Vocabulary Scores

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Difference in Direct Instruction and Control Group Means	21.521	22	.000	1.51304	1.3672	1.6588

CHAPTER V

DISCUSSION

The results from the assessments given do not support the original hypothesis that there would not be a significant difference in test scores of the students when they were given or not given direct vocabulary instruction. Results indicated test scores were significantly higher (mean difference in points out of 5 = 1.513, $p < .000$) when the students were given direct instruction prior to taking the vocabulary assessment.

Implications of Results

The results imply that direct vocabulary instruction can increase students' comprehension of the texts they read. When words were introduced to the students using a variety of strategies before reading a new story, the students appeared to be more comfortable and to comprehend the passages more fully. As the students identified the pre-taught words in their independent reading, they also appeared more confident as they completed their assessments. When working independently on the assignments, it was observed that the students seemed more tense at the beginning of the week when no instruction was given, compared to their level of confidence the end of the week when they had had direct instruction and were familiar with the vocabulary in the passages upon which they were being tested. On Monday of each week of the study, the students were given a passage to read and then five questions to answer independently. On Tuesdays, Wednesdays, and Thursdays during which the study was conducted, the students received direct vocabulary instruction regarding vocabulary in the passage they read Monday and which they would encounter in Friday's parallel assessment on a new passage. On Fridays, the students were given a new passage to read which contained the same new words they had

reviewed, and completed an assessment parallel to the one administered on Monday which also had five selected-response type questions to answer. When the students took assessments after being given direct instruction, they appeared more comfortable completing the five-item assessments. (See Appendix A)

Threats of Validity

A possible threat to the validity of these findings would be if the assessments given in the treatment and control conditions were not equally challenging. A possible change to reduce the likelihood of this would be to counterbalance the design of the study by randomly splitting the class in halves, with one half serving as a control group, and the other half being the treatment group. Each group would receive the same assessments; however, one group would get the vocabulary instruction prior to completing the assessment and the other group would not have any extra instruction.

Results indicated that most of the students passed the first assessment (without direct vocabulary instruction) but scored one or two points higher after receiving vocabulary instruction on their second assessment of the week. Teacher observations also suggested that the students not only performed better on the tests but were able to use the new words in their own writing after they received direct instruction.

Connections to Previous Studies/Existing Literature

Many sources describe a variety of pre-teaching vocabulary strategies. The use of graphic organizers, creative and vibrant teaching, and engaging students while learning can affect comprehension. Reading Recovery (2010) suggested the “Say-Tell-Do-Play” protocol for vocabulary instruction. The teacher reads the word aloud after which the students say the word.

Then the teacher gives a brief definition; and the students have to act it out. This teaching technique was used with preschoolers. This researcher's study was done in a third grade classroom, so the researcher/teacher adapted these concepts to a higher level and required the students to use the words in writing. Another study (Kindle, 2010) suggested that when teachers read aloud and discuss vocabulary words prior to reading a new text, the students have a better understanding of what it is they are reading. When conducting this study, students and the teacher conversed about the words and made connections between the words. These teaching procedures seemed to make the direct instruction condition more exciting for the students than the control condition

Implication for Future Research

This study suggests direct vocabulary instruction can have a beneficial effect on students' comprehension. If students are exposed to new vocabulary words in a different context, they are able to "hold on" to the words and then connect the words to a new text as evidenced by the study the teacher conducted. Students were exposed to words in isolated sentences, and then, with teacher instruction, they identified the meaning of the word. When the vocabulary words appeared in a passage, the students were able to remember the meaning of the word, or relate to the word, presumably due at least in part to the direct instruction. Vocabulary-rich environments can affect students' knowledge when working independently. The teacher that when students read stories aloud and encountered words that were taught previously, they were excited to know the word in its context and were also able to recall how it was used in in different texts/context.

Summary

This study found a significant difference between the control and treatment groups' comprehension scores, supporting the concept that direct vocabulary instruction can be a beneficial component of reading instruction and can enhance comprehension. It is important to talk to students about unknown words, because it not only expands their knowledge of the words' meaning but also increases the connections they make by applying the words to different subjects in different areas. When teaching the treatment group the words, the teacher wrote the word on the board, and then had the students read the word aloud with her. The word then was written in a sentence, and using context clues the class would try to define the word. The teacher then would record "the class's meaning" of the word. Next, the students discussed the word, independently drew a picture of the word, and finally wrote a sentence using the vocabulary word in context. Drawing pictures, acting out the words, and writing sentences using the words can help students commit these words to memory, thus enabling them to use the words in various situations.

It is important for teachers to understand that students may not always understand all the words they are reading and it is important to create a successful learning context for students. . The more teachers model and teach comprehension strategies, the better understanding students will have of what they read.

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Comment [T4]: PLEASE REFER TO THE LAST SET OF EDITS I SENT AND MAKE THEM

Appendix A:

The following below are two assessments that were given; the first passage and set of questions were given to the control group, and the second passage and questions were given to the treatment group. Both assessment use five common vocabulary words and five questions to assess the students' comprehension.

Target words: ordeal, enable, foul, chasm, rigged

Control Assignment 1

Directions: Read the story below, then answer the questions that follow.

In June of 2013, Joe went on a family trip to Greece. Before traveling to the new country Joe went to the library and took out a Greek dictionary, enabling Joe to learn some basic Greek words. The day finally came that Joe's family departed to the airport, but it ended up to be a big ordeal. When they got to the airport, they realized they left their passports at home. The family drove back home to get their passports, by the time they got back to the airport they missed their flight. The family waited for the next flight, a few hours past and foul weather hit Baltimore, causing their plane to be delayed three hours. Finally, Joe and his family arrived in Greece. When the family arrived they went straight to their hotel and went to sleep. The next morning, they were scheduled to go on a hike through the mountains. As they were hiking, they came across a chasm, there was no way they could jump over it or else they would have fallen 300 feet. Joe and his family rigged up a bridge made out of rope and branches and made it across safely.

1. What was the ordeal that Joe's family went through?
 - a. There was bad weather.
 - b. They traveled to Greece.
 - c. They forgot their passports.
 - d. He took out a book from the library.

2. Taking out books from the library “enabled” Joe to learn basic Greek words.
“Enabled” means....
 - a. Not able to learn
 - b. Allowed him to learn
 - c. Discovered
3. What caused Joe’s flight to be delayed?
 - a. They forgot their passports
 - b. The car ride home took too long
 - c. The weather was bad
 - d. They were stuck at the security check point.
4. What caused an adventurous moment while hiking?
 - a. There was a big boulder
 - b. There was a pack of deer in their way
 - c. They came across a mound of dirt
 - d. There was a deep opening in the ground
5. What did the family use to rig together so they could complete their hiking trip successfully?
 - a. rope
 - b. Hiking shoes
 - c. Back packs
 - d. Ropes and branches

Treatment #1

Last Sunday, Emily and her father decided it was time to clean out their basement. This was going to be a full day ordeal being there were toys, books, food scraps, and supplies all over the place. To prepare for this job, Emily's father had to clear a path down the steps to enable her to walk down the steps safely without falling. As Emily and her father made it safely down the steps, they both smelled a foul odor. They wanted to find the source as fast as they could. Emily rigged together materials to make a man-made mask to stop her from breathing in the odor. She found a small doll size blanket, and a long ribbon. Emily tied the blanket around her nose. She followed her father as he was getting closer to the smell. Once they got to the middle of the basement they noticed there was a narrow 5 foot chasm in the concrete. The smell was getting very strong. Emily took out her flashlight to try and see down the chasm. To their surprise they found a dead rat. For the next three hours, Emily and her father toiled away cleaning and organizing the basement.

1. What was the ordeal that Emily and her father were going through?
 - a. Finding a flashlight
 - b. Retrieving a mouse
 - c. Cleaning a messy basement
 - d. Making a mask

2. In the story it says: "Emily rigged together materials to make a mask." *Rigged means.....*
 - a. Found
 - b. Bought
 - c. Sewed
 - d. Gathered

3. Where did they find the mouse?
 - a. On the steps
 - b. In a deep crack

- c. In a bucket
 - d. Under a book
4. What was the cause of the foul odor?
- a. A rotten banana
 - b. A mouse
 - c. A dead mouse
 - d. Damp towel
5. What did cleaning the steps enable Emily to do?
- a. Find the mouse
 - b. Make a mask
 - c. Clean the basement
 - d. Walk down the steps