THE EFFECTIVENESS OF WORDWALL APPLICATION IN ENGLISH LEARNING AT FIFTH GRADE SDN 4 BALANGNIPA

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Abstract

This study examines the effectiveness of the Wordwall application in enhancing English vocabulary learning among fifth-grade students at SDN 4 Balangnipa. Using a quantitative approach with an experimental research design, the study involved 21 students who were assessed through pre-test and post-test evaluations, classroom observations, and questionnaires. Results demonstrated a significant improvement in students' vocabulary acquisition after implementing the Wordwall application, with post-test scores showing marked increases compared to pre-test scores. Statistical analysis using Paired Sample T-Test yielded a significance value of 0.000, indicating that the Wordwall application is highly effective for vocabulary instruction. Classroom observations revealed increased student engagement and enthusiasm during learning activities, while questionnaire responses showed positive student attitudes toward the interactive learning medium. The findings suggest that the Wordwall application provides an engaging, interactive platform that effectively enhances vocabulary acquisition through gamified learning experiences. This research contributes to the growing body of evidence supporting technology-based applications as valuable tools for vocabulary instruction in elementary education settings

Introduction

English, also referred to as a lingua franca, is a language that is still classified as a foreign language in Indonesia. Nevertheless, English is an essential necessity, especially in an increasingly digital era. English has already become mandatory knowledge that must be acquired to support life in various fields in today's era.

The field of education is one of the many fields that are affected by the need for qualified English proficiency. Learning English at school has become a necessity. Given the inevitable needs in the world of education, students must be taught English from an early age to prepare for the world of education and the world of work that relies on English as a primary language.

This aligns with the decision issued by Permendikbud 12 of 2024 concerning the Curriculum at Early Childhood Education, Basic Education, and Secondary Education Levels, which stipulates

that from the 2024/2025 to 2026/2027 school year, English is an optional subject that can be offered based on the readiness of the educational unit, then switches to being a compulsory subject in the 2027/2028 school year for elementary schools/equivalent. To support this policy, the Center for Education Standards and Policies (PSKP) in collaboration with various parties has conducted a study on the application of English subjects at the primary and secondary education levels (Kemendikbud, 2024). This further emphasizes the importance of learning in schools, which will soon become a compulsory subject.

Learning English involves four main skills, namely reading, writing, listening, and speaking. Besides these four skills, there are three components that are no less important and must be learned correctly, namely grammar, pronunciation, and vocabulary (Sugiharti & Riftina, 2019). One of the three components that is important to learn in English learning, both at school and in teaching English outside of school, is vocabulary. Vocabulary is the supporting component of all the skills that exist in English teaching. This is in line with Juhendi's opinion in (Hartaningsih, 2022), which states that vocabulary can be called the most important aspect in language teaching because it is related to the other four skills in English. Moreover, (Gunawan et al., 2023) in their research also stated that adequate vocabulary mastery will facilitate communication; the message in question will be easy to convey with good word comprehension, good reading comprehension, and broader writing skills.

Learning vocabulary should be taught from an early age as a foundation for receiving other learning in English. However, just like any other learning, vocabulary must also be taught in an engaging and fun way so that children are inspired to participate in learning (Thamrin & Yuniarni, 2017). If students are interested in a subject, whether because of the media or the teaching model, learning tends to run more efficiently, and students will easily understand the learning material.

However, in reality, the opposite has happened. Students are more often asked to memorize vocabulary rather than being given methods or media that are able to arouse their enthusiasm to learn vocabulary itself. This also happened at SD Negeri No. 4 Balangnipa, where most teachers in teaching English do not always focus on teaching vocabulary but rather focus on other skills and are fixated on the package book provided by the school. This causes students to lean more towards skills and forget the important foundation, namely English vocabulary. Learning vocabulary from an early age does allow students to be able to store more vocabulary. However, without providing interesting methods and media, it will feel burdensome and difficult for students to accept. Even when students have learned the importance of adequate vocabulary mastery, there is still reluctance and lack of motivation to learn it.

Based on the above facts, the researcher offers a solution in the form of learning media to support the mastery of vocabulary by students at the school. The application in question is a technology-based application. As technology advances, one of the many learning applications that have been available in this era, the researcher offers the Wordwall Application to be used as a vocabulary learning medium. The Wordwall application is a highly interactive quiz-based digital learning application. The Wordwall application is a type of learning media in the form of a game that has easy access online through wordwall.net with various features that can be used to create quizzes that will later be completed by students. Through this application, the assessment of students' understanding of the subject matter will be easier to measure.

The various engaging features that the Wordwall Application has make this application one of the interesting applications to be used as a learning medium. According to (Lai'Mandi et al., 2023) in their research, it was stated that the Wordwall Application can bring many benefits in the teaching and learning process, including making it easier for students to understand the material well, encouraging students to be active in learning, and being able to strengthen interactions and relationships between educators and students.

Based on the description above, it can be concluded that it is important to conduct a study to determine the effectiveness of the use of the Wordwall application in vocabulary learning at SD Negeri No. 4 Balangnipa.

Theoretical Framework
  A. Literature Review

      1. Effectiveness

         a. Definition of Effectiveness

         The Latin word effectivus, which means to be imaginative, fruitful, or efficient, is where the word "effective" comes from its etymology (Humaedy, 2021). Effectiveness according to (Asiah, 2018) is a state that indicates a goal has been achieved. According to the Great Dictionary of the Indonesian Language (KBBI), effectiveness is the usefulness, activeness and suitability in an activity between a person who carries out a task and the goals to be achieved (Ayus et al., 2021).

         According to Gibson in (Rasyidin & Pahlevi, 2020) that effectiveness is an assessment of the success of both individuals and group achievements. Another opinion is that effectiveness is the ability to succeed at work by achieving a set goal, measured through the relationship between results and goals. (Septiana et al., 2024). Thus, it can be said that effectiveness is the value of a situation where the goal that has been mapped at the beginning of an action is finally achieved.

         b. Indicators of Effectiveness in Learning

         In general, a learning is said to be effective, namely if it shows how far a goal is achieved that is predetermined (Widiyani et al., 2016). Meanwhile, according to (Herawati et al., 2021) that learning is said to be effective if it meets the following indicators:

         1) Success of learning management activities

         2) The success of communication between students and teachers in learning.

         3) The success of material preparation and lesson implementation.

         4) Success in measuring learning outcomes.

Furthermore, according to Ulfa, effective learning is a learning process that can provide additional value or new information for students. Learning is said to be effective if the learning can provide or add information and knowledge to students (Ulfatushaliha, 2019). To conclude, it can be said that whether or not a learning is effective can be assessed based on whether or not there are benefits obtained by students in learning.

2. Wordwall

   a. Wordwall Definition

Wordwall is an application presented in the form of a game that aims to involve students in answering quiz questions, discussions, and surveys (Purnamasari et al., 2020). According to Safira in (Khusnah & Rosiyanti, 2024) states that Wordwall It is a learning tool that serves as a complementary material, media and assessment for students by allowing students to see the results of the quiz after playing the game. Moreover wordwall can be an innovation in attracting students' attention and interest in learning.

Wordwall is a digital-based learning application with features that allow interaction between teachers and students that also allows automatic assessment of student performance.

   b. How to Use

How to use the Wordwall Application is briefly explained by Nabilah and Warmi, which are as follows:

1) The first step that must be taken is to access the *official* wordwall *website* *https://wordwall.net/*, then register an account and complete the data requested on the website.
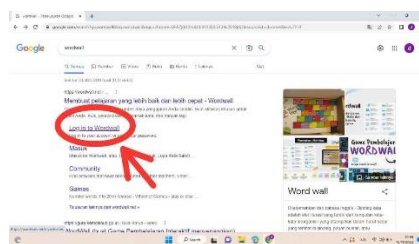
Picture 1
(Wordwall Homepage)

2) Select *create activity* and continue to select the provided template
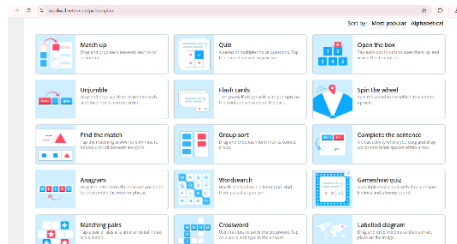
Picture 2
(Activity Template Selection)

3) Write the title and description of the quiz,
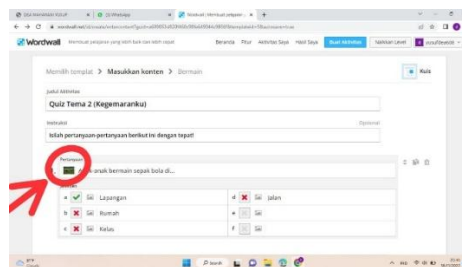
Picture 3
(Title and Description Form)

4) Write the material that has been created with the selected type of games,

Picture 4
(Writing Quiz Material)

5) The last step is to click *Done* when you have finished making the game (Nabilah & Warmi, 2023).

Picture 5
(Completing Game Creation)

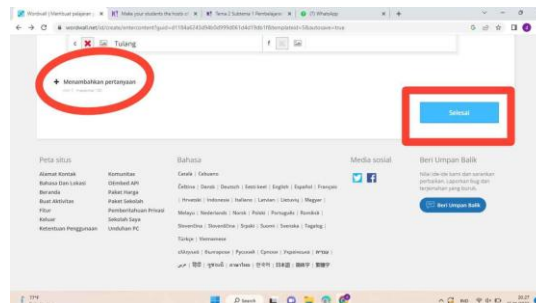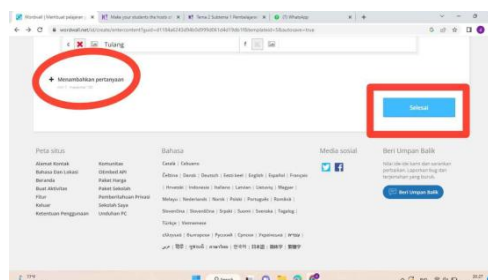Furthermore, how to use this application according to (Ratnasari et al., 2022) i.e., 1) visit https://wordwall.net/ page. 2) Select the option *Sign-up* Then fill in your name, email address, password and location. You can also sign up using a registered google account. 3) If the account has been created, please select the Create Activity option. Later there will be various kinds of templates that can be adjusted to what is desired in making learning media. For this template, the author chose *template Maze Chase*. 4) If you have chosen which template to use, please click on the template then fill in the title, game description and questions. 5) If all the steps have been done then click*done.*

c. Advantages and Disadvantages

1) Excess

According to Siagan and Trigan (2023) (Zulkarnain & Efendi, 2024), there are several advantages in the use of the App *Wordwall* namely as follows:

a) develop game-based learning activities

b) fostering students' interest in learning

c) easy to use by educators and learners

d) improve students' memory skills

e) Providing opportunities for educators and students to be creative.

Other than that (Sari & Yarza, 2021) In his research, he mentioned another advantage that this application has, namely the number of templates available to be made by educators and the games that have been made can be transferred to PDF form so that it is easier for students who are constrained by the internet network.

According to the researcher's own experience when using the Wordwall Application, this application feels fun both as a quiz maker and as a quiz participant. As a quiz maker, there are many conveniences that are obtained, such as different forms of questions so that they can be adjusted to your needs and creativity. Meanwhile, as a quiz participant, it will be very fun and stressful because the scores obtained will immediately appear on the application page. So, participants will immediately find out their level of ability for the quiz.

2) Deficiency

In addition to the advantages, the App Wordwall Of course, it also has disadvantages, namely because this application is a visual medium, so it is more effective for students with visual learning styles and tends to take more time to prepare quizzes that will be given to students (Herta et al., 2023).

3. English Language Learning

English learning in general contains 4 main skills that are needed not only in the academic world but also in daily communication practice. In line with (Amaniarsih & Arsita, 2023) which states that no matter what language and with any kind of word structure, all languages still consist of 4 main elements, namely reading, writing, hearing, and speaking. These four skills are important to master so that communication and absorption of English learning can be more efficient.

However, besides these four skills, there are important components in English, namely word pronunciation, word structure, and vocabulary. *Vocabulary* is very important to teach because without mastering *vocabulary* Then students will experience difficulties in learning (Syafawani, 2023). This is what causes *vocabulary* must be taught as early as possible so that students have mastery *vocabulary* that is enough before learning the other components of the English language.

The importance of vocabulary mastery in English language teaching according to (Munirah & Hardian, 2016) is to be able to absorb more knowledge, especially those presented in English. In teaching *vocabulary* There is a mastery assessment template *vocabulary* which is used in the world of education. Getting to know the assessment rubric *vocabulary* English by (Shabrina & Wahyu Taufiq, 2023) namely as follows:

Table 1

Vocabulary Assessment Rubric

No	Indicator	Score	Criteria
1	Imitate pronouncing English word according to pictures	1	The child does not imitate pronouncing English words.
		2	are still wrong sounds and it is not clear with or without the teacher's help.
		3	Children can imitate pronouncing English words correctly and with the help of teachers
		4	Children can immediately imitate pronouncing English words correctly, fluently, clearly and without the help of a teacher

2	Saying English words according to the picture	1	The child is not yet willing to say the words in English according to the picture.
		2	Children say words in English but are still wrong or not exactly according to the picture with or without the teacher's help.
		3	Children pronounce English words according to the pictures correctly but still make mistakes with the sounds, and with the help of the teacher.
		4	Children say English words according to the pictures correctly, fluently, clearly and without the teacher's help
3	Match the Sound of the English Word Heard with the Picture that Represents it	1	Children are not yet willing to match the English sounds they hear with the pictures that represent them.
		2	Children match the sounds of English words they hear and the pictures that represent them but still make mistakes, both with and without the teacher's help.
		3	Children match the English words they hear and the pictures that represent them correctly and with the help of the teacher.
		4	Children match the English sounds they hear and the pictures that represent them correctly, fluently and without teacher assistance.
4	Connecting images and English words	1	Children do not want to connect pictures and written English words
		2	Children connect pictures and English text but still incorrectly or not correctly with or without the teacher's help.
		3	Children connect pictures and written English words correctly but are not yet fluent and with the help of teachers

| 4 | Children connect pictures and written English words correctly, fluently and without teacher assistance. |

Relevant Research

Similar research has been conducted by (By Zahrah & Anwar, 2023) with the finding that the students who were the object of the research experienced an increase in learning outcomes due to the use of applications Worwall which is interactive so that it seems more fun to teach vocabulary compared to usage powerpoint usual. Some research on the use of apps Wordwall in learning vocabulary are as follows:

1. Research by (Shabrina & Wahyu Taufiq, 2023) indicates that the use of Wordwall significantly improves students' English vocabulary. The experimental group that used Wordwall showed a post-test average score of 89.13 compared to 77.90 in the control group, demonstrating significant improvement in vocabulary knowledge. An independent sample t-test revealed a probability value of 0.001, which confirmed the effectiveness of Wordwall App in vocabulary teaching. This evidence supports the background's assertion that adequate vocabulary mastery facilitates communication and enhances reading comprehension and writing skills, as demonstrated through measurable learning outcomes.

2. Findings by (Ilahiyati et al., 2023) show that the Wordwall game effectively improves students' pronunciation, memorization, and sentence preparation skills in vocabulary learning. The interactive design of the game engages learners, making the learning process enjoyable and improving their vocabulary acquisition. Participants reported increased interest and focus during lessons, with many expressing enjoyment in the activities, and students admitted to discovering many new words. This research directly addresses the background's emphasis on the need for "engaging and fun" vocabulary instruction methods that can "inspire children to participate in learning," as advocated by (Thamrin & Yuniarni, 2017).

3. (Zahrah & Anwar, 2023) conducted research entitled "The Effect of Using Wordwall Game Applications to Improve Students' Vocabulary in Chumchon Ban Phanokkhao School," with findings stating that the Wordwall Application proved effective in teaching vocabulary, as evidenced by significant improvements in students' pre-test and post-test scores across grades VII, VIII, and IX. The study showed that the average post-test score increased to 90.00 from a pre-test score of 76.92, with a significance value of 0.000, indicating a strong positive effect. The engaging game elements of Wordwall increased students' motivation and interest, making vocabulary acquisition more enjoyable and effective in the learning process. This research validates the background's claim that when students are interested in a subject due to compelling media or teaching models, "learning tends to run more efficiently, and students will easily understand the learning material".

Some of the above studies have so far proven that Wordwall Apps are effectively used in learning. However, further research is still needed at SD Negeri 4 Balangnipa to prove whether the application can be used at all school levels. Also, so that this research can contribute thoughts and help educators to get the right learning media to create a more effective vocabulary learning atmosphere.

Hypothesis
Based on the description in the previous section, the researcher offers a hypothesis that will be proven through the research process, which is as follows:

1. H0: The Wordwall application is not effectively used in vocabulary learning at SD Negeri 4 Balangnipa.

2. H1: The Wordwall application is effectively used in vocabulary learning at SD Negeri 4 Balangnipa.

Method
This research used a quantitative approach, utilizing an experimental research design. This method was selected to determine the effectiveness of using Wordwall Applications in vocabulary learning. Additionally, this research design was chosen because the Wordwall Application has not been previously implemented in the educational process at the school under study. Consequently, the researcher will implement and test the application during the teaching and learning process.

According to Sugiyono (as cited in Marliana Susianti, 2024), research variables are attributes, traits, or values of people, objects, or activities that exhibit variations determined by researchers to be studied, from which conclusions are drawn. In this study, there are two types of variables: variable X (independent variable) and variable Y (dependent variable). Variable X is "Wordwall Application," while variable Y is "vocabulary learning". Data were collected through various collection techniques including observation, pre-test and post-test administration, and questionnaire distribution to assess student feedback on the learning media utilized. The collected data were subsequently analyzed using SPSS software

The research was conducted at SD Negeri 4 Balangnipa, located at Jl. HOS. Cokroaminoto, Balangnipa, North Sinjai District, Sinjai Regency, South Sulawesi, from March to April 2025. Population refers to the entire object or subject of a study, which can be in the form of a person, object, or element and serves as the focus of the study. A sample, on the other hand, is a representative part of the population that exhibits characteristics representative of the whole population (Fadilah et al., 2023).

Findings
The results of the research The Effectiveness of Wordwall Application in Teaching English at Fifth Grade SD Negeri 4 Balangnipa, can be seen as follows:
   1. **Observation of Teacher Activities**

The learning process is measured in the form of observation using observation sheets that have been prepared beforehand. The data obtained are as follows:

Table 2

Observation of Teachers' Teaching Activities

No	Aspects observed	Yes	No
1	Teachers manage the classroom well	✓	
2	Teachers use interesting learning media	✓	
3	Teachers use learning methods that are in accordance with the material	✓	
4	The teacher conveys the material clearly	✓	
5	Teachers make good use of learning time	✓	
6	Teachers give an assessment of the students' work results	✓	
7	Teachers give awards for students' learning progress	✓	
8	Teachers associate vocabulary with everyday life	✓	
9	Teacher introduces foreign vocabulary to students	✓	

Based on the table above, It is seen that the teacher do almost all aspects of observation well. So, it can be said that the implementation of learning with Wordwall media has been carried out well.

2. **Observation of Students Activities**

Similar to teachers' activities in learning, in this study also observations were made on student activities in the learning process with the following results:

Table 3

Observation of Students Activities

No	Aspects observed	Yes	No
1	Students participate in learning with enthusiasm	✓	
2	Students respond to the teacher's questions	✓	
3	Students collaborate with fellow students	✓	
4	Students ask questions related to the material	✓	
5	Students complete assigned assignments	✓	
6	Students focus on learning activities without being distracted		✓

Based on the observation sheet above, it is evident that the students are very enthusiastic about participating in the learning process. They respond eagerly to the questions posed by the teacher and collaborate with each other to solve the problems. It is not uncommon for students to ask questions about material they do not understand. Additionally, during the learning process, students remain focused on what is being presented and demonstrate active participation.

3. **Students Learning Outcomes: Comparison Pre-test and Post test**

To measure students' vocabulary ability, a pre-test is given to test the initial ability before being given treatment. After that, students are then given a posttest after treatment to see if the treatment is effective on students' vocabulary skills.

a. Pre-test and Post-test Result

At this section, the scores of students who have been obtained based on the pretest and posttest questions will then be compared to identify the differences and become the result of the treatment that has been given previously.

Table 3

Pre-test and Post-test Score

No	Name	Pre	Post
1	NGR	3	5

2	NZ	4	7
3	AA	9	10
4	MAD	4	6
5	SWL	7	9
6	LZ	4	5
7	NF	4	9
8	YH	7	9
9	AF	5	7
10	IJ	9	10
11	NA	8	10
12	RZ	6	8
13	II	6	7
14	DDS	1	5
15	AN	5	7
16	AF	3	6
17	MA	5	9
18	ZS	4	6
19	RR	3	7
20	NT	3	8
21	MDP	5	7

Based on the scores of the Pre-test and Post-test results above, there was a significant increase by students. In the Pre-test questions, there are several students who get the lowest score, namely only answering one question correctly and only two students who achieve almost perfect scores, namely 9 out of 10 questions answered correctly. However, after being given treatment, students experienced a significant improvement, namely the lowest score of 5 and the highest can reach the highest score of 100. It can be said that the treatment carried out using the Wordwall application has been successfully applied in vocabulary learning in schools. The results of filling out the Pre-test and Post-test are then tested using normality tests, homogeneity tests, and hypothesis testing that have been formulated previously
.

b. Normality test

Normality test is a test that is carried out to test whether the data obtained is normally distributed. Because the sample in this study was only 21 people, the test was carried out with the sapphiro wilk normality test. This test is carried out with the provision that if the significance value obtained > 0.05, then the data is said to be normally distributed and if the significance value obtained < 0.05, then it can be concluded that the data is not normally distributed.

Source: SPSS Application

Table 4
Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	.167	21	.131	.944	21	.256
Posttest	.184	21	.061	.919	21	.082

a. Lilliefors Significance Correction

After the data was tested with SPSS, the following results were found that the Pre-test values is 0,25 > 0.05 and Post-test value is 0.08 < 0.05 so the Pre-test and Post-test values is considered to be normally distributed.

c. Homogenity Test

Homogeneity tests are used to test whether the data obtained is homogeneous. The test in this case is to test the homogeneity between the pretest and the posttest. Provided that if the significance value obtained > 0.05, the data can be said to be homogeneous. However, if the significance value obtained is < 0.05, the data obtained is not homogeneous.

Table 5

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
learningoutcomes	Based on Mean	.424	1	40	.519
	Based on Median	.616	1	40	.437
	Based on Median and with adjusted df	.616	1	38.677	.437

Based on trimmed mean	.426	1	40	.518

Source: SPSS Version 25

Based on the test results in the table above, a significance value of 0,58 was obtained. Therefore, it can be concluded that the pretest and posttest data of the students have the same variance because the significance value of 0,58 is greater than 0,05.

d. Hypotesis

Testing the effectiveness of Wordwall in learning, students are given a pre-test and post-test. The hypotheses that have been determined previously are as follows:

1) H0: The Wordwall Application is not effectively used in vocabulary learning at SD Negeri 4 Balangnipa.

2) The Wordwall Application is effectively used in vocabulary learning at SD Negeri 4 Balangnipa

Furthermore, hypothesis testing was carried out using the SPSS application and produced the following outputs:

Table 6

Paired Differences

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Pretest - Posttest	-2.47619	1.24976	.27272	-3.04508	-1.90731	-9.080	20	.000

Based on the table of SPSS test results above, it was found that a significance value of 0.00 where the value of 0.97 was smaller than 0.05, so that H0 was rejected and H1 was accepted. So it can be said that the use of the Wordwall application is effectively used in learning English, especially vocabulary at SD Negeri 4 Balangnipa.

4. **Students' Response Questionnaire**

Here are the results of the questionnaire filled out by 21 fifth-grade students from SD Negeri 4 Balangnipa, consisting of 15 questions

Table 7

Questionnaire Data

No	Name	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	TS
1	NGR	3	3	4	4	3	4	4	4	4	4	3	3	3	3	3	52
2	NZ	3	3	3	3	3	3	3	3	3	4	3	3	3	3	3	46
3	AA	3	3	3	4	4	3	4	4	4	4	4	3	3	3	4	53
4	MAD	3	3	4	3	3	3	3	3	4	3	3	3	3	3	4	48
5	SWL	3	2	3	3	3	3	2	3	3	3	3	3	3	3	3	43
6	LZ	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	45
7	NF	4	3	3	4	3	3	3	3	4	3	3	4	3	3	3	49
8	YH	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	45
9	AF	4	4	3	3	3	3	3	3	3	3	3	3	3	3	2	46
10	IJ	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	45
11	NA	3	4	3	3	3	3	4	3	3	3	3	3	4	3	3	48
12	RZ	3	3	4	3	3	3	3	3	3	3	4	3	3	3	3	47
13	II	4	4	3	3	3	4	4	4	3	4	3	3	3	4	4	53
14	DDS	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	45
15	AN	4	4	3	4	4	3	4	4	4	4	3	4	4	3	4	56
16	AF	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	45
17	MA	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	45
18	ZS	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	45
19	RR	4	4	4	3	4	4	4	3	4	4	4	4	4	4	3	57
20	NT	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	45
21	MDP	3	3	4	4	3	4	4	4	4	4	3	3	3	3	3	52

Based on the data above, it can be seen that the overall response of students to each item of statement in the questionnaire is "agree (3)" and "strongly agree (4)". This indicates that students are enthusiastic and like learning using media in the form of Wordwall applications. Students admitted that they liked learning using interactive media compared to learning with monotonous methods such as lectures.

Table 8
Descriptive Statistics Analysis

	N	Range	Minimum	Maximum	Sum	Mean		Std. Deviation	Variance
							Std. Error		
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Error	Statistic	Statistic
Angket Siswa	21	32.00	36.00	68.00	1104.00	52.5714	1.63237	7.48045	55.957
Valid N (listwise)	21								

Based on the observation data that has been tested using SPSS, the highest score of the data was obtained which was 68, the lowest score was 36, and the average score of the student questionnaire was 52. The standard deviation from the data is 7.48. These results show that there is a conformity in the students' responses to the questionnaire given.

Discussion
Based on the research results presented, it can be unequivocally stated that the Wordwall application is highly effective for English vocabulary learning at SDN 4 Balangnipa. This conclusion is strongly supported by multiple lines of evidence derived from the study's quantitative and qualitative data.

Firstly, the significant improvement observed in students' vocabulary acquisition is a primary indicator of Wordwall's effectiveness. The pre-test and post-test data provide compelling evidence of this. As shown in Table 3, students' scores markedly increased after the intervention. While pre-test scores revealed a range of initial vocabulary abilities, with some students scoring as low as 1 out of 10, the post-test scores demonstrated a substantial leap, with the lowest score rising to 5 and the highest reaching a perfect 10. This dramatic shift underscores Wordwall's capacity to facilitate rapid and effective vocabulary mastery. The statistical analysis further solidifies this finding. The Paired Sample T-Test yielded a significance value of 0.000. Since this value is considerably less than the conventional significance level of 0.05, the null hypothesis (H0), which posited that the Wordwall application is not effectively used in vocabulary learning was decisively rejected. Consequently, the alternative hypothesis (H1) stating that the Wordwall application is effectively used in vocabulary learning was accepted. This robust statistical outcome provides a strong empirical basis for asserting Wordwall's effectiveness. This finding aligns perfectly with the study by (Arsini et al., 2022), which similarly concluded that the Wordwall application is effective in vocabulary learning due to its ability to enhance students' creativity, motivation, and engagement during the learning process. Students in their study also reported that Wordwall's interactive games aided contextual vocabulary learning and improved grammar skills, echoing the positive impact observed in our research.

Secondly, the increased student engagement and enthusiasm during learning activities, as captured through classroom observations and questionnaire responses, further highlights Wordwall's positive impact. Table 2, detailing the observation of teachers' teaching activities, indicates that teachers effectively managed the classroom and utilized interesting learning media, including Wordwall.

More importantly, Table 3, which presents the observation of students' activities, clearly shows that students participated with enthusiasm, eagerly responded to teacher questions, collaborated with peers, and remained focused. This active participation is a direct consequence of Wordwall's interactive nature. The student questionnaire data (Table 4) provides qualitative support for these observations. The overwhelming response of "agree" (3) and "strongly agree" (4) across most questionnaire items indicates a highly positive student attitude towards learning with the Wordwall application. Students explicitly expressed their preference for interactive learning media over monotonous methods like lectures, suggesting that Wordwall successfully addressed a common challenge in traditional vocabulary instruction. This aligns with the inherent design of Wordwall as a gamified learning tool, which naturally fosters a more dynamic and enjoyable learning environment.

The effectiveness of this application in learning has also been consistently proven by another relevant research. For instance, (Az Zahrah & Anwar, 2023) found that the Wordwall application is effective in vocabulary learning, evidenced by significant improvements in students' English vocabulary scores across different grade levels (e.g., class VII from 75.00 to 92.27, class VIII from 78.57 to 92.14, and class IX from 76.92 to 90.00). Their research, like ours, noted that the application's interactive and user-friendly nature significantly enhances student engagement and interest, making it a valuable tool for teaching vocabulary effectively. Similarly, Shabrina & Wahyu Taufiq (2023) reported that experimental groups using Wordwall showed a higher post-test average score (89.13) compared to control groups (77.90), with a significant probability value of 0.001, confirming its effectiveness. Ilahiyati et al. (2023) also highlighted Wordwall's ability to improve pronunciation, memorization, and sentence preparation skills, further broadening the scope of its benefits. These consistent findings across various studies reinforce the generalizability of our results regarding Wordwall's efficacy in vocabulary instruction.

Conclusion

Based on the results and discussion above, it can be concluded that the Wordwall application is effective for English language learning, particularly in vocabulary acquisition, at SD Negeri 4 Balangnipa. The application is effective because it is interactive, allowing active feedback between teachers and students during the learning process. Students become more engaged and active in answering questions through various interesting quizzes provided by the application. This, of course, increases students' enthusiasm for learning, enabling them to better understand and absorb more vocabulary.This effectiveness is clearly demonstrated by the significant improvement in student learning outcomes, where post-test scores showed marked increases compared to pre-test scores, and statistical analysis using Paired Sample T-Test yielded a significance value of 0.000. Furthermore, classroom observations revealed high student enthusiasm and active participation, with students eagerly responding to questions and collaborating, and questionnaire responses indicated overwhelmingly positive student attitudes, with the overall response to each statement being "agree (3)" and "strongly agree (4)".

References

Amaniarsih, D. S., & Arsita, L. D. (2023). Tips Menguasai 4 Keterampilan Dalam Bahasa Inggris. *JURDIMAS: Jurnal Pengabdian Masyrakat Universitas DIPA Makassar*, *2*(1), 149–155.

Arsini, N. N., Santosa, M. H., & Marsakawati, N. P. E. (2022). Hospitality School Students'

Perception on the Use of Wordwall to Enrich Students' Work-Ready Vocabulary Mastery. *Elsya : Journal of English Language Studies*, *4*(2), 124–130. https://doi.org/10.31849/elsya.v4i2.8732

Asiah, S. (2018). Efektivitas Kinerja Guru. *TADBIR: Jurnal Manajemen Pendidikan Islam*, *4*(2), 1–11.

Ayus, A. D., Gusniwati, G., & Buhaerah, B. (2021). Efektivitas Pembelajaran Matematika Berbasis Daring (E-Learning) Terhadap Prestasi Belajar Siswa. *Pi: Mathematics Education Journal*, *4*(1), 31–36. https://doi.org/10.21067/pmej.v4i1.5052

Az Zahrah, R. amalia, & Anwar, K. (2023). The Effect Using Wordwall Game Applications To Improve Student's Vocabulary In Chumchon Ban Phanokkhao School. *DIDAKTIKA : Jurnal Pemikiran Pendidikan*, *29*(1), 18. https://doi.org/10.30587/didaktika.v29i1.5246

Gunawan, H., Simatupang, E. C., Dianita, Sari, P., Nugraha, D. N. S., & Rusyan, S. (2023). Pemanfaatan Duolingo Untuk Meningkatkan Vocabulary Siswa-Siswi Di Sman 11 Garut. *Jurnal Abdimas Bina Bangsa (Jabb)*, *4*(2), 1296–1302.

Hartaningsih, D. (2022). Meningkatkan Penguasaan Vocabulary Bahasa Inggris dengan Menggunakan Media Wordwall Siswa Kelas VII MTs. Guppi Kresnomulyo. *ACTION : Jurnal Inovasi Penelitian Tindakan Kelas Dan Sekolah*, *2*(3), 303–312. https://doi.org/10.51878/action.v2i3.1443

Herawati, R., Retnowati, R., & Harijanto, S. (2021). Peningkatan Efektivitas Pembelajaran Melalui Penguatan Supervisi Akademik Dan Disiplin Kerja. *Jurnal Manajemen Pendidikan*, *9*(1), 60–66. https://doi.org/10.33751/jmp.v9i1.3369

Herta, N., Nupus, B. C., Sanggarwati, R., & Setiawan, T. Y. (2023). Pemanfaatan Aplikasi Game Wordwall dalam Pembelajaran untuk Menumbuhkan Minat Belajar Siswa Sekolah Dasar. *Jurnal Seminat Nasional Paedagoria*, *3*, 527–532. https://journal.ummat.ac.id/index.php/fkip/article/view/16858/pdf

Humaedy, A. (2021). *Efektivitas Penggunaan Metode Diskusi Via Online dalam Pembelajaran Speaking Selama Masa Pandemi Covid-19 pada Mahasiswa Tadris Bahasa Inggris Angkatan 2020 IAIM Sinjai*.

Ilahiyati, N., Rohmah, Z., & Hamamah, H. (2023). the Implementation of Wordwall Games in Vocabulary Learning. *IJEE (Indonesian Journal of English Education)*, *10*(1), 144–159. https://doi.org/10.15408/ijee.v10i1.29905

Kemendikbud. (2024). Kurikulum Pada Pendidikan Anak Usia Dini, Jenjang Pendidikan Dasar, Dan Jenjang Pendidikan Menengah. *Permendikbud Ristek Nomor 12 Tahun 2024*, 1–26.

Khusnah, N. S., & Rosiyanti, H. (2024). *Penggunaan Media Pembelajaran Wordwall dalam Upaya Meningkatan Keterampilan Menulis dan Kosakata Bahasa Inggris bagi Siswa Kelas VII SMP*

Muhammadiyah 3 Cipetir. 2400–2409.

Lai'Mandi, W., Kurniawati, I. Y., Ilyas, M., & Sarniaty, S. (2023). Analisis Penggunaan Media Pembelajaran Wordwall Pada Pembelajaran IPA. *Prosiding Seminar Nasional PPG Universitas Mulawarman*, *4*, 34–41.

Munirah, M., & Hardian, H. (2016). Pengaruh Kemampuan Kosakata Dan Struktur Kalimat Terhadap Kemampuan Menulis Paragraf Deskripsi Siswa Sma. *Jurnal Pendidikan Bahasa Dan Sastra*, *16*(1), 78. https://doi.org/10.17509/bs_jpbsp.v16i1.3064

Nabilah, N. P., & Warmi, A. (2023). Penggunaan Media Pembelajaran Berbasis Website Wordwall Games terhadap Motivasi Belajar Matematika di Kelas VIII SMPN 2 Jalancagak. *Jurnal Pengabdian Kepada Masyarakat Nusantara*, *4*(2), 1454–1464.

Purnamasari, S., Rahmanita, F., Soffiatun, S., Kurniawan, W., & Afriliani, F. (2020). Bermain Bersama Pengetahuan Peserta Didik Melalui Media Pembelajaran Berbasis Game Online Word Wall. *Jurnal Pengabdian Kepada Masyarakat*, *1*(1), 177–180.

Rasyidin, R. A., & Pahlevi, T. (2020). Efektivitas Penerapan E-Performance di Kelurahan Gunung Anyar Tambak Kota Surabaya. *Jurnal Pendidikan Administrasi Perkantoran (JPAP)*, *9*(1), 169–185. https://doi.org/10.26740/jpap.v9n1.p169-185

Ratnasari, D., Dhiya, H. R., Susanti, A., Pd, S., & Pd, M. B. I. (2022). Pemanfaatan Aplikasi Wordwall Sebagai Media Pembelajaran Bahasa Inggris yang Menyenangkan. *… Seminar Nasional Hasil …*, 1243–1250. http://seminar.uad.ac.id/index.php/semhasmengajar/article/view/10848

Sari, P. M., & Yarza, H. N. (2021). *Pelatihan_Penggunaan_Aplikasi_Quizizz_Da*. *4*(April), 195–199.

Septiana, N., Sugeng, & Velani, W. I. (2024). Efektivitas Kinerja Pegawai dalam Penggunaan Sistem Kearsipan Berbasis Elektronik (Studi pada PT Perusahaan Listrik Negara (Persero) Unit Induk Transmisi Jawa Bagian Timur dan Bali). *Sports Culture*, *15*(1), 72–86. https://doi.org/10.25130/sc.24.1.6

Shabrina, F., & Wahyu Taufiq. (2023). The Effect of Teaching English Vocabulary on Junior High School Students By Using Wordwall.net. *Borneo Educational Journal (Borju)*, *5*(2), 283–295. https://doi.org/10.24903/bej.v5i2.1353

Sugiharti, R. E., & Riftina, Y. (2019). Upaya Meningkatkan Penguasaan Kosakata Bahasa Inggris melalui Model Scramble pada Siswa Kelas 4 SDN Jatimulya 04 Tambun Selatan. *Indonesian Journal of Primary Education*, *2*(2), 14. https://doi.org/10.17509/ijpe.v2i2.15096

Syafawani, U. R. (2023). Metode Pembelajaran Building Words Dalam Vocabulary Inggris. *Karimah Tauhid*, *2*(2), 486–491.

Thamrin, M., & Yuniarni, D. (2017). Meningkatkan Kosa Kata Bahasa Inggris Anak Usia Dini Melalui Total Physical Response Method. *Jurnal Pendidikan Dan Pembelajaran*, 6, 1–14.

Ulfatushaliha. (2019). The Effectiveness of Using Picture Stick on Students Speaking Ability of Second Grade Students at MA AL-Aqhsa Massaile. In *Sustainability (Switzerland)* (Vol. 11, Issue 1). http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco.2008.06.0 05%0Ahttps://www.researchgate.net/publication/305320484_SISTEM_PEMBETUNGAN_ TERPUSAT_STRATEGI_MELESTARI

Widiyani, D. T., Amalia, F., & Susetyo, A. M. (2016). Indikator Pembelajaran Efektif dalam Pembelajaran Daring (dalam Jaringan) pada Masa Pandemi COVID-19 dI SMAN 2 Bondowoso. *Jurnal Fakultas Keguruan Dan Ilmu Pendidikan*, 2–5.

Zulkarnain, M., & Efendi, Y. (2024). *Penerapan Media Pembelajaran Wordwall dalam Meningkatkan Hasil Belajar Matematika Siswa Kelas 8 . 3 SMP Dharma Karya UT*. 1676– 1681.