



The Implementation of Wordwall Platform to Deliver Interactive Medium For Students' Vocabulary in SDN 1 Jeringo

Fadila Komaris Saumi^{1*}, Boniesta Zulandha Melani¹, Lalu Ali Wardana¹, Dewi Satria Elmiana¹

¹English Education Department, Faculty of Teacher Training and Education, University of Mataram, 62 Majapahit St, Mataram, West Nusa Tenggara, 83125, Indonesia

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Abstract: This study investigates the implementation of the Wordwall platform as an interactive medium for enhancing vocabulary learning among fifth-grade students at SDN 1 Jeringo. The study was driven by changes introduced through the 13 Curriculum, which resulted in the elimination of English lessons in early grades and limited access to adequate learning tools. Since 2022, the Merdeka Curriculum has been implemented, reintroducing the English subject to elementary school students. The Merdeka Curriculum is an educational reform introduced by Indonesia's Ministry of Education, Culture, Research, and Technology (Kemdikbudristek) in 2022. This curriculum marks a transition toward a more adaptable, learner-focused, and skills-oriented approach to teaching and learning. SDN 1 Jeringo, as one of the Sekolah Penggerak, has started reintroducing English through the Merdeka Curriculum in grades 3 and 5, although students still struggle due to insufficient resources and prior exposure. A pre-experimental research design with a one-group pretest-posttest model was conducted involving 26 students. Vocabulary tests created using the Wordwall platform were administered before and after the intervention. The activities included matching games and picture-word association tasks, conducted in three sessions over three days. The average vocabulary score increased significantly from 60.77 (pretest) to 83.46 (posttest), with a practical gain of 22.69 points. The normality of the data was confirmed using the Shapiro-Wilk test. A paired sample t-test, performed in SPSS 26, showed a statistically significant improvement ($p < 0.05$). These findings suggest that Wordwall is an effective, engaging, and accessible tool for vocabulary learning in primary education, especially in the context of the Merdeka Curriculum.

Keywords: Wordwall Platform, Vocabulary, Interactive Learning, Merdeka Curriculum.

Introduction

Language is a system used by people to express thoughts, ideas, feelings, and information through vocabulary, grammar, and pronunciation, and it can be spoken, written, or signed as a key part of human communication (Kridalaksana, 2001). As a global language, English is widely used by people around the world for communication and is considered essential for students to learn because it supports their future career prospects (Thohir, 2021). To master English, learners need to develop four core skills: listening,

reading, writing, and speaking, as language remains the main tool for human interaction.

English serves as an international language, allowing people around the world to connect. Today, English is one of the most widely spoken languages globally, and learning it as a foreign language is essential for students' future careers (Thohir, 2021). Mastering English involves four skills: listening, reading, writing, and speaking. Language has always been a vital means of communication for interacting with one another.

Email: fadilakomarissaumi@gmail.com

To learn English effectively, it's essential to understand and master its vocabulary. When students possess a strong command of English vocabulary, they encounter fewer challenges in learning the language. This enhances their ability to recall English words and improves their communication and language skills (Thornbury, 2002). Therefore, English subjects, especially in basic education, prioritize students' abilities to understand English vocabulary, such as identifying letters, numbers, and animal names, to improve language learning and fluency.

Robert (2008, p.12) explained that vocabulary consists of words that function as individual units within grammatical structures. In this context, a word is regarded as a single element that can stand independently in speech and cannot be divided into other parts with the same characteristics. Similarly, Larsen (1986) describes vocabulary as the set of words that an individual utilizes or understands, even if they are not actively used in speaking, writing, or reading.

However, many primary school students in Indonesia face challenges in mastering English vocabulary. The 2013 Curriculum removed English from early education levels, limiting students' exposure to the language. Although the Merdeka Curriculum has reinstated English for grades 3 to 5, learners still struggle due to a lack of foundational knowledge and limited access to effective learning resources. This issue is evident at SDN 1 Jeringo, a designated Sekolah Penggerak (Driving School), which, despite having adequate digital infrastructure like Wi-Fi and Chromebooks, still reports significant difficulties in English learning among students.

In the modern digital age, interactive learning plays a vital role in boosting student involvement and enthusiasm. Platforms that incorporate game-like elements have been shown to effectively enhance student participation and support vocabulary development (Wang & Tahir, 2020). Research indicates that gamification enhances cognitive processing by integrating features such as rewards, challenges, and immediate feedback.

There are several web tools for learning English, such as Quizlet, Kahoot, Padlet, and others, but a specific web tool offers games while learning on the Wordwall platform. As part of its educational games, Worldwall.net provides a variety of interactive games for vocabulary practice. Through this website, teachers can create their games based on templates and use other teachers' games (Çil, 2021, p. 22). One of the successful learning media that the teacher can utilize to move students' motivation forward in the learning lexicon is Wordwall (<https://Wordwall> platform). Wordwall could be a web application with numerous

highlights that provide bulletin sheets with different subjects and exercises, including entertainment as a support tool to memorize vocabulary (Uspa, 2020). Wordwall gives numerous formats or bulletin words with varying diversion exercises such as coordinate up, test, lost words, discover the coordinate, word look, re-arranged word, labyrinth chase, etc. According to Aribowo (2021). WordWall is a website-based application that can create learning media such as quizzes, matching, pairing, anagrams, word randomization, word search, grouping, etc.

Furthermore, WordWall media is a fun and appropriate learning medium for improving students' vocabulary because it has various interesting features that allow students to play an active role during the learning process. So, it can be concluded that Wordwall media could be a learning medium in the form of an online application in which different diversions can be adjusted to the requirements and material to be conveyed. This media can also be utilized as a learning assessment instrument. Usually, by the statement of Sun'iyah (2020) states that the Wordwall is situated for the assessment of learning that can be adjusted to the material, lesson, and students and gives elective varieties within the teacher's teaching style.

In addition, SDN 1 Jeringo is located in Jeringo village, Gunungsari Subdistrict, West Lombok Regency, NTB. SDN 1 Jeringo is a Sekolah Penggerak, a program from the Ministry of Education and Culture (Kemendikbudristek) aimed at improving education in Indonesia by creating excellent schools as a model of good teaching. According to Kartadinata (2021), Sekolah Penggerak is a program that helps create an active, creative, and collaborative learning environment. He explains that this program encourages teachers to be more innovative and responsive to changes and helps students become independent and critical learners. The program focuses on improving teachers' and principals' skills through training, using student-centred teaching methods, and applying the Merdeka Curriculum, allowing teachers and students to be more creative and independent. The school is well-equipped with learning facilities, such as Wi-Fi and Chromebooks or laptops, for students to use during lessons.

Based on the issues above, the research was conducted at SDN 1 Jeringo. The students had many problems with English because English lessons had been eliminated from the school since the implementation of the 2013 curriculum. The Merdeka Curriculum is being implemented and only applied to grades 3, 4, and 5, whose ages range from 9 to 11 years old. They're familiar with website-based learning tools like quizzes and proficient in computer operations.

English lessons are included in this Merdeka Curriculum. Due to this curriculum change, students with no prior knowledge of the alphabet, vocabulary, and other English basics severely lack English skills

Based on preliminary findings from fifth-grade students at SDN 1 Jeringo, several challenges were identified in vocabulary learning. These include limited learning time due to students' lack of prior exposure to English, reduced opportunities to encounter the language because of the removal of English lessons from the curriculum, and teaching limitations, as many teachers were not specifically trained in English instruction or familiar with the Wordwall platform. Lail (2018) highlighted that unknown vocabulary is a major obstacle for learners, often leading to low motivation and interest in learning English. To address these issues, the Wordwall platform offers an innovative and interactive solution. Its engaging features, such as information and picture matching, help students learn vocabulary in a visually appealing and enjoyable way. Rahman et al. (2023) emphasized that this platform creates a more supportive and enthusiastic learning environment for students, while Wan Azli et al. (2018) noted that the edutainment approach used in Wordwall supports various learning styles—visual, auditory, and kinesthetic—thus improving retention and increasing students' motivation to learn.

The Wordwall platform also offers significant benefits for teachers with limited English skills. The platform provides easy-to-use teaching tools, enabling teachers to deliver lessons effectively without needing advanced English proficiency. Ahmadi (2018) emphasized that learning tools like the Wordwall platform can enhance interaction between teachers and students, give students opportunities for independent learning, and help teachers adapt lessons to meet students' needs. In this way, the Wordwall platform not only supports students but also assists teachers in creating interactive, engaging, and well-structured learning experiences, even when there are challenges in mastering English.

Based on the various problems identified, the Wordwall platform is an innovative solution with interactive features designed to make learning more engaging and effective. Rahman et al. (2023) stated that this approach creates a supportive learning environment, allowing students to be more enthusiastic about learning English, even if they face initial difficulties. Additionally, the Wordwall platform helps improve students' vocabulary skills. Through interactive activities like information matching and picture matching, the platform allows students to learn new words visually appealingly. This edutainment approach is effective in helping students remember

words and suits different learning styles, such as visual, auditory, and kinesthetic (Wan Azli et al., 2018). This is important for boosting student motivation, which is often a challenge in vocabulary learning.

The Wordwall platform also offers significant benefits for teachers who may have limited English skills. The platform provides easy-to-use teaching tools, enabling teachers to deliver lessons effectively without needing advanced English proficiency. Ahmadi (2018) emphasized that learning tools like the Wordwall platform can enhance interaction between teachers and students, give students opportunities for independent learning, and help teachers adapt lessons to meet students' needs. In this way, the Wordwall platform not only supports students but also assists teachers in creating interactive, engaging, and well-structured learning experiences, even when there are challenges in mastering English.

Unlike platforms such as Quizlet, which primarily utilizes flashcards, or Kahoot, which focuses mainly on quiz formats, Wordwall provides a wider range of interactive templates—such as maze games, word matching, and anagrams—that cater to diverse learning preferences and encourage more active participation (Rosyida et al., 2024).

Method

This research employed a pre-experimental design, specifically the one-group pretest and posttest model. According to Arikunto (2010), this design involves administering a pretest before the treatment and a posttest after the treatment. In this study, the pretest was conducted to assess the students' initial vocabulary mastery, followed by implementing the Wordwall platform as a learning medium. After the treatment, a posttest was given to measure the improvement. By comparing the results of the pretest and posttest, this research successfully evaluated the effectiveness of the Wordwall platform in enhancing students' vocabulary mastery.

This design was chosen due to its practicality in classroom settings where control groups are not available. However, it has limitations such as the absence of a comparison group, making it difficult to rule out external factors that might influence learning outcomes.

Table 1. One-Group Pretest and Posttest Design

Pre-test	Treatment	Pre-test
O ₁	X	O ₂

(Sugiyono, 2008:111)

According to Sugiyono (2022), a population is a general group of objects or subjects with certain qualities and characteristics determined by the researcher to be studied and concluded. The population in this study consisted of all fifth-grade students at SDN 1 Jeringo, with 26 students (18 male and 8 female).

Table 2. The population of Students in Grade 5th of SDN 1 Jeringo

No	Characteristics of the Population	Number of Population
1	Male students	18 students
2	Female students	8 students
	Total	26 Students

According to Sugiyono (2022), a sample is a subset of a population that shares the same features. This study employed the total sampling technique, in which the entire population is used as the sample. Accordingly, all fifth-grade students at SDN 1 Jeringo were taken as the sample in this research.

Demographically, most students came from lower-middle-income families in rural West Lombok. Although English was not their first language, they were familiar with basic technology due to the school's use of Chromebooks and other digital learning tools.

A written test was used to measure students' vocabulary mastery, consisting of multiple-choice questions that were aligned with the material taught during the lessons. The data collection process involved three main steps. First, a pretest was administered to evaluate the students' initial vocabulary knowledge before the intervention. Next, the treatment phase was conducted, during which the Wordwall platform was integrated into classroom instruction. This step was taken because the students faced difficulties in communication due to limited vocabulary. The researcher utilized the Wordwall platform to support vocabulary learning engagingly and interactively. Finally, after the treatment, a posttest was given to assess the improvement in the students' vocabulary mastery. The results of the posttest were used to evaluate the effectiveness of the intervention.

The Wordwall activities used in this study included matching games, picture-word associations, and quizzes. These activities were designed to be interactive and visually engaging, conducted over three sessions of 30–40 minutes each.

The scores from the pretest and posttest were analyzed using statistical techniques to determine

whether there was a meaningful improvement after the treatment. A paired sample t-test was conducted to compare the results before and after the use of the Wordwall platform. The analysis was performed using SPSS version 26 to ensure accurate and reliable findings that would support or refute the study's hypothesis. To assess the practical significance of the results, effect size was also calculated using Cohen's *d*. According to Cohen (1988), a *d* value of 0.2 indicates a small effect, 0.5 a medium effect, and 0.8 or above a large effect.

A hypothesis in this study was defined as a temporary assumption regarding the relationship between the variables being examined. The research aimed to find out whether the use of the Wordwall platform could improve students' vocabulary mastery. To test this, the following hypotheses were formulated: (a) if the t-test value is greater than or equal to the t-table value at the 0.05 significance level, the null hypothesis stating that the use of the Wordwall platform is not effective is rejected; (b) if the t-test value is less than or equal to the t-table value at the 0.05 significance level, the null hypothesis is not rejected.

Result and Discussion

This research used an experimental method, where the same group of students was tested before and after the learning activity. The type of experiment used is called a "one-group pretest-posttest design." The study was done over three days, from March 18 to March 20, 2025, with the fifth-grade students at SDN 1 Jeringo.

On the first day, the researcher gave the students a pre-test. This test was used to check how much English vocabulary the students already knew before they were taught using a new method. The pre-test helped the researcher understand the students' vocabulary level at the beginning.

On the second day, the researcher started the treatment. The students were taught using the Wordwall platform. Wordwall is an online learning tool that helps make lessons more fun and interactive. During the class, the students played Wordwall games and activities to help them learn new English words. One of the games they played used the matching pictures feature. In this game, each group representative was asked to come to the front of the class. They had to match the correct picture with the correct meaning. The student did this by touching the board and moving the picture to the word they thought was right. After they made their choice, the board showed right away if the answer was correct or wrong. At the end of the game, the total score was shown, so

the students could see how well they did. This activity helped make learning more exciting and helped students remember the new words better. On the third day, after the Wordwall learning activities were completed, the students took a post-test. This test was similar to the pre-test and was used to find out if the students had improved their English vocabulary after using Wordwall. By comparing the scores from the pre-test and post-test, the researcher could see whether the Wordwall platform helped the students learn better or not.

The findings from this study are consistent with previous research conducted by Çil (2021), which

also found that using Wordwall enhances vocabulary mastery enjoyably and interactively. In addition, Wandari et al. (2024) emphasized that Wordwall is effective not only for assessment purposes but also as an instructional tool that supports active learning and student-centered approaches. These comparisons reinforce the reliability of the results in the present study.

The following is the data on student learning outcomes (Pre-Test and Post-Test) for fifth-grade students.

Table 3. Pre-Test and Post-Test Score Data

Number of Students	Test	Lowest Score	Highest Score	Median	Modus	Average
26	Pre-Test	40	85	66.5	60	60,77
	Post-Test	60	100	85.5	60	83,46

The table above shows that the students' mean pre-test score was 60.77, with the lowest score being 40 and the highest score being 85. At this point, the mean post-test score was 83.46, the lowest score was 60, and the highest score was 100.

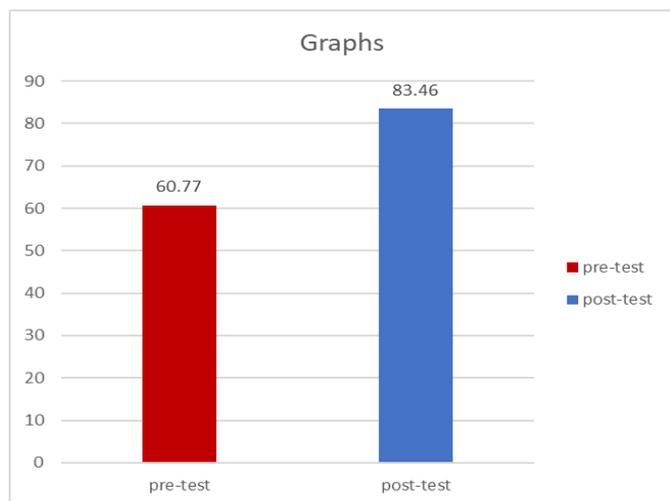


Figure 1. The result of the pretest and posttest

Based on Figure 1, it can be seen that the average student learning score in the pre-test was 60.77. After being given treatment using the Wordwall platform, the average student score in the post-test increased to 83.46. This significant improvement suggests that students responded positively to digital and gamified learning tools. This shows that students learned better when they used the Wordwall platform.

After obtaining the students' learning outcome data, the next step is to perform a normality test. The normality test is conducted to determine whether the data from the class is normally distributed or not.

The Shapiro-Wilk test, which was performed using the SPSS 26 program, was used to determine normality. The decision-making basis in the descriptive statistical normality test is as follows: if the statistical significance value is greater than 0.05, the data is distributed normally; if the significance value is less than 0.05, the data is not normally distributed. The results of the Shapiro-Wilk test can be seen in the following table.

Table 4. Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
pre test	.151	26	.132	.942	26	.151
post test	.122	26	.200*	.958	26	.361

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

a. Lilliefors Significance Correction

Referring to the data in the table, the Shapiro-Wilk normality test for the pre-test yielded a significance value of 0.151. Since this value exceeds the 0.05 threshold, it suggests that the distribution of pre-test scores does not significantly differ from a normal distribution, indicating that the data are normally distributed. Likewise, the post-test produced a

significance value of 0.361, which is also above 0.05, confirming that the post-test scores follow a normal distribution as well.

These findings demonstrate that both sets of vocabulary test scores—taken before and after the implementation of the Wordwall platform—fulfill the assumption of normality, which is a key condition for conducting parametric statistical analyses. As a result, the data are appropriate for further analysis using a paired sample t-test. This test was carried out using

SPSS version 26 to compare the means of the two related data sets.

The paired sample t-test was used to examine whether there was a statistically significant difference between students’ vocabulary scores before and after the treatment. By comparing the two sets of results, the analysis aims to determine the effectiveness of using the Wordwall platform as a learning tool. The detailed outcomes of the hypothesis testing are presented in the table that follows.

Table 5. Paired Samples Test

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pretest - Posttest	-22.692	8.512	1.669	-26.131	-19.254	-13.593	25	.000

Table 5 indicates that the paired sample t-test results showed a significance value (2-tailed) of 0.000. Since this number is smaller than 0.05, it indicates a clear difference between the students’ scores before and after using Wordwall. Therefore, the null hypothesis (H_0), which states that using Wordwall does not affect students’ English learning, is rejected.

On the other hand, the alternative hypothesis (H_a), which states that Wordwall helps improve students’ English learning, is accepted. This indicates that Wordwall had a significant and positive effect on how well the fifth-grade students at SDN 1 Jeringo learned English, particularly in their vocabulary.

This result also shows that using fun and interactive tools like Wordwall can really help students learn better. It helps them stay more interested in the lesson and makes it easier for them to remember new words.

Furthermore, the effect size calculated using Cohen’s d was 2.67, which falls under the category of a very large effect. This confirms that the Wordwall platform had not only a statistically significant but also a practically meaningful impact on students’ vocabulary performance.

Several factors may have contributed to the success of this intervention. First, SDN 1 Jeringo is equipped with supportive facilities such as internet access, projectors, and laptops, which enable the smooth implementation of digital learning.

However, this study has several limitations. The absence of a control group means the results cannot be compared to another group using traditional methods. Additionally, the short treatment duration of only three days might not fully capture the long-term effects of using Wordwall. Future studies are encouraged to use quasi-experimental designs and extended implementation periods.

Conclusion

The results indicate that students' average post-test scores were higher than their pre-test scores. Specifically, the average score increased from 60.77 in the pre-test to 83.46 in the post-test after implementing the Wordwall platform. This represents a gain of approximately 22.69 points, or an improvement of around 37% in vocabulary achievement, demonstrating a substantial learning impact. The Shapiro-Wilk normality test confirmed that both sets of scores were normally distributed, as the significance values exceeded 0.05. Furthermore, the paired sample t-test produced a significance value of 0.000, which is less than 0.05, indicating a significant improvement in students' vocabulary mastery following the use of Wordwall. These findings suggest that Wordwall is an effective tool for enhancing vocabulary learning. The use of Wordwall had a positive impact on the vocabulary skills of fifth-grade students at SDN 1 Jeringo. Additionally, it helped build a more engaging and interactive classroom environment, aligning with

students' preferences in today's technology-driven era. In today's digital era, students are more inclined to learn through electronic devices like smartphones, laptops, and computers, making classroom learning more enjoyable for them.

This study has some limitations: First, it used a one-group pretest-posttest design without a control group, making it hard to rule out the impact of other factors, such as students' previous experiences, motivation, or exposure to English outside the classroom. Second, the intervention only lasted for three class sessions. Although improvements were seen, a longer period might show better and more lasting results. Finally, the study was conducted only at SDN 1 Jeringo with a single class of fifth-grade students, so the findings might not apply to other schools, grade levels, or different learning environments.

For future research, it is recommended to adopt a quasi-experimental design that involves both control and experimental groups. This approach would help distinguish the actual effect of the intervention from other external influences. Researchers are also encouraged to explore additional variables such as student motivation, which may play a key role in vocabulary acquisition and overall learning success.

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