

**THE EFFECT OF WORD WALL DIGITAL GAME MEDIA  
ON STUDENTS' VOCABULARY (A QUASY EXPERIMENTAL RESEARCH AT  
THE SEVENTH GRADE OF SMP ISLAM AL-AZHAR 52 KOTA BENGKULU)**

Pintar Alatas<sup>1</sup>, Irwan Satria<sup>2</sup>, Reko Serasi<sup>3</sup>  
<sup>1,2,3</sup>Tadris Bahasa Inggris UINFAS Bengkulu  
[1pintaralatas49@gmail.com](mailto:pintaralatas49@gmail.com), [2Satriairwan1974@gmail.com](mailto:Satriairwan1974@gmail.com)  
[3reko58serasi@gmail.com](mailto:reko58serasi@gmail.com)

**ABSTRACT**

This research aims to know whether there was a significant effect of word wall digital game media on students' vocabulary. This research method is quantitative with a quasi-experimental design. The population used in this research was class VII students of SMP Islam Al-Azhar 52 Kota Bengkulu. Those taken were class VII A as the experiment (30 students) and class VII D as the control class. data collection using pretest and posttest. trial of this research instrument with validation tests and reliability tests. The data analysis techniques used in this research are classic assumption tests and hypothesis testing. The research results showed that there were significant changes in the experimental class with an average value of 82.83, while in the control class, the average value was 77.66. in the statistical hypothesis sig (2-tailed) = 0,031 which is lower than the sig  $\alpha$  0,05 can be inferred that the null hypothesis ( $H_0$ ) is rejected and the alternative hypothesis ( $H_a$ ) is accepted. The post-test results show that using the digital word wall game media can increase students' vocabulary. Thus, word wall media can be an effective medium for increasing students' vocabulary.

*Keywords: Word wall, Digital Game, Students' Vocabulary*

**ABSTRAK**

Penelitian ini bertujuan untuk mengetahui apakah terdapat pengaruh yang signifikan penggunaan media permainan digital word wall terhadap kosakata siswa. Metode penelitian ini adalah kuantitatif dengan desain eksperimen semu. Populasi yang digunakan dalam penelitian ini adalah siswa kelas VII SMP Islam Al-Azhar 52 Kota Bengkulu dan yang diambil adalah kelas VII A sebagai eksperimen (30 siswa) dan kelas VII D sebagai kelas kontrol. pengumpulan data menggunakan pretest dan posttest. uji coba instrumen penelitian ini dengan uji validasi dan uji reliabilitas. Teknik analisis data yang digunakan dalam penelitian ini adalah uji asumsi klasik dan uji hipotesis. Hasil penelitian menunjukkan terdapat perubahan yang signifikan pada kelas eksperimen dengan nilai rata-rata sebesar 82,83, sedangkan pada kelas kontrol nilai rata-rata sebesar 77,66. pada hipotesis statistik sig (2-tailed) = 0,031 lebih rendah dari sig  $\alpha$  0,05 dapat disimpulkan hipotesis nol ( $H_0$ ) ditolak dan hipotesis alternatif ( $H_a$ ) diterima. Hasil post-test menunjukkan bahwa penggunaan media permainan word wall digital dapat meningkatkan kosa kata siswa. Dengan demikian, media word wall dapat menjadi media yang efektif untuk meningkatkan kosa kata siswa.

*Kata Kunci: Word wall, Permainan digital, Kosakata Siswa*

## **A. Introduction**

Language is the medium that people use to communicate with each other. Communication means understanding and expressing all information, thoughts, feelings, and development of science, culture, and technology. Without language, there is no communication. English is an international language that is taught in most countries of the world. The position of English as the language of the universe and as a global language has made many people in the world need English. Therefore, it is clear that English does not need enough attention from the government or other stakeholders because it is still a luxury for most Indonesian children. English is also known in Indonesia. Today, college students learn English through certain media such as books, newspapers, television, etc. It can be concluded that "language is a complex-specialized ability that develops spontaneously in the child without conscious effort or formal instruction".

Furthermore, the result of English studies in Junior High School can be said to be still far from expected. All of this time, most of the students know and can memorize the

materials (vocabulary and grammar) but they often do not understand how to use them. Learning English is not only learning the material, but we also must try to apply it in communication. Many factors cause this to happen. Take, for example, the students only learn English at school, and their teacher may not speak much English. So it makes it difficult for them to use English. Confessed or not, these factors can make most of the student's motivation for learning English low, because they feel that what they learn at school has no link to benefits to their daily lives.

English is taught by teachers in schools with the aim of students acquiring basic language skills in English form. However, many students have problems with learning English. In general, their problems are related to low concentration, motivation, bad study habits, and self-confidence. In external factors such as class, the atmosphere is too crowded. Most students have problems with learning all their English language skills. According Noprival (2016) states that there are five problems related to students' problems with speaking English. Including 1) scant vocabulary knowledge, 2) grammar as

a hindrance, 3) fear of negative response from others, 4) not confident to speak in English, and 5) feeling afraid to speak in English.

Furthermore, wordwall.net implied the same various activities of word wall media strategy, such as information matching, picture matching, and word grouping. The difference is that wordwall.net as a web tool use technology, whether word wall media as a traditional strategy use classroom equipment (Wells & Narkon, 2012). Many researchers, who have already researched the use of word wall media, found that traditional word wall strategy succeeds in improving learners' vocabulary. While among online learning, teacher can still use the word wall media strategy which is replaced by the website based, wordwall.net.

Besides that, it can be more enjoyable for the learners because at the end of the game there will be launched score. Scores from the participants showed in the section leaderboard and it will engage learners to be winner by trying to answer many more questions correctly. Therefore learners have a chance to focus and to learn

independently through this website. The games are also easy to understand, without many rules, so teachers are not necessarily to tell the complicated game rules to learners.

Based on the author's observations made by researchers at SMP Islam Al-Azhar 52 Kota Bengkulu. Researchers saw and found out that the subject teacher used a word wall digital game as an alternative/supporting medium in presenting material to students for now. Moreover, the English teacher at the seventh grade of SMP Islam Al-Azhar 52 Kota Bengkulu is actively media for now. With the results of the observations that have been made, the researcher is interested in finding out whether the use of video in the learning process for now will be useful effectively to used by teachers at SMP Islam Al-Azhar 52 Kota Bengkulu. Therefore, the researcher became curious and tried to investigate with a research entitled "**The Effect of Word Wall Digital Game Media on Students' Vocabulary (A Quasy Experimental Research At the Seventh Grade of the SMP Islam Al-Azhar 52 Kota Bengkulu)**"

Based on the background of the study, the research question is: "Is

there any effect of word wall digital game media on student's vocabulary in the seventh grade of the SMP Islam al-Azhar 52 Kota Bengkulu?"

Based on the research question above, the objective of the research is as follows: To find out whether or not word wall significant effect on students' vocabulary in the seventh grade of the SMP Islam Al-Azhar 52 Kota Bengkulu.

## B. Research Methodology

The experimental research design used is a Quasi-Experimental Design type also called a Quasi-experimental which tests the independent variable with the dependent variable carried out on a sample of the experimental group or control group. Then, both groups were given a post-test. The steps taken were to divide the subjects into two groups, then the experimental group would be given stimulation, while the comparison group would be given stimulation. The design form to be used is Nonequivalent posttest-Only Control Group Design. The paradigm in this research is illustrated as follows:

**Table 1 The paradigm in this research is illustrated**

Groups	Treatment	Post-test
Experimental class	X	O1
Control class	O	O1

Keterangan:

X: media use

O: does not use X media

O1 : Post test

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Pre-Test Experiment	30	50	30	80	52.33	11.798
Post-Test Experiment	30	35	65	100	82.83	10.144
Pre-Test Control	30	40	30	70	53.67	9.463
Post-Test Control	30	35	65	95	77.67	7.849
Valid N (listwise)	30					

## C. Research Results and Discussion

### A. Classic Assumption Test

#### 1. Descriptive Analysis

Descriptive analysis will be carried out in the discussion, including a general summary of the amount of data, minimum, maximum, average, and standard deviation.

**Table 2 Descriptive Statistics**

Based on the table descriptive analysis above, it can be seen that the experimental class pre-test variable with a total of 30 data (N)

has an average of 53.33, with a minimum of 30 and a maximum of 80. Meanwhile, the standard deviation is 11.798. The experimental post-test variable with a total of 30 data (N) has an average value of 82.83. with a minimum value of 65 and a maximum of 100. while the standard deviation is 10,144. The control class pre-test variable with a total of 30 data (N) has an average value of 53.66, with a minimum value of 30 and a maximum value of 70. While the standard deviation is 9,463. The last is the control class pre-test variable with a total of 30 data (N) which has an average value of 77.67. with a minimum value of 60 and a maximum of 95 while the standard deviation is 7.849.

## 2. Normality Test

The normality test is used to determine whether the research data obtained is normally distributed or around the normal average value. Good data is a power that resembles a normal distribution. In this research, the data collected is related to the influence of word wall digital

games on students' vocabulary. The data was tested for normality using the SPSS (Statistical Product and Service Solution) Program.

### Table 3 Tests of Normality

Based on the table above, we look at Shapiro-Wilk. this shows that normality is significant. The significance of the control class pre-test of 0.400 indicates this. The significance of the control class post-test was 0.208. The significance of the pre-test for the experimental class was 0.408. Meanwhile, the post-test significance for the control group was 0.408. Because the significance of all variable variables is greater than 0.05, it can be concluded that the data population contributed normally.

## 3. Homogeneity Test

Testing the homogeneity of two variances between the experiment and control classes with the Lavene test

Kelas	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Hasil Pre-Test Control Class (Konvensional)	.123	30	.200*	.964	30	.400
Post-Test Control Class (Konvensional)	.123	30	.200*	.953	30	.208
Pre-Test Experiment Class (Word wall)	.144	30	.115	.965	30	.408
Post-Test Experiment Class (Word wall)	.118	30	.200*	.952	30	.192

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

using the SPSS (Statistical Product

and Service Solution) Program. According to Septi (2013) the guidelines for decision-making regarding normality test.

- a) A significance score < 0.05 means the data is not homogeneous.
- b) A significance score > 0.05 means the data is homogeneous.
- c) After processing the data, the table can be seen below:

**Table 4 Test of Homogeneity of Variance**

Based on the table above, the results of the homogeneity test using the Levene test produce significance with a score of 0.113.>0,05. It can be concluded that the control class and

Pair 1	Sebelum Treatment – Setelah Treatment	Mean	Std. Deviation	Paired Differences		t	Df	Sig (2 tailed)
				Std. Error mean	95% confidence interval Difference lower Upper			
		-24.000	8.749	11.597	-27.267 -20.733	-15.024	29	<.001

experimental class students have the same variance, or that the two classes are homogeneous.

**B. Hypothesis Test**

**1. T-Test**

The data analysis technique used in this research is the Paired Sample T-test (paired sample test). This test is a comparative

		Levene			
		Statistic	df1	df2	Sig.
Hasil	Based on Mean	2.588	1	58	.113
	Based on Median	2.048	1	58	.158
	Based on Median and with adjusted df	2.048	1	57.073	.158
	Based on trimmed mean	2.582	1	58	.113

hypothesis test or comparison test. The aim is to find out whether there is a difference in the averages of two samples (two groups) that are paired or related. The results of the hypothesis test obtained the following details:

**Table 5 Uji Paired Sample T-test Experiment class**

Based on the table above, the Paired Sample T-Test test in the experimental class shows that the sig. (2-tailed) is 0.001, which means less than 0.05, meaning there is a significant difference in the average results of the pretest and post-test

**Table 6 Uji Paired Sample T-test Control**

Based on the table above, the Paired Sample T-Test test in the control class shows that the sig. (2-tailed) is <0.001, which means less

than 0.05, meaning there is a significant difference in the average results of the pretest and post-test.

Based on the output above obtained from the two tables of the experimental class and the control class which obtained a Sig. (2-tailed) of  $<0.001 < 0.05$ , it can be concluded that there is a difference in the average student learning outcomes between students using the word wall game and the conventional model.

**Table 7 Independent samples T-Test**

		Levene's test equality of variances		t-test for equality of means					95% confidence interval of the difference	
		f	Sig.	t	df	Sig. (2-tailed)	Mean difference	Std. Error Difference	Lower	upper
Hasil Belajar	Equal Variances assumed	2.588	.113	2.206	58	.031	5.167	2.342	.479	9.854
	Equal Variances not assumed			2.206	54.562	.032	5.167	2.342	.473	9.860

Based on the independent sample t-test in the table above, it can be seen that the results of the significance value are so that based on the criteria in the independent sample t-test, it shows that  $0.031 < 0.5$ , then  $H_0$  is rejected and  $H_a$  is accepted, which means there is a difference in the average learning outcomes of students from the control class and the experimental class.

Therefore, the influence of using word wall digital games on students' vocabulary.

### C. Discussion

This research aims to determine the effect of word wall digital game media on students' vocabulary. This research was conducted on seventh-grade students at SMP Islam Al-Azhar 52 Kota Bengkulu Bengkulu for approximately one month. Before the treatment is given to the experimental class, students' initial abilities are first measured using pre-test questions in both the control and experimental classes. After the pre-test is carried out, it can be seen that the pre-test scores of the control group and the experimental group have almost the same scores. This shows that there is no difference in vocabulary between the two classes. This shows that the experimental class and control class depart from the starting point with the same ability.

After that, each group was given treatment, but using word wall digital game treatment was only carried out in the experimental class and the control class was taught using the usual method without using word wall digital game. Treatment was

given for 5 meetings in each class. After the learning activities in the control group and experiment group finished, at the end of the activity, vocabulary comprehension of students is measured again, and students re-tested using a test or called post test. These results indicate that in both groups there was an improvement of students' scores in vocabulary students, but the improvement in the experiment group is higher than in the control group.

Based on the test results on research data, namely pre-test and post-test data, it can be concluded that there is a significant effect word wall digital game on students vocabulary. The basis for making the decision is that in the prerequisite test for the data normality test, it is known that the data in the control group (pre-test and post-test) and the experimental group (pre-test and post-test) are all normally distributed. In the data homogeneity test, the output results can be seen in the table above. It can be seen that the significance value is 0.113. then it can be concluded that the two classes are homogeneous or the same.

So it can be concluded that the use of digital word wall games is very important for the success of the

learning process itself, especially in acquiring foreign language skills such as understanding vocabulary. One of the most important parts of learning a foreign language is preparation before the main task of understanding students' vocabulary. It is important that using word wall media is beneficial for students' understanding of vocabulary.

#### **D. Conclusion**

After conducting a vocabulary teaching experiment using Word Wall Media in the experimental class and without using it in the control class, the researcher analyzed the experimental data, and then the researcher continued to conclude the research. The researcher concluded, based on the measurement results, that there were substantial differences in students' vocabulary mastery in the experimental class and the control class. The results of the research showed that the score obtained for the experimental class treated using the Word Wall was 60.5495. Meanwhile, the gain score for the control class that was treated without using word wall media was



51.5075. This means that the gain score for the experimental class is higher than the control class.

In short, from the findings above it can be concluded that Word Wall Media has a significant influence on Students' Vocabulary

## Referencess

### Book :

- Akbar, Usman. (2006). *Metedologi Penelitian Sosial*. Jakarta: Bumi Aksara.
- Akbar, Usman. (2006). *Metedologi Penelitian Sosial*. Jakarta: Bumi Aksara.
- Anwar, (2009) Suroyo. *Pemahaman individu, observasi, checklist, interview, kuesioner dan sosiometri*, Yogyakarta: Pustaka Pelajar.
- Arash Beidollahkhani, (2017). "Challenges in Providing Training for English Teachers of Elementary Schools," *Political Studies of Islamic World*
- Arifin, Zainal. (2016). *Evaluasi Pembelajaran*. Bandung: PT Remaja Rosdakarya.
- Arikunto, S. (2010). *Produser Penelitian Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta.2010
- Brown, H. D. (2004). *Language Assessment: Principles and Classroom Practices*. New York: Pearson Education
- Creswell, J. W, (2012). *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research* (4th ed). Boston: Pearson.
- Hammer, J. (2007). *How to Teach English*. Harlow: Pearson Longman
- Hermawan, I. (2019). *Metodologi penelitian pendidikan (kualitatif, kuantitatif dan mixed method)*. Hidayatul Quran.
- Masyhuri, dkk. 2011. *Metodologi Penelitian*. Bandung: PT Refika Aditama.
- Maykut, P., & Morehouse, R. (1994). *Beginning Qualitative Research: A Philosophic and Practical Guide*. London: The Farmer Press
- Muijs, Daniel, and David Reynolds. (2005). *Influence is Teaching Evidence and Practice*, London: Sage Publication.
- Nation, I. (2001). *Learning Vocabulary in Another Language* (Cambridge Applied Linguistics). Cambridge: Cambridge University Press
- Sanjaya Wina, (2006) *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan*, Jakarta: Prenada Media Group.
- Schmitt, N. (2000) *Vocabulary in Language Teaching*. Cambridge: Cambridge University Press

- Sugiyono.(2011)Metode Penelitian kuantitatif, kualitatif, dan R&D. Bandung: Afabeta.
- Takač, V.P. (2008). Vocabulary Learning Strategies and Foreign Language Acquisition. Canada: Multilingual Matters
- Thornbury, Scott. (2002). How to Teach Vocabulary. Harlow: Pearson Education Limited
- Tobin, Kenneth. (1993). The Practice of Constructivism in Science Education, New York: AAAS Press.
- Ur, Penny. (2009). A Course Language Teaching: Practice and Theory. United Kingdom: Cambridge University Press
- Wells, J., & Narkon, D. (2012). A Comparison of Traditional Versus Electronic Word Wall Instruction on Word Identification in Kindergarteners with Developmental Disabilities. *Electronic Journal for Inclusive Education*, 3(4).
- Wilkins, D. A. (1972). *Linguistics in Language Teaching*. Cambridge: MFT Press.
- Prasetyo, Bambang. 2014. *Metode Penelitian Kuantitatif*. Jakarta: PT RajaGrafindo Persada.
- Punch, K. F. (2014). *Introduction to Social Research: Quantitative & Qualitative Approaches Third Edition*. London: Sage
- Journal :**
- Fatimah, S. (2020). Students' Vocabulary Mastery through Word Wall at SMPN 44 Surabaya. *JournEEL (Journal of English Education and Literature)*, 2(2), 22-33.
- Khairunisa, Y. (2021). Pemanfaatan Fitur Gamifikasi Daring Maze Chase–Wordwall Sebagai Media Pembelajaran Digital Mata Kuliah Statistika Dan Probabilitas. *Mediasi - Jurnal Kajian Dan Terapan Media, Bahasa, Komunikasi*, 2(1), 41–47
- Kunto, E. (2021). "Wordwall: Media Pembelajaran Interaktif Mulai dari Quiz, Wordsearch, hingga Anagram", Februari 2021, <https://www.erickunto.com/2020/11/wordwallmedia.pembelajaraninteraktif.html>
- Magasvaran, V., Ukat, J., & Yunus, M. M. (2021). "Catch and Keep" Through Wordwall in Improving Vocabulary Mastery among Year 3 Pupils. *Research & Design in Challenging Environment*.
- Maghfiroh, K. (2018). Penggunaan Media Word Wall untuk Meningkatkan Hasil Belajar Matematika Pada Siswa Kelas IV MI Roudlotul Huda. *Jurnal Profesi Keguruan*, 4(1), Art. 1. <https://doi.org/10.15294/jpk.v4i1.13742>
- Meltzer, D. E. (2002). The relationship between mathematics preparation and conceptual learning gains in physics: A possible "hidden variable" in diagnostic pretest scores. *American journal of physics*, 70(12), 1259-1268.

- N. A. Kasim, (2011). "Increasing The Students' Vocabulary Mastery by Using Word Wall Media," Universitas Negeri Makassar, (2011). Performance at The Tenth Grade of SMAN 1 Punggur Central Lampung (Doctoral dissertation, IAIN Metro).
- Noprival. (2016). Students' voice: EFL Speaking Problems on English Day Program at One Senior High School in Indonesia. *Jurnal Ilmiah Universitas Batanghari Jambi*, 16(1). Retrieved from <https://media.neliti.com/media/publications/225311-students-voice-efl-speaking-problems-on-88c780c1.pdf>
- Purnamasari, S., Rahmanita, F., Soffiatun, S., Kurniawan, W., & Afriliani, F. (2022). Bermain Bersama Pengetahuan Peserta Didik Melalui Media Pembelajaran Berbasis Game Online Wordwall. *Abdi Laksana: Jurnal Pengabdian Kepada Masyarakat*, 3(1), Art. 1. <https://doi.org/10.32493/aljpkm.v3i1.17052>
- Minarta, S. M., & Pamungkas, H. P. (2022). Efektivitas Media Wordwall Untuk Meningkatkan Hasil Belajar Ekonomi Siswa MAN 1 Lamongan. *Jurnal Kajian Pendidikan Ekonomi dan Ilmu Ekonomi Universitas Negeri Surabaya*, VI
- Nadhiroh, U. (2010). The Effectiveness of Word Wall Media in Improving the Fifth Year Students Mastery on Vocabulary at SDN. 04 Sumberbendo, Pucanglaban, Tulungagung.
- Nitasari, M. (2017). The Influence of Using Mingle Game Strategy Towards Students' Speaking