

How will strategies that are designed to help students learn vocabulary words affect long term memory?

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1. Introduction

Why teach vocabulary? Baumaun and Kame'enui (2004) declared that direct instruction of vocabulary is important to vocabulary development. Also, learning vocabulary will help students communicate more effectively (Allen, 1999). What area should I target? In my reading class, the reading series provides six vocabulary words that are connected to the story. At the end of each story, students are assessed on the six words. When students understand a story's vocabulary, they are more successful at comprehending the story (Marzano, 2001). How should I teach vocabulary? Based on the following quote from Allen (1999), "Definitions alone do not provide enough support for readers to be able to transfer these definitions to reading contexts." (p. 35), I chose to change my strategy to involve three modalities: visual, auditory, and kinesthetic. Effective vocabulary development is multifaceted and requires a variety of different activities so that students will learn (Johnson & Johnson, n.d.)

I researched several activities that would correlate with my purpose. I wanted to teach vocabulary using a strategy that would enhance long term memory. I not only want students to learn the words for the weekly test, but I want them to remember the words beyond the week of instruction. My focus was on students remembering more words after using the research-based activities involving three modalities.

2. Experiment, Results, Discussion, and Significance

Before beginning the action research project, I taught vocabulary using the same routine each week. On Mondays, I introduced the vocabulary through a discussion and had my students copy definitions in their reading notebooks. Tuesdays, as well as, Thursdays, students were to study the vocabulary words as homework. On Wednesdays, we again discussed the vocabulary and students completed two workbook pages that focused on the words. On Fridays, I reviewed the words with the students and gave an assessment. In order to check for long term memory, I waited 2 weeks after each story and gave the same assessment. I continued this procedure for three weeks. The scores collected were averaged into percentages. This was done to use as baseline data for comparison purposes.

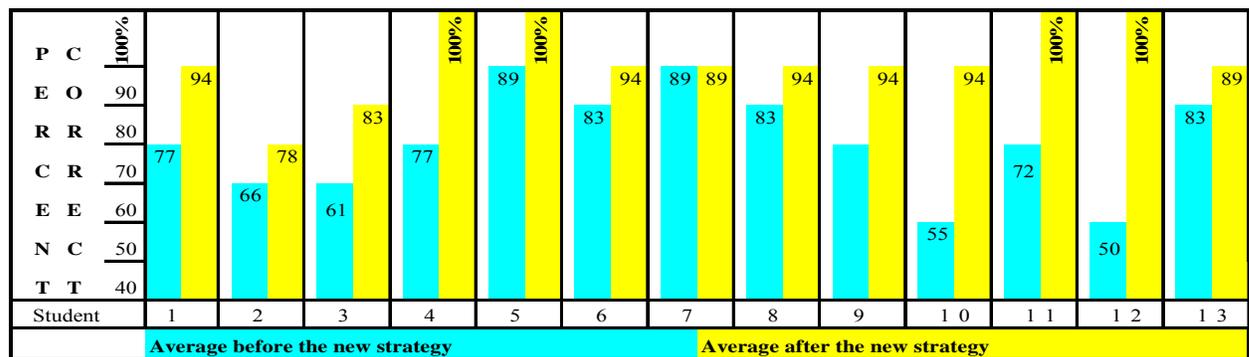
The new weekly schedule was derived from information by Marzano (2004). On Mondays, my teammate introduced the vocabulary through her morning social studies lesson. The students copied the definitions into their reading notebooks as she discussed the words. Research supports the use of keeping a log of words learned (Baumann & Kame'enui, 2004). That afternoon, I continued to discuss the vocabulary. This ensured multiple exposures of the words (Marzano, 2004; Johnson & Johnson, n.d.). Baumann and Kame'enui (2004) mentioned that multiple exposures and cross curricular lessons can have positive effects on learning vocabulary. Students would hear the story being read to them and listen for the vocabulary words (Johnson & Johnson, n.d.). Then they would perform an activity (various activities described below). Students were instructed to study the words at home on Tuesdays and Thursdays. On Wednesdays, I would review the vocabulary and have the students complete two workbook pages and perform an activity. On Fridays, students hear the story again and engage in another activity as a review. The students would then take the assessment. Again, I waited 2 weeks and gave the same assessment. I compared this data to the baseline data to determine if long term memory had been affected.

Following are some activities that were randomly used throughout the 3 week period of the new strategy. Lessons were carefully planned ensuring that all three modalities were represented during each week. Word webs were used based on research from Marzano (2004), Allen (1999), and Johnson &

Johnson (n.d.). On the back of the word webs, I would have the students draw symbolic representations of the words (Marzano, 2001). They had to explain in their own words why their pictures were relevant the words (Marzano, 2004). Drama (Baumann & Kame'enui, 2004; Johnson & Johnson, n.d.; Marzano, 2004) was used to demonstrate the words. Group, as well as individual, drama was performed and other students guessed the vocabulary word. Vocabulary cards were also used. All words and definitions were on separate cards. Students would play a matching game to study the words. Partner and individual review time was given. Students would either read the words and definitions to each other or silently.

In order to answer my research question: How will strategies that are designed to help students learn vocabulary words affect long term memory? I used individual percentages to determine success. Figure 1 shows individual student percentages. The first bar reflects percentages of the old strategy and the second bar reflects percentages of the new strategy. All students raised their percentages, except Student 7 who maintained 89%. There were 4 students who remembered 100% of the words after using the new strategy. There were 11 students who increased by more than 10%.

Figure 1. Individual student percentages of scores collected before and after the new strategy



3. Conclusion

By comparing the percentages from the long term evaluations, I have found an answer to my question. Yes, long term memory was affected by the new strategy. Comparison revealed that students remembered more vocabulary definitions after the new strategy was put into place. All students, except Student 7, increased their percentage. Student 7 did maintain a proficient percentage. Therefore, 100% of the students increased or maintained their average. No one was hindered by the new strategy. Long term memory was affected in a positive way. The students remembered more words!

I will definitely continue to use the new strategy with my reading students. They had more fun and remembered more definitions over an extended period time. In turn, I had more fun teaching and was proud of my students for improving. A new question has come to mind: Will students begin using the vocabulary words when communicating? I believe they will since they are confident in their recalling ability (by seeing their own personal improvement). Through the new strategy, I think they will become comfortable with the words and will freely use the words in future conversations. Before, I thought I didn't have enough time to allow for all the activities. Now, I realize that I don't have enough time NOT to do the visual, auditory, and kinesthetic activities.

4. Acknowledgements

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[1]Baumann, J.F., & Kame'enui, E.J. (2004). *Vocabulary instruction: Research to practice*. New York, NY: Guilford.
 [2]Allen, J. (1999). *Words, words, words: Teaching vocabulary in grades 4-12*. Portland, ME: Stenhouse.
 [3]Marzano, R.J., Pickering, D.J., & Pollock, J.E. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement*. Alexandria, VA: Association for Supervision and Curriculum Development.
 [4]Johnson, C., & Johnson, D. (n.d.). *Why teach vocabulary?*. Retrieved September 22, 2005, from www.epsbooks.com/downloads/articles/Why_Teach_Vocabulary.pdf#search=word%20wizards%20vocabulary%20instruction
 [5]Marzano, R.J. (2004). *Building background knowledge for academic achievement*. Alexandria, VA: Association for Supervision and Curriculum Development.