# Influence of Word Games to Students' Vocabulary Achievement 

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#### Abstract

This paper is a study on the grade 8 students' vocabulary achievement using word games. The study was conducted at Kiwalan National High School and aimed to determine the effectiveness of word games as a learning method in improving students' vocabulary achievement. The data was collected through questionnaires and was analyzed through percentage, mean, $t$-test, and paired $t$-test. The results showed that there was no significant difference between the students' pretest scores in vocabulary when grouped to Word Games method and Traditional method with a p-value of 0.835, but there was a significant difference on the students' posttest scores in vocabulary when taught to Word Games method and Traditional method with a p-value of 0.0015 . Additionally, paired $t$-test revealed that there was a significant difference between the students' pretest and posttest scores in vocabulary when exposed to Word Games method with a p-value of 0.00016 , while the p-value of 0.257 achieved by the group of students taught to Traditional method was not statistically significant. Based on these findings, it is recommended that word games be implemented in vocabulary classes as an effective method for improving students' vocabulary achievement.


KEYWORDS - Word games, vocabulary achievement, Grade 8

## I. INTRODUCTION

Learning English and acquiring vocabulary is crucial in the 21st century for academic achievement, cognitive development, and cultural understanding (ACTFL, n.d.). However, students face difficulties in communication and vocabulary acquisition (Temple, 2010). The COVID-19 pandemic has further impacted education, with distance learning and modular approaches causing challenges in vocabulary learning (Republic Act No. 9275). Students struggle to retain vocabulary, and traditional teaching methods may not effectively engage them (Temple, 2010). Integrating word games and graphic features into instruction can enhance vocabulary retention and student engagement. Teachers play a vital role in creating meaningful learning experiences and supporting students' diverse backgrounds (Farah et al., 2005; Payne, 2009). By incorporating word-play activities and captivating techniques, teachers can motivate students and facilitate language skills development.

This study investigates the impact of word games on grade 8 students' vocabulary achievement at Kiwalan National High School. The research addresses the challenge of ineffective vocabulary teaching caused by modular learning and the lack of clear instructions and explanations in vocabulary materials. The study aims to determine whether integrating word games can help students enhance their vocabulary. The specific research questions
include comparing pretest scores of students grouped by learning method (word games vs. traditional), comparing posttest scores of students taught with different methods, examining if there are significant differences in pretest scores between the two methods, analyzing if there are significant differences in posttest scores between the two methods, and assessing whether there are significant differences in both pretest and posttest scores between the two methods.

## II. REVIEW OF RELATED LITERATURE

This chapter presents the reviews which are related to the study taken from books, journals and internet sources. vocabulary is the knowledge of words and their meanings, which plays a crucial role in language proficiency and communication (Kamil \& Hiebert, 2005; Richards \& Renandya, 2002). Vocabulary acquisition is a lifelong process that requires explicit instruction and strategies to expand and deepen vocabulary knowledge (Stahl \& Kapinus, 2001). Teaching vocabulary involves various approaches and methods, including real object visualization, direct method, Total Physical Response (TPR), and Communicative Language Approach (CLT) (Hatch \& Brown, 1995; Cameron, 2001). The National Reading Panel recommends both incidental and intentional vocabulary learning, with a focus on repeated exposure and the development of word consciousness (Graves, 2000; Cunningham \& Stanovich, 1998). Word games provide a fun and engaging way to learn and reinforce vocabulary, promote understanding, practice language skills, develop life skills, provide sensory experiences, and enhance attention and concentration (Halliwell, 1991; Hale, Wells \& Narkon, 2011). Games create a meaningful context for language use, stimulate competition, and reduce anxiety, leading to positive attitudes and improved learning outcomes (Uberman, 1998; Richard-Amato, 1988). By integrating word games, teachers can create an enjoyable and effective vocabulary learning environment (Harmer, 1991).

This study is based on the Meaningful Learning Theory by David Ausubel and the Constructivism Learning Theory by John Dewey. According to Ausubel (1963), meaningful learning occurs when new information is related to prior knowledge, and learners acquire information through a meaningful process of relating new events to existing concepts. Ausubel also emphasized the role of visual cues in subsuming information in a categorical manner when linked with familiar patterns.

In the perspective of constructivism theory, knowledge is best gained through reflection and active construction in the mind (Mascolo \& Fischer, 2005). Dewey's constructivism emphasizes the integration of real-world and classroom activities, with learners actively creating meaning and knowledge by building on previous experiences. Dewey's work suggests that learners engaged in real-world activities demonstrate higher levels of knowledge through creativity and collaboration (Behling \& Hart, 2008). Dewey also emphasizes the importance of learners connecting real-life experiences with school activities to facilitate learning.

## III. METHODOLOGY

The research design utilized in this study was a true-experimental design, specifically the randomized pretest-posttest control group design. Two sections, "Efficient" and "Friendly," were used, with the "Efficient" section serving as the experimental group exposed to Word Games as a vocabulary learning method, and the "Friendly" section serving as the control


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group with the traditional method. The groups were formed through random assignment. The vocabulary achievement of the students was measured through pretest and posttest assessments administered before and after the intervention. The study involved 50 grade 8 students from Kiwalan National High School. The sampling procedure involved obtaining permission from the school principal, securing a letter of permission, and conducting the data gathering process with the participation of the students. The data collection involved a pretest, weekly intervention using word games, and a posttest. Questionnaires were used as the instrument to collect the data, which included vocabulary words from a grade-8 English textbook. The data were analyzed using percentage, t -test, paired t -test, and mean to determine the distribution, improvement, and average scores of the students' pretest and posttest results.


## IV. FINDINGS

### 5.1. Students' pretest score in vocabulary when grouped to Word Games as a learning method and Traditional method

### 5.1.1. Students' pretest score in vocabulary when grouped to Word Games as a learning method

Figure 1 shows the percentage distribution of the students' pretest scores in vocabulary when grouped to Word Games as a learning method. Out of 25 students, $60 \%$ of them got a score ranging from 17 and below failed to meet the expectation. Eight percent (8\%) of them have a score ranging from 18-20, which means poor but considered passing. $20 \%$ of them have a score ranging from 21-22 which means average, while $12 \%$ of them have a score ranging from 26-30 considered as excellent.


Figure 1. Percentage distribution on the students' pretest score in vocabulary when grouped to Word Games as a learning method

### 5.1.2 Students' pretest score in vocabulary when grouped to Traditional method

 grouped to Traditional method. Out of 25 students, $64 \%$ of them got a score ranging from 17 and below, which failed to meet the expectation. Eight percent ( $8 \%$ ) of them got a score ranging from 18-20, which means poor but considered passing. $20 \%$ of them got a scoreranging from 21-22, which means average. Four percent (4\%) of them got a score ranging from 23-25, which means good and another four percent (4\%) of them got an excellent score ranging from 26-30.


Figure 2. Percentage distribution on the students' pretest score in vocabulary when grouped to Traditional method
5.2. Students' posttest score in vocabulary when taught to Word Games as a learning method and Traditional method

### 5.2.1. Students' posttest score in vocabulary when taught to Word Games as a learning method

Figure 2 shows the percentage distribution of the students' posttest scores in vocabulary using Word Games as a learning method. Out of 25 students, eight percent ( $8 \%$ ) of them did not meet the expectation as they got a score ranging from 17 and below. $16 \%$ of them got a passing score ranging from 18-20, labeled poor. $36 \%$ of them got a score ranging from 21-22, which means average. $16 \%$ of them got a score ranging from 23-25, which means good and $24 \%$ of them got a score ranging from $26-30$ considered as excellent.


Figure 6. Percentage distribution on the students' posttest score in vocabulary when taught to Word Games as a learning method

### 5.2.2. Students' posttest score in vocabulary when taught to Traditional method

Figure 3 shows the percentage distribution of the students' posttest scores in vocabulary using the traditional method. Out of 25 students, $40 \%$ of them got scored 17 and below, which failed to meet the expectation. $24 \%$ of them got a score ranging from 18-20, which means poor but considered passing. $16 \%$ of them got a score ranging from 21-22, which means average. Eight percent ( $8 \%$ ) of them got a score of $23-25$, which means good and $12 \%$ of them got an excellent score ranging from 26-30.


Figure 3. Percentage distribution on the students' posttest score in vocabulary when taught to Traditional method
5.3. Difference on the students' pretest scores in vocabulary when grouped to Word Games as a learning method and Traditional method

Table 1 shows the difference in the pretest score between the Word Games as a learning method and Traditional method. The result is said to be not statistically significant. The analysis reveals that there is no significant difference in pretest score in Word Games as a learning method and Traditional method since the $t$-value which is 0.21 that corresponds to the p -value which is 0.83544 is greater than the 0.5 level of significance. Therefore, the null hypothesis is not rejected.

Table 1. T-test result showing the difference on the students' pretest scores of the two groups

| Pretest | Mean | Mean <br> Difference | t-value | p-value | Remarks |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Word Games as <br> Learning Method | 15.52 | 0.4 | 0.21 | 0.83544 | Not <br> Significant |
| Traditional Method 15.12 |  |  |  |  |  |
| with O.05 level of significance |  |  |  |  |  |
| 5.4. Difference on the posttest scores in vocabulary when taught to Word Games as a <br> learning method and Traditional method |  |  |  |  |  |

Table 2 shows the difference in the posttest score between the Word Games as a learning method and Traditional method. The result is said to be statistically significant. The analysis reveals that there is a significant difference in posttest score in between Word Games as a learning method and Traditional method in favor of Word Games as a learning method since the $t$-value which is 3.58 that corresponds to the $p$-value which is 0.0015 is lesser than the 0.05 level of significance. Therefore the null hypothesis is rejected.

Table 2. T-test result showing the difference on the students' posttest scores of the two groups

| Posttest | Mean | Mean <br> Difference | t-value | p-value | Remarks |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Word Games as <br> Learning Method | 22.48 | 5.28 | 3.58 | 0.001511 | Significant |

Traditional Method 17.20
with 0.05 level of significance
5.5. Difference on the students' pretest and posttest scores in vocabulary when taught to Word Games as a Learning method and Traditional method

Table 3 shows the difference among students' pretest and posttest scores when grouped to Word Games as a Learning method and Traditional method. Based on the result in students' pretest and posttest scores in the Word Games as a learning method, the result is said to be statistically significant. The analysis reveals that there is a significant difference in pretest score and posttest scores in favor of posttest, since the $t$-value is -4.467 that corresponds to the p-value which is 0.00016 is lesser than 0.05 level of significance. Therefore the null hypothesis is rejected.
Based on the result in students' pretest and posttest scores in the Traditional method, the result is said to be not statistically significant. The analysis reveals that there is no significant difference in pretest score and posttest score in favor of posttest, since the $t$-value which is 1.156 that corresponds to the p -value which is 0.257 is greater than the 0.05 level of significance. Therefore, the null hypothesis is not rejected.
Table 3. Paired t-test result showing the difference on the students' pretest and posttest scores of the two groups

|  | Mean | Mean difference | t-value | p-value | Remarks |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Word Games as <br> Learning Method <br> Pretest | 15.52 |  |  |  |  |
| Posttest | 22.48 | -6.96 | -4.467 | 0.00016 | Significant |
| Traditional |  |  |  |  |  |
| Method |  |  |  |  |  |
| Pretest <br> Posttest | 15.12 |  |  |  |  |

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## V. SUMMARY AND CONCLUSIONS

1. Poor vocabulary is one of the problems that the student has been facing in improving language proficiency. The ability of the student to adeptly acquire reading, communication, and writing skills depends on vocabulary knowledge. With a lack of vocabulary, students will have difficulties expressing their thoughts and feelings in both written and oral forms; which in turn reflects their educational achievement. This paper is based on a study on students' vocabulary of grade 8 in Kiwalan National high School using word games. The purpose of this study is to determine the effectiveness of word games as a learning method in improving students' vocabulary achievement. Specifically, it aimed to: determine the percentage distribution of the pretest and posttest scores in vocabulary of the students when grouped to Word Games method and Traditional method; find out the significant difference between the pretest scores in vocabulary of the students when grouped to Word Games Method and Traditional method; find out the significant difference between the posttest scores in vocabulary of the students when exposed to Word Games and traditional method; find out the significant difference between the pretest and posttest scores in vocabualry of the students exposed to Word Games method and Traditional method. The participants were 50 grade- 8 students: 25 students exposed to word games method and 25 students to traditional method. The study used a true experimental design, the pretest and posttest control group design. The data is collected through questionnaires and is analyzed through percentage, t -test, paired t test and mean.
2. During the pretest, majority of both groups find it difficult due to the unfamiliarity of the words used in context and are somewhat susceptible to guessing in answering the test. Based on the result, $60 \%$ of the students under Word Games and $64 \%$ of the students under the Traditional method got a score of 17 and below, which failed to meet the expectation.
3. After having implemented the treatment, eight percent ( $8 \%$ ) of the students taught to Word Games as a learning method got a score between 17 and below. Students who were exposed to word games tend to remember English words they have encountered in their pretest as the majority of them got the correct answer during the posttest. In contrast, $40 \%$ of students taught to Traditional method got scored 17 and below which failed to meet the expectation. The researcher reached the conclusion that students that are taught to traditional method are more likely prone to guessing when answering. Therefore, traditional method is ineffective as a learning tool when applied to teaching vocabulary as compared to word games.
4. Based on the result, both groups were assumed equivalent. Students' pretest scores in vocabulary when grouped to Word Games as a learning method and Traditional method is not statistically significant since the t -value which is 0.21 that corresponds to the p -value which is 0.83544 is greater than the 0.5 level of significance. Therefore, the null hypothesis is not rejected.
5. Moreover, T-test result has proved that there was a significant difference between the students' posttest scores in vocabulary when exposed to Word games as a learning method and Traditional method since the t -value which is 3.58 that corresponds to the p -value which is 0.0015 is lesser than the 0.05 level of significance. Therefore, the null hypothesis is rejected.
6. At the end of the experiment, paired t-test result showed that students that are exposed to Word Games as a learning method got a mean score of 15.52 during their pretest and 22.48 during their posttest. Therefore, students that are exposed to treatment, Word Games, managed to significantly improve English vocabulary. While students' pretest and posttest scores in the Traditional method, on the other hand, only got a mean difference of -2.08 (pretest mean score is 15.12 and their posttest mean score is 17.2 ). The improvement achieved by the group of students taught to Traditional method, however, was not statistically significant than that of the students that are grouped to Word Games method.
7. This study concluded that word games are useful tools that should be applied in vocabulary classes. This learning method provides a game experience to students with different techniques in learning English vocabulary words. Integrating word games in education is a way to make teaching and learning vocabulary more interesting, enjoyable, and effective.

## VI. IMPLICATIONS AND RECOMMENDATIONS

The findings in this study have contributed to the concept that integrating word games is an essential learning method in improving students' vocabulary achievement. This study has indicated the effectiveness of word games when applied to teaching vocabulary. Accordingly, the findings concur with and provide practical implications and recommendations as follows:

1. This study has shown that integrating word games as a learning method could boost students' working memory. Word games help improve their working memory, particularly in building vocabulary skills where they have to access vocabulary and definitions from memory, which can have a knock-on effect on learning and achievement.
2. Word games create meaningful learning opportunities where students actively engage themselves during the teaching-learning sessions. When students are interested, they are more likely to pay attention and actively participate in learning activities.
3. Word games help them learn and retain new words more easily while having fun. Students are able to employ their newly acquired vocabulary in a relaxed setting after extensive study and practice (Uberman, 1998).
4. In the new normal education, the use of word games as a support tool is a great way to make progress in students' vocabulary achievement despite distance learning. These games not only develop students' knowledge of vocabulary but also motivate them by creating interest.
5. Teachers who incorporate word games as a learning method have the means to enhance students' vocabulary achievement. Hence a careful selection of appropriate word games must be done accordingly.
6. This study establishes effective strategies that enable them to develop the right strategy in combatting boredom in teaching-learning vocabulary.
7. It is recommended that teachers need to change their traditional way of teaching vocabulary. They should assist the students learn vocabulary meaningfully and contextually in a joyful and exciting manner.
8. Teachers must be able to adapt vocabulary teaching and learning strategies in the new normal education system. Adapting word games as a learning method usually involves friendly competition and keeps learners interested.
9. To learn and retain new words, learners should take part in several meaningful activities with different tasks, whether it is a paired task, group task, or individual task. Such activities also include word games, which allow them to explore and discover information without memorization when obtaining a new set of vocabulary words.
10. Based on the findings of this study, it is recommended that the curricula designers should include educational games in the syllabus to strengthen and improve the students' vocabulary achievement.

## REFERENCES

i. Brau, B. 2018. Constructivism. In R. Kimmons, The Students' Guide to Learning Design and Research. EdTech Books.
ii. Beck, I. L., McKeown, M. G., \& Kucan, L. 2013. Bringing words to life. Robust vocabulary instruction, 2nd ed., New York: Guilford Press.
iii. Behling, K., \& Hart, D. 2008. Universal design: A model for professional development. In Universal design in higher education: From principles to practice (pp. 109-125). Cambridge, MA: Harvard Education Press.
iv. Cunningham, A. E. \& Stanovich, K. E. 1998. "What reading does for the mind," American Educator, Vol. 22, pp. 8-15.
v. Harmer, J. 2008. The Practice of English Language Teaching. England: Pearson Longman.
vi. Hatch, E., \& Brown, C. 1995. Vocabulary, Semantics, and Language Education. Cambridge: Cambridge University Press.
vii. Hidayat, N. 2015. Improving Students' Vocabulary Achievement through Word Games. Journal of English Educators Society, 1(2), 95-104. doi.
viii. Kamil, M. L. \& Hiebert, E. H. 2005. "Teaching and learning vocabulary: Perspectives and persistent issues," in E. H. Hiebert and M. L. Kamil (eds.), Teaching and learning vocabulary: Bringing research to practice, Mahwah, NJ: Erlbaum.
ix. Kang, B., \& Tan, S. H. 2014. Interactive games: Intrinsic and extrinsic motivation, achievement, and satisfaction. Journal of Management and Strategy, 5(4), 110-116.
x. Linse, C. T. \& Nunan, D. (Ed). 2005. Practical English Language Teaching: Young learners. New York: McGrawHill ESL/ELT
xi. Mascolo, M. F., \& Fischer, K. W. 2005. Constructivist theories. Cambridge Encyclopedia of Child Development (pp. 49-63). Cambridge, England: Cambridge University Press.
xii. Renandya, W.A.,\& Richards, J.C. 2002. Methodology in Language Teaching. New York : Cambridge University Press.
xiii. Richard-Amato, P. A. (1988). Making it happen: Interaction in the second language classroom: From theory to practice. New York: Longman.
xiv. Rixon, S. 1981. How to use games in language teaching. London: Macmillan
xv. Stahl, S. A. 2005. "Four problems with teaching word meanings (and what to do to make vocabulary an integral part of instruction)," in E. H. Hiebert and M. L. Kamil (eds.), Teaching and learningvocabulary: Bringing research to practice, Mahwah, NJ: Erlbaum.
xvi. Thornbury, S. 2002. How to teach vocabulary. UK:Longman.
xvii. Wells, J., \& Narkon, D. 2011. Motivate students to engage in word study using vocabulary games. Intervention in School and Clinic, 47(1), 45-49
xviii. Word Game. (n.d.) Collins English Dictionary - Complete and Unabridged, 12th Edition 2014. (1991, 1994, 1998, 2000, 2003, 2006, 2007, 2009, 2011, 2014)


[^0]:    with 0.05 level of significance

