Can Vocabulary Study for High School Students Be FUN?

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Abstract
The purpose of my study was to find out if word games could be used as the primary method for teaching vocabulary to high school students. Using one of my classes of 9th grade English students as a control group and another class as an experimental group, I compared vocabulary instruction based primarily on games with a traditional drill and practice approach. Based on average performance for the two groups on chapter quizzes and tests, I concluded that students can learn vocabulary words through word games, and that vocabulary study for high school students can be fun.

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Introduction and Context
I have noticed a disconcerting trend developing over the years concerning the vocabulary skills of the 13- and 14-year old students entering my classroom. No matter what their cognitive abilities may be, these young students do not seem to possess a broad enough vocabulary base to support the comprehension of the massive amounts of reading they are required to do in order to be successful in today’s competitive, demanding academic
The jeopardy and bingo really helped me understand, but doing sentences does not really help me at all.

I find it more helpful when we do things in groups because it helps my retention of words . . .

comments from student surveys

world. They also seem to lack adequate word attack skills which could help them figure out unfamiliar and difficult words that appear in content area reading. Unfortunately, once students reach high school, they will frankly admit that they have more important things to do than memorize a bunch of vocabulary words which they will promptly forget after the test. They have a point; with the constant demands of sports, social obligations, service projects, and family concerns placed upon them, they have little time to devote to this type of task. Why should they bother when they believe it is pointless?

On the other hand, I have observed my students enjoying crossword puzzles, word searches, charades, and other word games when these activities are offered during vocabulary instruction time. I began to wonder: Could there be an effective way to combine play with instruction while teaching my students the vital vocabulary and word solving skills that they must have? Is it possible to make learning vocabulary and word skills FUN? The goals of my research project thus became twofold: 1) to help my students not only memorize but also internalize at least a portion of the vocabulary words presented to them this school year; and 2) to have lots of fun with words along the way.

I teach ninth grade English at St. Francis DeSales High School in Columbus, Ohio. Located on the north side of the city, St. Francis DeSales has a proud tradition of academics, athletics, faith and community service.[http://www.stfrancisdesaleshs.org/about-us/mission-core-values]. Motivated by the mandates of our school and the Columbus Catholic Diocese.[www.cdeducation.org], under whose auspices the school operates, the English Department decided to place all incoming freshmen in a leveled English course, which we developed and titled Introduction to Literature and Composition. The course focuses heavily on writing and communication skills, promoting the school and department goal of critical thinking. My research project and goals fit perfectly within the framework of the school goals, for without a strong vocabulary base from which to draw, students’ writing and critical thinking abilities will surely be negatively impacted.

What Research Has to Say

Vocabulary represents a major cornerstone of reading comprehension, fluency and achievement (Bromley, 2007; Hennings, 2000) and is fundamental to these skills (Nagy, 1988). Additionally, a large vocabulary base gives students a sense of confidence and helps them to be more articulate (Bromley, 2007). Research shows that students who possess an extensive vocabulary also score higher on achievement tests than do students with smaller vocabularies (Bromley, 2007). In summary, then, “. . . a large vocabulary
facilitates becoming an educated person” and is “...strongly related to reading proficiency in particular and school achievement in general” (Beck, McKeown & Kucan, 2002, p. 1). There can be no doubt that the acquisition of vocabulary impacts every aspect of students’ lives, both inside and outside the classroom.

Nevertheless, many adolescent readers possess inadequate working vocabularies. Research also suggests that there is a large and distinct gap in vocabulary knowledge between different socio-economic groups, and, once this gap appears, bridging it becomes difficult (Beck, McKeown, Kucan, 2002). Students whose primary language is not English, as well as students who are neither exposed to a wide variety of vocabulary words nor encouraged to use such a vocabulary at home, also enter the classroom with disadvantages in word knowledge (Tran, 2007; Hennings, 2000; Bryant, 1982).

Despite the importance of vocabulary, research also suggests that there is not a great deal of vocabulary instruction taking place in high school (Beck, McKeown & Kucan, 2002), and the instruction that does take place is not especially effective (Flanigan & Greenwood, 2007). How, then, can effective vocabulary instruction best be accomplished? Literacy researchers believe that “students must be actively involved” (Towell, 1997, p. 357) in their vocabulary instruction, and that they must be taught by teachers who are “excited about language and teaching or using new words” (Bromley, 2007, p. 535). There is evidence to support the notion that motivating students, keeping them actively involved, and showing them the relevance of the words that they must learn are keys to successful vocabulary instruction (Towell, 1997). Since I love words and try every day to bequeath that love to my students, I am able to fulfill part of this requirement, but I had to have something more to truly engage my students. It seemed to me that vocabulary games might be just the hook I needed to actively involve even my reluctant vocabulary learners.

“Literacy researchers believe that students must by ‘actively involved’ (Towell, 1997 p. 357) in their vocabulary instruction...”

**Procedures**

At the beginning of the 2008-2009 school year, I noticed a wide range of vocabulary abilities within the four classes of 9th grade English classes that I teach. In each class, three to six high achieving students seemed able to memorize easily and apply the list of 20 words contained in each chapter of the vocabulary text book that the school utilizes.
The middle group, which made up the majority of my students and numbered between 10-13, worked somewhat harder to achieve the same results; in this group, there were a few students who, though capable, appeared to lack the motivation or perhaps the time to devote to vocabulary study and so did not score high on the vocabulary quizzes and tests. Finally, in each class there were three to five students who struggled with vocabulary mastery, never seeming to gain knowledge of the words and consistently scoring poorly on the quizzes and tests. For the purpose of my study, I defined “struggling students” as those who consistently scored 70% or less on vocabulary quizzes and/or tests.

My first, third, and seventh period classes each consisted of 22 students; the fifth period class was quite small, with only 8 students. I decided to use my seventh period class as my experimental class. This particular class had the largest number of both middle level and struggling students. If word games helped improve scores for these students, I could feel confident in the results of my study. For my control group, I chose my third period. This class also contained a large number of middle level students. The number of struggling students in this class was smaller only by two or three than the experimental group, and the number of top students was nearly the same as that in the experimental group. (See Table 1 for demographics.)

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Control Group</th>
<th>Experimental Group</th>
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</thead>
<tbody>
<tr>
<td><strong>Total Students</strong></td>
<td>22</td>
<td>22</td>
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<tr>
<td><strong>Males</strong></td>
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<td>11</td>
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<tr>
<td><strong>Females</strong></td>
<td>10</td>
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<td><strong>Hispanic</strong></td>
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<td>0</td>
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<td><strong>Asia/Pacific Islander</strong></td>
<td>0</td>
<td>1</td>
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<td><strong>Accommodation Plans/ESL</strong></td>
<td>5</td>
<td>8</td>
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</tbody>
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To begin, I decided to find out how students felt about vocabulary in general and specifically about the type of vocabulary instruction they were receiving in my class. I created a simple, 10-question survey that “forced” students to respond either positively or negatively to various aspects of vocabulary. This was accomplished by writing the questions so that responses marked “A” were generally positive; those marked “B” were generally negative. By tallying up the total “A” and “B” responses, I discovered that the control group generally felt more positive towards vocabulary study, including the instruction they received in my class, than did the experimental group (58% vs. 55%). Conversely, this meant that the overall negative response for the experimental group was slightly higher than the control group (45% vs. 42%).
Traditional instruction for my classrooms looks like this: Each chapter in the vocabulary textbook covers 20 words. We target one chapter of vocabulary words each month. Weeks one and two are spent working with the first 10 words of the chapter; weeks three and four are spent working on the second set of 10 words. The students practice pronouncing the words and using the words properly in original sentences. They study definitions, synonyms, antonyms, and spelling. We also look at word origins. Two class periods of 45 minutes each are dedicated to vocabulary study during the week; the students have three total class periods working with a set of 10 words before they are given a quiz covering those words. At the end of each chapter, the students and I review the words by completing the chapter pages in the textbook. I give the students practice drills on the synonyms, antonyms, and definitions as well. Finally, we finish the chapter with a chapter test over all 20 words. This is the type of instruction that the control group continued to receive during the course of the study.

Before the study began, I had started experimenting with adding word games to instruction for all my classes, including crossword puzzles, synonym gradient lines, thesaurus and dictionary “treasure hunts,” vocabulary bingo, and vocabulary jeopardy. These last two games were the top two favorites for all my students. They loved the competition in the jeopardy game, and they enjoyed eating the bingo markers (usually Cheerios). When I set up the experimental instruction, I definitely included these two games in the repertoire of instructional activities. I also chose password, crossword puzzles, word searches, and matching games. For the experimental group, the same amount of class time was allotted to instruction. However, instead of the traditional instruction described above, the students played word games. The chapters were still divided into two sections of ten words each; I still reviewed the words with the students to make sure they could pronounce them. Thereafter, they interacted with the words primarily through a series of word games. I usually started off with crossword puzzles and word searches. I allowed the students to use their books and each other if they got “stuck” on a word, but their goal was to eventually complete a game without looking at their book or asking a partner for help. Before quizzes, I would give them a match-up game where they had to find the synonyms and antonyms for each of the target words. If they were able to successfully complete 15 out of 20 match-ups, they were allowed to “waiver out” of a quiz, and the total number of correct matches they had found made up their score for the quiz. So, if they found 15 out of 20 successfully and wished to forego the quiz, their score for the quiz became 15/20.

“This is just a suggestion . . . maybe offer a prize or reward, for the games . . . a piece of candy or possibly an extra bathroom pass . . .”

comment from student survey
The experimental group did not always play the same games. Within the scope of word searches, for instance, I might make word cards, tape them up around the room in obscure places, give the students a card with an antonym or synonym, and have them try to find the card with the target word. I also taped word cards on students’ backs and then asked other students to match antonyms, synonyms or definitions with the hidden word, or have the students try to guess what word was taped on their backs based on clues provided by others.

The experimental class and the control class were given the same quizzes and tests. I also offered the control class a pre-test at the end of each chapter which would allow them to “waiver” out of the final test. These quizzes and tests covered definitions, correct use in sentences, synonyms, and antonyms. I assessed this knowledge in various ways (matching, fill-in, writing original sentences for specific words, and deciding whether or not a word was used correctly in a sentence).

Data Analysis and Findings

_The data and results which I describe here are based on four chapters of vocabulary words. Two chapters were completed prior to the beginning of the study; two chapters were completed within the scope of the study._

Chart 1 compares the average test scores for the experimental group and the control group. Before intervention (during Chapters Two and Three), the control group performed better overall on the chapter tests than did the experimental group. However, after participating in the study (during Chapters Four and Five), the scores of the experimental group climbed to meet the control group, resulting in only a fraction of a point difference between the two groups’ test score averages.
The control group’s test score average on Chapter Two was 32.3, while the average performance of the experimental group was 31.5. The experimental group actually slipped a bit on Chapter Three, falling to 31.4, while the control group increased almost a point to 33.2. After employing the word games strategy for Chapter Four, the experimental group rose to 35.2, just a fraction of a point lower than the control group’s 35.3. Finally, the experimental group achieved an average score of 32 on the Chapter Five test, while the control group averaged 33. Not only did the experimental group’s average score increase, but there was now only 1 skinny point’s difference between the two class averages. These results were both exciting and affirming to me.

Based on these test averages, it seems reasonable to conclude that high school students can learn vocabulary words through word games, and that vocabulary study for high school students can indeed be fun. For students who struggle with learning vocabulary words through traditional methods, having fun with word games could become an important gateway through which they can begin to access word meanings.

**Discussion and Reflections**

Words are the world’s primary method of communication. Without words, and the ability to use them in powerful, meaningful ways, students may face a lifetime of missed opportunities. These were the thoughts that framed my decision to investigate vocabulary instruction. The more I learned through research about vocabulary and its importance to the success of my students, the more I began to notice how terribly thin their store of words and their knowledge of how to use those words to best advantage appeared to be in the classroom. For example, one of our summer reading selections was the novel *Speak* by Laurie Halse Anderson (1999). As I read over their written assessments of the book, I was appalled to discover that many of those who read the book failed to realize that the main character had been raped at a summer party, and that this rape was the reason she had become withdrawn and guarded. During book discussions with the students, they admitted that they had not understood some of the words the author had used in the book.

I wanted to find a way to not only teach the words but also to help the students make these words their own. Surely, I thought, there was a way around the usual routine of students memorizing a list of words, definitions, antonyms and synonyms just to spit these words back out on a quiz or test and then promptly consign the words to the black hole of an overloaded memory. Thus it was that I began to cautiously experiment with playing vocabulary games in class. These games met with such enthusiasm from the students that I wondered whether they could be used as the primary method of instruction. My vocabulary word study was born.

When I prepared and administered the vocabulary survey, I was amazed at the students’ responses. They were stunned and openly appreciative that a teacher actually cared about what they had to say, and frankly, that saddened me. Did they really believe teachers
cared so little? In frank discussions about the results of the survey, students continually echoed this remark: “It is so cool that you want us to tell you what we would like to do. It is so great that you want to try something that will really help us learn.”

The survey results showed that vocabulary bingo and vocabulary jeopardy games remained the runaway favorites for all students. I had seen a colleague play the bingo game with her classes, and when I tried it out with my students, I had almost as much fun as they did. Thanks to our school technology director, I had a jeopardy game template already stored on my school computer. The other games were simple enough to find on the internet and adapt to my purposes.

As I reviewed my data results, I noticed that the class averages for Chapter Five dropped several points for both groups (33 for the control group, 32 for the experimental group). This can be attributed to several factors. First, it should be noted that I intentionally made this test the hardest vocabulary test my students had taken. I needed and wanted to be sure that the word games worked, and I felt that a difficult vocabulary test would give me the reassurance I needed. Secondly, it should be noted that there were numerous instructional time interruptions during the weeks of study set aside for Chapter 5. Thirdly, the end of the school year was quickly approaching. I am convinced that these circumstances taken together contributed significantly to the generally lower outcomes achieved by both groups for this particular chapter test. That being said, I also believe the experimental group’s overall average score improvement confirmed that my experiment was successful.

Finally, I must also say that word games seem to be particularly popular with my students who struggle to learn vocabulary through traditional methods. Playing with words seems to empower these students. Several students in the experimental group who did not achieve or barely achieved 70% on their quizzes and tests before the intervention were able to improve their scores and their ability to retain the words after the intervention. It is said that success breeds success; for these students, that saying proved true.

**Recommendations**

For those teachers who think they might like to venture into the world of word games, may I offer the following suggestions:

- Involve your students. Tell them what you’d like to do with vocabulary. Ask for their opinions. Incorporate their suggestions. Openly discuss options with them. You will be pleased and amazed at how responsive they are when they feel they have a say in their own education.
- Employ a variety of word games. Word searches and crossword puzzles, which students could solve alone or in teams, were almost as popular as bingo and jeopardy in my classroom.
• Use high school students’ love of talking and socializing to create healthy competition. Let them challenge each other. Let them teach and coach each other.
• Offer “cool” prizes, such as homework passes, theme pencils, edible treats, and novelty toys. (For my students, spider rings and vampire erasers were the coveted prizes during the Halloween season.)
• Relax and enjoy. Don’t worry about making too much noise. Somehow, learning still occurs, and nothing beats having fun while learning.

Frankly, it takes a great deal of planning, work, effort and time to incorporate word games into vocabulary instruction. However, I found the positive results far outweighed the inconvenience. I watched my students magically transform from dull, apathetic beings who suffered through vocabulary instruction to energized, engaged learners, eagerly awaiting the next team challenge. But be careful – you just might find yourself cheering and laughing nearly as much as your students. You might even come to believe, as I have, that word games can make vocabulary study for high school students both effective and FUN!

Wordle Art Cloud created from students’ vocabulary survey comments.
Works Cited


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