



The Effect Using Wordwall Game Applications To Improve Student's Vocabulary In Chumchon Ban Phanokkhao School

Rizka Amalia Az Zahrah¹, Khoirul Anwar²

^{1,2} Universitas Muhammadiyah Gresik; Indonesia

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ABSTRACT

This study aims to determine the effectiveness of the word wall application used by students to increase their English Vocabulary. This type of research uses quantitative methods with research subjects of class VII, VIII and IX involving 30 students. The data collection method was carried out through a pre-test, treatment, and post-test. Analysis of the data presented in this study by comparing the values of the pre-test and post-test (paired sample t-test). The results of this study are; (1) there is a significant difference in means from the pre-test and post-test for each class VII (pre = 75,00, post = 92,27), VIII (pre = 78,57, post = 92,14), IX (pre = 76,92, post = 90,00); (2) there is a difference in the average pre-test, and posttest learning outcomes with a sig value of 0.000 is less than 0.05 ($0.000 < 0.05$). It concludes that the word wall application is effective in increasing English vocabulary. In addition, word wall applications can increase mastery of Vocabulary because of the simple steps. So, it might enhance enthusiasm for learning English vocabulary.

Corresponding Author:

Rizka Amalia Az Zahrah
Universitas Muhammadiyah Gresik; Indonesia azzahraamalia42@gmail.com

INTRODUCTION

Learning media is an integral part of learning activities in schools. Utilizing learning media is also a creative effort to create student learning processes. Likewise, the role of the teacher must know the purpose of the media and the characteristics of the media to be used by making comparisons of learning media. So that, teachers must be professional and able to adapt to sophisticated scientific developments and apply learning methods that suit the needs of students. Educational innovation in the field of learning technology media can bring efforts to realize various ideas and thoughts that must

be carried out to realize learning achievements (Darmawan, 2014). One of the purposes of education is to help pupils improve their linguistic abilities. In addition, students must understand how to utilize learning apps appropriately and appropriately for these activities to take place in an orderly manner. Not all of the students will be able to comprehend straightforwardly how to use the program; hence, the instructor has to have experience with the different types of apps that will be utilized throughout the learning process.

Applying teaching methods and learning strategies is a way to improve student's learning abilities. It is crucial to equip them with essential skills that support their oral and written communication skills. Games are used as a method of instruction for learning. By considering the importance of a game application used in the learning process, the use of games in education can make it easier for students to master the material and remember it with great enthusiasm. Also, consider the type of game application that will be most effective in achieving the learning objectives.

Students are inspired to be more creative by the many different application games and drawn to become more engaged in the educational process. Using educational gaming programs such as Wordwall, Quizziz, Live Worksheet, and Mentimeter. Nonetheless, the researcher at Chumchon Ban Phanokkhao School only employed the Wordwall program in the context of the teaching and learning process in class IX in order to expand the pupils' vocabularies. It is something that captures the attention of pupils in the process of remembering Vocabulary and answering questions since it has an intriguing backdrop and a large number of functions that are accessible in the application. (Bakhsh, 2016) stresses the importance of employing games in the classroom to not only encourage students but also boost their interest in actually using the language being learned.

The objective of teaching Vocabulary using the Wordwall program is for pupils to acquire a large English vocabulary. With mastery of Vocabulary, it is easier for pupils to construct meaningful sentences, given the importance of the word in communication. By definition, Vocabulary is a list of words. According to (Beno, 2019), Vocabulary comprises all of the words contained in a language, words used in science, the wealth of words owned by speakers, or lists of words compiled by dictionaries along with short and practical. The application word wall is a collection of vocabulary words presented in giant letters and arranged methodically. Wordwall acts as a record that is kept permanently of pupils' progress in language study. This media can not only be shown or seen, but it can also be intended to assist group study activities, and it can actively include students in generating it. Students have the opportunity to strengthen their critical and active reading and writing skills while utilizing this Wordwall medium.

The Wordwall program is an interactive media that facilitates learning in hearing, speaking, reading, and writing via several game elements. In addition to those mentioned four linguistic abilities, pupils must also have a significant vocabulary to learn a foreign language successfully. This kind of media may serve as a source of student learning and also as an enjoyable assessment tool. This program may be used to construct games focused on enjoyable quizzes that can increase students' vocabulary abilities. Some examples of games that can be made with this application are word searches, quizzes, and anagrams. The Wordwall application's downsides include the fact that it is time-consuming to create, that the text size cannot be altered, and that it is not possible to alter the size of the text that is included inside pictures. As a result, to develop assignments using the word wall application, the educator has to be imaginative and intelligent.

Implementation and processes for Wordwall

The school system in Indonesia places a strong emphasis on character formation and development. Several student traits must be had, including the trait of discipline. Education, which contributes to the development of this character, must maximize its role, particularly school instructors.

To shape the disciplined character of their pupils, teachers must possess a high level of creativity and teamwork. Forming a specific curriculum or using the media as a learning aid is a highly effective way to enhance student character. The creation of a student's disciplined character is crucial. Therefore, the educator must recognize the advancements and potential of this century. Similarly, to increase the efficacy of learning, instructors may use digital technology relevant to the current state of education.

One of the mediums that may be utilized for learning, mainly English, is word wall gaming apps. Multiple studies have shown that deploying a word wall gaming application may enhance pupils' vocabulary acquisition. This word wall application may be used for appropriate learning processes at the junior high level. Effective learning occurs when students can concentrate on the topic and engage in enjoyable activities. This study shows that word wall gaming apps may positively influence and enhance vocabulary acquisition with improved progress outcomes.

Then, according to the study's findings (Savitri, 2021), it was shown that using word wall games as a learning assessment might improve student comprehension. The 96.8% improvement in student comprehension may have occurred as a direct result of utilizing the word wall application. Students may benefit from implementing and exploiting this word wall application in a roundabout way, which can help them study. This is due to the fact that kids do not experience feelings of boredom when learning is taking place. Students will have a better time studying in such an environment since it will foster excitement and a pleasant attitude. For this reason, the usage of this program should be optimized to its best potential, and it should have full support from all aspects of education.

Wordwall is a program that may be used to produce many forms of educational media, including quizzes, matching, anagrams, random words, word searches, and so on. Students have numerous possibilities to imagine thanks to the word wall program's highly interactive features and handouts, which are used in classroom lessons utilizing the application. This program may be used on a variety of different devices, and its output can either be printed directly or downloaded in PDF format. Users can effortlessly move from one activity template to another since there are 18 different templates available that may be obtained free of charge.

In this program, educators can exercise their creativity via game elements, which may be accessed after registering for an account at <https://wordwall.net/>. This application's usage is straightforward, and its operation may be grasped in a short amount of time. Students' excitement in working on the problems is increased thanks to this application based on a game. In addition, various gameplay options are available, such as maze cases, matching pairs, whack-a-mole, truth or false, missing words, and many more. The instructor may develop activities and choose one of the templates that are accessible on the web after first establishing an account and then providing the name, email address, and password for the account. If a teacher wants to provide a hint in a question, they also have the option to add a photo.

Wordwall to Language Acquisition

It is possible to experience monotony everywhere and at any moment. Therefore, creativity and innovation in learning media are necessary to increase students' interest and motivation. When students lose interest and drive for learning, the educator must revive their interest and motivation. We may use a range of learning materials as one option.

This type of game has the advantages of being easy for creative students to follow and being more relevant for learning English vocabulary. The Wordwall application can also be used for students of various grade levels, as it provides 18 easily interchangeable activity templates. Additionally, this application can be played offline and printed, which is intriguing. According to the findings of (Nenohai, Rokhim, Agustina, & Munzil, 2022), students can easily reap the benefits of this word wall application, according to the research. Students can use it without having to create an account because

it has a straightforward interface and offers a variety of free templates. This demonstrates that word wall applications can combat boredom when receiving learning materials and assist teachers in determining students' levels of comprehension.

Vocabulary

According to (Richards, Richards, & Renandya, 2002), "Vocabulary is an essential element of language proficiency and provides a substantial foundation for how well language learners speak, listen, read, and write. When speaking a foreign language, it is necessary to learn this aspect of the language. Students will be able to listen, speak, read, and write. Therefore, students must have an extensive vocabulary to complement their skills.

Vocabulary is a list of words with meanings, and meaning is essential for communicating our thoughts. Students will also do well on their English exams if they have a solid grasp of Vocabulary. Vocabulary is a crucial aspect of learning a second language. In addition, Vocabulary is the focal point of learning a foreign language, particularly at the secondary level, to enrich their language. Vocabulary is essential in the EFL classroom for expressing meaning and communicating ideas through receptive and productive skills. Vocabulary is a crucial component of language learning and plays a crucial role in student and teacher learning. This implies that vocabulary mastery plays a crucial role in certain aspects of language and that students must acquire sufficient Vocabulary to communicate effectively.

Based on the prior study's findings, word wall apps have been designed to assist primary school pupils in increasing their Vocabulary. On the other hand, few study findings have been employed to support vocabulary mastering for students in higher education, such as kids in junior high school and those with traits that favour local expertise. The findings of a study done (Çil, 2021) in elementary schools found that the results of research in grade 5 primary schools in Turkey suggested an improvement in pupils' vocabulary understanding. Another research found that kids' interest in learning and their desire to participate in learning rose when they used the word wall application to learn in grade 2 of primary school (Siti Faizatun Nissa, 2022). A shift in perspective is brought about in students enrolled in class IV SD when they use word wall learning media. This is because the tool can reignite students' interest and enthusiasm for the educational process (Pradani, 2022). The findings of the considerable research conducted employing word wall apps in primary schools have shown that these applications have a positive influence. On the other hand, not much work has been done at the junior high and senior high school levels; very few people have explored this topic, but not to expand students' vocabularies. (ALYAZ, Dr. Yunus, 2016) Investigating the popularity of digital education in foreign language teaching reveals the role of game-based language learning (DGBLL) in vocabulary knowledge. This demonstrates significant improvements in language skills and the use of games while teaching. Despite numerous studies, word wall applications continue to be dominant in assisting learning at the elementary school level. However, word wall has not yet been combined with web technology. Thus, this study will reveal the effectiveness of using the word wall game application in learning at junior high school levels VII, VIII, and IX by combining websites.

This study intends to discuss the effects of using word wall applications to increase students' Vocabulary at the junior high school level. Considering the limitations of learning Vocabulary, which still needs to improve in the use of the technology that has been provided, this study aims to discuss the effects of using the word wall applications. The authors of this study expect to be able to provide a research contribution to English instructors that they may use and innovate upon by using this educational game as a form of assessment in students' learning. Therefore, the phrasing of the issue that will be investigated in this research is how effective the influence of word wall game applications is in increasing Vocabulary in grades seven, eight, and nine.

METHODS

This study aims to assess the effect of word wall applications used by students at Chumchon Ban Phanokkhao school to increase Vocabulary in English subjects. The context of this study is to collect quantitative data using the experimental method, which is a series of activities that explain the causal relationship (causality) between one variable and another (variable X and variable Y). From July to September 2022, this research was conducted in Thailand for three months and twelve meetings. According to (Arikunto, 2006), A sample is a small unit of individuals that precisely includes research from the calculation, there were 30 students from the number of respondents studied, and all were practical classes. As a result, the researcher took class VII with 11 students, VIII with seven students, and IX with 12 students at the junior high school level. The data of the participants are presented in table 1.

Table 1. The number of students in the class

Class	Total	Male	Female
VII	11	11	-
VIII	7	5	2
IX	12	8	4

Table 1 describes the number of participants and the gender involved in each class. Class M1 consists of 11 males and no females; class M2 consists of 5 males and two females; and class M3 consists of 8 males and four females.

Data collecting methods and measures

In each class, the data collection stages are the pre-test and post-test. This pre-test activity is performed before using the word wall application and the treatment process. During the lesson, the researcher can assess the students' vocabulary skills by presenting a simple picture via power point and a Google form. Following the pre-test, students were administered the word wall application strategy. Students are tested again after the pre-test using the same questions as before. Finally, the posttest was conducted using the word wall application strategy. The researcher asks the same questions as in the first test exam. Students are given a set amount of time and can work individually with care.

Materials

The vocabulary knowledge test contains 20 multiple-choice questions used as a data collection tool for the pre-test and post-test. The pre-test was performed before treatment, and the post-test was performed four weeks later. The vocabulary topics taught are presented in tests, namely games, during treatment. The material used to teach Vocabulary is for the pre-exam; the researcher uses a Google form with questions based on guessing and arranging words based on the pictures provided. The researcher then created a game for the post-exam that would be distributed to students using the word wall game application. The types of games available on the web are numerous, and researchers select games appropriate for the level and class environment in which they will be played. The following are the different types of games available on the website.

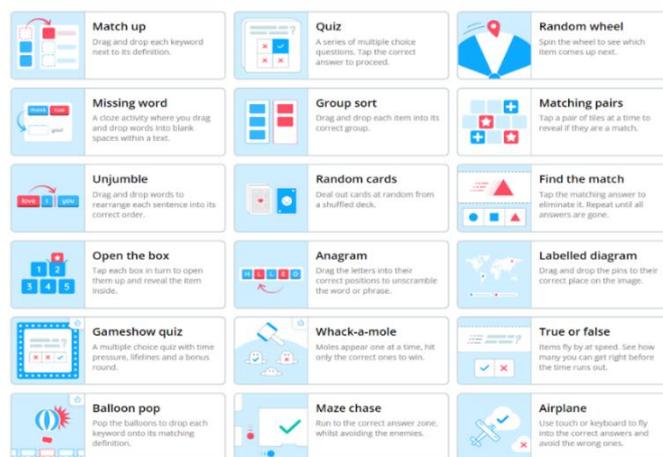


Figure 1. Various games in the Wordwall application

Evaluation of learning carried out with Wordwall is given according to its level. The following is an example of using the word wall applications in class IX used during learning. The teacher provides teaching materials which are then applied in a learning application, namely the word wall application. The game given is "crossword". This is one of the game templates in the application. This is useful for compiling a correct vocabulary from a question. The material for composing a word is still essential because, based on evaluations of student writing, many things could be improved in writing English correctly. Therefore, this material is evaluated through a "crossword" game, as shown in the following figure.



Figure 2. Games on Wordwall "crossword puzzle

FINDINGS AND DISCUSSION

This kind of study is quantitative, and the examination of the data is carried out statistically. In order to analyze the data, we utilize SPSS version 22, a program that can compute the comparison of paired sample t-tests between different experimental group tests. The following findings of the normalcy test that was carried out using the SPSS 22 test may be seen in the table that follows:

Table 2. Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
M1Pretest	.258	7	.174	.818	7	.062
M1Posttest	.258	7	.174	.818	7	.062
M2Pretest	.269	7	.135	.918	7	.456
M2Posttest	.264	7	.149	.887	7	.262
M3Pretest	.203	7	.200*	.877	7	.215
M3Posttest	.253	7	.197	.820	7	.064

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

a. Lilliefors Significance Correction

The study's findings in table 2 show that the value of Sig. for the variables M1 pre-test and post-test is 0.062 and 0.062, while the value of Sig. for M2 pre-test and post-test is 0.456 and 0.262. Finally, the value of Sig. for class M3 pre-test and post-test is 0.215 and 0.064. The data follows a normal distribution since each of the three sets of findings has a Sig value greater than > 0.05.

The accompanying table, which was created using SPSS 22, displays the results of the homogenous test administered to students in classes M1, M2, and M3:

Table 3. Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
1.863	2	28	.174

Table 3 reveals that the homogeneity test's significance across the three different categories is 0.174, which is more than > 0.05. Therefore, the distribution of the data is consistent throughout.

This study used multiple-choice test questions to collect data from the learning evaluation results, which consisted of vocabulary tests related to the material. The following tables are data analysis of pre-test and post-test scores:

Class M1

Table 4. Paired Samples Statistics class M1

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Pre Test	75.00	11	4.472	1.348
Post Test	92.27	11	6.467	1.950

Table 4 shows the data analysis of pre-test and post-test scores with the average student learning outcomes after using the word wall application media in the English learning process. The post-test score obtained was 92.27, an increase of 17.27 from the pre-test score of 75.00, which means that student learning outcomes in learning English vocabulary increased significantly.

Table 5. Paired Samples Test class M1

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1 Pre-Test - Post Test	-17.273	6.068	1.830	-21.349	-13.196	-9.441	10	.000

In table 5, since it is known that the value of Sig. (2-tailed) table 4 is $0.000 < 0.05$; one can conclude that there is a significant difference between the results of learning English in class M1 using the word wall application in the Pre-test and the Posttest.

Class M2

Table 6. Paired Samples Statistics class M2

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre Test	78.57	7	6.901	2.608
	Post Test	92.14	7	5.669	2.143

The data in table 6 shows the analysis of pre-test and post-test scores after using the word wall application media in the English learning process with an average post-test score of 92.14, increasing of 13.57 from a pre-test score of 78.57, which means that learning outcomes for students in learning English vocabulary increased significantly.

Table 7. Paired Samples Test class M2

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre-Test - Post Test	-13.571	3.780	1.429	-17.067	-10.076	-9.500	6	.000

In table 7, because of the value of Sig. (2-tailed) table 7 is known to be $0.000 < 0.05$, and one may conclude that there is a significant difference between the outcomes of learning English in class M2 by utilizing the word wall program in the Pre-test and the Posttest.

Class M3

Table 8. Paired Samples Statistics class M3

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre Test	76.92	13	6.934	1.923
	Post Test	90.00	13	7.071	1.961

The results of data analysis from the pre-test and post-test revealed that student learning outcomes in English Vocabulary increased significantly after using the word wall application media with an average score (post-test), 90.00, an increase of 13.08 from the pre-test score of 76.92 (Table 8).

Table 9. Paired Samples Test class M3

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre-Test - Post Test	-13.077	3.252	.902	-15.042	-11.112	-14.498	12	.000

In table 9, since the value of Sig. (2-tailed) in table 9 is known to be $0.000 < 0.05$, one may conclude that there is a significant difference between the outcomes of learning English in M3 class utilizing the word wall program in the Pre-test and the Posttest. The statistics shown in tables 5, 7, and 9 prove that using the word wall application effectively can boost students' vocabulary knowledge across all three courses. This evidence is presented in table 5, table 7, and table 9. There are significant distinctions between those who have the character trait of discipline, like asking questions, are active or passive in class, and those who are the latter. As a result, word wall apps have a considerable effect.

Discussion

This study aims to see the effect of word wall applications used by students to increase Vocabulary in English subjects. Finally producing significant findings as evidenced by the increase in grades obtained in class VII, with an average pre-test score of 75.00 students and an increase in the post-test with a score of 92.27. In class VIII, the average pre-test score obtained was 78.57, and in the post-test, there was an increase with an average score of 92.14. And in class IX, the average pre-test score obtained was 76.92, while for the posttest, it was 90.00. Therefore, the word wall application has the effect of increasing students' interest in learning, especially in learning English Vocabulary

Some of this word wall application's features have an easy-to-use interface and come with a variety of templates. Additionally, these features can be accessed without having to create an account. This facilitates student participation and access to the game. It also makes it easier for teachers to assess the level of students' comprehension of the material presented through this type of game. According to research conducted in grades seven, eight, and nine at the Chumchon Ban Phanokkhaos school, there has been an increase in the implementation of word wall applications in vocabulary learning and the provision of a space for educators to be creative and innovative in learning. In addition, this media can enhance students' English learning effectiveness, particularly their vocabulary acquisition. When students become disinterested or bored with learning, it is the educator's responsibility to reinvigorate their interest. Utilizing a variety of learning media is one option available to us. The word wall application contains elements that entice students to complete practice questions. When students are happy, this will significantly affect how they receive the delivered material. This is also a way for educators to incorporate innovation into the learning process so that students do not become bored.

This study's findings support previous research utilizing similar media, specifically word wall applications. Even though the research was conducted at the same grade level but only in eighth grade, the application had the same outcome, namely that it increased students' Vocabulary (Fakhrudin, Firdaus, & Mauludiyah, 2021). In addition, other researchers who used word wall applications for teaching English vocabulary in their applications also obtained favourable results, as evidenced by the fact that students' Vocabulary increased by 37.50 per cent overall. Because word wall applications can assist students who struggle with vocabulary acquisition (Pradini & Adnyayanti, 2022). Following the implementation of the word wall application, students' English vocabulary skills improve. Wordwall is an interactive tool supporting listening, speaking, writing, and reading in the classroom. This study aims to improve the vocabulary skills of students. A teacher's innovative and creative classroom management strategies, including learning media, can improve students' vocabulary skills. According to (Riani Ester Aruperes and Nihta V.F. Liando, n.d.), it is believed that teaching Vocabulary through word wall games is more effective for students. Because it will encourage greater student participation in the teaching and learning process, teaching and learning will occur through communicative and enjoyable activities, allowing students to comprehend Vocabulary.

Therefore, this research is expected to complement the previous findings, which are still limited to material processed in class. Previous studies have shown that word wall applications have a significant impact. However, no studies have used samples of three different classes. So, this study has differences in sampling, such as the number of people who participated in the experimental treatment. Because the need for research on learning to use word wall applications is still lacking, this research still needs to be developed further.

On the other hand, it supports research by using the word wall applications, but on the other hand, this research has limitations in processing material. This study differs from previous studies by using respondents from Thailand as a research sample conducted at the junior high school level. Therefore, the researcher hopes that other researchers will benefit from this study and examine the

scope of the problem using different skills and a more significant number of respondents at the high school or university level.

CONCLUSION

According to the research data obtained to determine the effect of the word wall application used by students to increase Vocabulary in English subjects, there has been a significant improvement. There is a significant increase, as evidenced by the pre-test and post-test results. The posttest result for class VII was 92.27. For class VIII, it was 92.14, and for class IX it was 90.00. This is because the learning media used is interactive and simple to use, which increases student learning interest in learning English vocabulary for grades VII, VIII, and IX at Chumchon Ban Phanokkaho. This application is more effective than using a simple PowerPoint image to teach Vocabulary. This is to avoid students becoming bored while working on practice questions. It also allows educators to be creative when creating quizzes as a form of learning evaluation.

This study can be used as a benchmark and a source of media-related knowledge by educators when teaching English vocabulary to students in grades VII, VIII, and IX. Furthermore, this research can be used as a reference for future researchers, particularly those interested in Wordwall media, and is expected to further develop ideas for more innovative and creative learning. It is hoped that innovative and creative learning will contribute to the world of education to improve educational quality.

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