Expanding Vocabulary and Improving Comprehension Through the Use of Graphic Organizers

Florida International University

HERNANDEZ, MISTIQUE N
Abstract

The present study examines the extent to which reading comprehension will improve when graphic organizers are used to increase vocabulary knowledge. At the conclusion of this action research, findings show a significant increase in vocabulary knowledge as well as reading comprehension for seven middle school students with learning disabilities.

Keywords: Graphic organizer (GO), Vocabulary knowledge, Reading comprehension, Intervention, Students with learning disabilities, Effective method, Higher order vocabulary, Direct instruction

Statement of the Problem

Vocabulary is one of the most important concepts of reading comprehension teachers should emphasize in their classrooms. However, not every student acquires the appropriate vocabulary knowledge they need to succeed in school. Students who do not have higher order vocabulary skills will encounter difficulties in reading fluency and comprehension. Lane and Allen (2010) state that, “Vocabulary knowledge is one of the best predictors of comprehension, reading performance and school achievement” (p.364). Unfortunately, students, especially those with learning disabilities, survive all through middle school without developing the necessary skills needed to extract knowledge from text. They receive instruction without appropriate accommodations and eventually fall behind their peers. Students who are not able to acquire knowledge based on competencies can end up failing in all subject areas and develop a behavior issue.

A recent study by Platt (2009) indicates that, “Decades of research show behavior problems often co-occurring with reading problems” (p.284). Behavior issues lead to
social and emotional deficits and delinquency. Platt’s study supports Daale (2007) 
research by reporting that “There are significant relationships between language skills 
and referrals” (284). This means that students who score low in language skill 
assessments are more likely to be referred to the juvenile justice system.

Purpose

The purpose of this research study was to use graphic organizers to build the 
vocabulary repertoire of students with learning disabilities in order to improve reading 
comprehension. The research question in this study is, “To what extent will reading 
comprehension improve when graphic organizers are used to increase vocabulary 
knowledge?”

Literature Review

Vocabulary is a major component in developing grade level reading 
comprehension. Various studies have been completed to display significant relationships 
between these elements. Yildrim, Yildiz and Ates (2011) and Zhang (2012) conducted 
similar studies to provide evidence that vocabulary knowledge is important for reading 
comprehension. Vocabulary knowledge was invaluable to reading comprehension in both 
studies.

Some research shows that graphic organizers (GOs) aid students in learning. The 
single subject intervention led by Knight et al. (2013), a meta-analysis done by Dexter 
and Hughes (2011), and a study conducted by Boulineau, Fore III, Hagan-Burke, and 
Burke (2004) attempted to increase reading comprehension through the use of GOs. The 
results of the data for each supported the research.
Robinson et al., (2012) as well as Özmen (2011) examined the idea that using GOs at a certain point during a lesson will make their use more effective. Robinson’s results reinforced GOs as being much more useful following reading but not before as an overview. Özmen’s data concluded that effects of GOs were similarly useful in whatever order they are given to students.

Much evidence has been attained to support that teaching vocabulary directly will increase vocabulary knowledge and comprehension. GOs are a means for providing students with specific and direct instruction. Seifert and Espin (2012) and Hua, et al., (2013) provided evidence to support the notion that students will not automatically gain vocabulary and word knowledge solely from reading text information. Results from both studies added on to previous research.

**Methodology**

The present study examines the extent to which reading comprehension will improve when graphic organizers are used to increase vocabulary knowledge. A group of middle grade students used graphic organizers to practice vocabulary words. Research was conducted in a portable classroom with seven of the students identified as having a learning disability based on IDEA criteria and, they come from low socioeconomic backgrounds. Four of the students are female and three are male. At the start of the research, students were given a survey to understand their attitudes towards graphic organizers. Students were given a vocabulary pre-test. They were asked to look through a list of 25 words and define the familiar ones. An excerpt was then read to students followed by a comprehension pre-test consisting of multiple choice and short answer questions. One to Three new words from the vocabulary pre-test were picked and
presented weekly and practiced through the use of graphic organizers. Every two weeks, a checkpoint post-test consisting of multiple choice and match questions were given to measure how many new words were learned. There were 7 sessions after which the story was reread and the same vocabulary, comprehension and survey were re-administered as a post-test.

Results

Results revealed that a relationship was made between graphic organizers and increases in vocabulary knowledge. It is unclear if increases in reading comprehension were due to vocabulary gains alone. Doing a re-read of the passage may have contributed to improvements in reading comprehension. Regardless, all students, except two of them, did make improvements in comprehension after intervention.

Three checkpoint post-tests were given. When comparing post-tests across students, they all scored low on one and two. For posttest three students scored the highest.

Graphic organizer one “Pave Map” (divided into 2 parts) illustrated that students achieved gains throughout the intervention. Graphic organizer two “Own the Word” helped students relate words they already recognized to the new words. Some students were allowed two attempts because of inappropriate usage of words in their sentences. Practicing words repeatedly, helped students learn and memorize words and their definitions.

For the student attitude survey’s, findings across students showed that they did not like using graphic organizers but they felt it did help them learn. Above all, they felt
that it helped them learn new words. Analysis of the table suggests that they may not like graphic organizers because they do not find them easy to use.

**Implications**

For future implications, certain suggestions should be considered. Students with learning disabilities become frustrated and discouraged quickly. Consequently, students will not work to their full potential. Using incentives to motivate students should be considered. It is important for educators to identify what students can and cannot do because the type of graphic organizer the teacher chooses for usage should be appropriate for their level. Throughout this study, direct instruction was given while students were completing the graphic organizers. It is important to note this because literature has shown direct instruction to be the best way of increasing vocabulary and comprehension.

**References**


