The Effect of Wordwall.net in the Teaching of Vocabulary at SMP Negeri 7 Tualang

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Abstract
This research aimed to determine the effect of using Wordwall.net in the teaching of vocabulary to seventh-grade students at SMP Negeri 7 Tualang. This study was motivated by the vocabulary gap experienced by students who switched from elementary schools implementing the 2013 Curriculum, where English is an elective subject, and in junior high schools implementing the Merdeka Curriculum, where English is a core subject. The research used a quantitative approach with a pre-experimental one-group pretest-posttest design. The sample consisted of 29 students selected through purposive sampling. Data were collected through vocabulary tests administered before and after treatment using Wordwall.net. The data analysis technique used is descriptive analysis. The data acquired in the Sig. column (2-tailed) is 0.000 (0.000 < 0.05). Besides, the value of t-count is higher than t-table (t-count > t-table), which is 26.224 (26.224 > 2.048). It means that Ho is rejected and Ha is accepted. So, it can be concluded that the use of Wordwall.net has a significant effect on students' vocabulary mastery of seventh-grade students of SMP Negeri 7 Tualang. It is suggested that teachers incorporate Wordwall.net as a supporting medium to enhance vocabulary learning in an interactive and enjoyable way.
Keywords: Wordwall.net, Vocabulary, Teaching Vocabulary, Junior High School

INTRODUCTION

Entering the era of globalization, the ability to speak English is an important requirement for every individual to access information and communicate across countries. English is widely recognized as a lingua franca or global language of instruction (Mesquita, 2021), which plays an important role in education, business, technology, and international relations. In the context of education, mastering English helps students develop six language skills in an integrated manner, namely reading, writing, listening, speaking, watching, and presenting (Oktavia et al., 2023). Of all these aspects, vocabulary is the main foundation that supports overall language skills (Laufer in Stocks, 2020). In Indonesia, English has been taught from elementary school to university level. However, its implementation at the primary school level is often uneven due to differences in curriculum policies. In Curriculum 2013, English is not listed as a compulsory subject in primary schools, but as a local content (Cesare Ardaya et al., 2022). As a result, some students start learning English from grade one, others in grade four, and some even do not learn at all until they graduate from elementary school (Sholeh & Anam, 2020). This imbalance has an impact on students' initial abilities when entering junior high school, especially in terms of vocabulary mastery.

On the other hand, the Merdeka Curriculum, which is now implemented at the junior high school level, makes English a core subject that emphasizes strengthening critical thinking, communication, creativity, and collaboration skills (Ferdaus & Novita, 2023). This is certainly a challenge for students who do not have adequate vocabulary, especially in understanding texts such as descriptive text, which requires a lot of vocabulary to describe objects, places, or people. In addition to challenges for students, this is also a challenge for teachers in designing learning that is effective, interesting, and in accordance with the diverse abilities of students.

According to Sri Utari & Syafitri (2020), mastery of a wide vocabulary is very important for the successful use of foreign languages, because without adequate vocabulary, students will have difficulty understanding sentence structures, communication contexts, and subject matter. One solution that can be used is the utilization of technology-based learning media. One of them is Wordwall.net, an interactive learning platform that provides various educational games such as quizzes, picture matching, wheel of fortune, and word puzzles designed to enrich students' vocabulary (Çil, 2021). Research by Fuster-Guilló et al. (2019) also shows that interactive media such as Wordwall.net can increase students' learning motivation. Based on this background, this study aims to determine the effect of using Wordwall.net in vocabulary learning of grade VII students at SMP Negeri 7 Tualang, especially in descriptive text material, using a pre-experiment research design.

RESEARCH METHODS

The research method used is quantitative research with types of research including pre-experimental, true experimental, factorial experimental, and quasi-experimental. This research uses pre-experimental research. In this design, only one group of grade 7 students was involved. They were given a pre-test to measure their initial vocabulary ability before receiving the treatment, which included instruction using Wordwall.net. After the treatment, the students were given a post-test to determine how well their vocabulary acquisition improved after the implementation of the treatment. The purpose of this study is to find out whether there is a significant effect of Wordwall.net in vocabulary teaching at SMP Negeri 7 Tualang. The population used in this study was seventh-grade students of SMP Negeri 7 Tualang, totalling 149 students consisting of 5 classes. The sample selection in this study used a purposive sampling technique, which is a sampling technique based on special considerations and criteria. In this study, the sample was determined by considering a class that had a relatively low average score in English among other classes. Based on information from teachers at SMP Negeri 7 Tualang, out of five classes in grade 7, grade 7.4 was chosen as the research sample because students in this class showed lower English proficiency than other classes. The data collection technique used in this study is first by using the scores from the students' pre-test and post-test, which are used to measure the learning outcomes of seventh grade students at SMP Negeri 7 Tualang after receiving treatment in the form of implementing learning by using Wordwal.net. Second, data collection techniques in the form of the situation during the test in class 7.4 at SMP Negeri 7 Tualang.

RESEARCH RESULTS AND DISCUSSION

This research was conducted at SMP Negeri 7 Tualang with class 7.4 as the experimental class to investigate the effect of Wordwall.net on students' vocabulary mastery. A pre-test was administered before the treatment, and a post-test was given after applying the media. The data were analyzed using SPSS 26. The results show an improvement in students' vocabulary achievement after being taught using Wordwall.net. The data analysis includes validity and reliability of the instruments, descriptive statistics, normality test, N-gain analysis, and paired sample t-test. All data were analyzed using the IBM SPSS 26 program. The following are the results of the research obtained.

Instrument Validity and Reliability

A tryout test was conducted in class 7.5 to examine the validity and reliability of the instrument. The reason for taking class 7.5 as a trial class is because only class 7.5 has the same number of students as class 7.4, which is the sample in this study with 29 students. The results showed that from 40 questions, there are 35 valid questions, and invalid questions have been

revised. The Cronbach's alpha value was 0.923, indicating that the instrument was highly reliable for measuring students' vocabulary mastery.

Students' Average Score

The students' vocabulary mastery before and after using Wordwall.net was analyzed descriptively.

Table 1. The Descriptive Table of Students Score

Statistic	Pre-Test	Post-Test
N	29	29
Mean	48.53	75.34
Maximum	72.50	97.50
Minimum	17.50	47.50
Std. Deviation	15.302	14.604

Table 1 shows that the average score obtained by students in the pre-test is 48.53, while the average score in the post-test after the treatment is 75.34. The increase in the average score of the experimental class was 26.81 points which showed the seriousness in applying this Wordwall.net. When given the pre-test, the maximum score achieved by students was 72.50, and the maximum score of the post-test (conducted after treatment) was 97.50. Furthermore, the minimum score achieved by students after being given the pre-test was 17.50, and the minimum score of the post-test was 47.50. The data from this table shows that students' vocabulary learning outcomes have increased after being given the treatment using Wordwall.net.

Normality Test

The normality of pre-test and post-test scores was tested using the Shapiro-Wilk test. The results are shown below:

Table 2. Normality Tests of Pre-Test and Post-Test

Normality Test	Sig. Value	Interpretation
Pre-test	0.337	Normally Distributed
Post-test	0.281	Normally Distributed

Based on the Table 2, the calculation of pre-test normality can be seen in the Shapiro-Wilk column because the number of samples used in this study is below 50, namely 29 people. The significance value for the normality test on the pre-test is 0.337 > 0.05 and the post-test is 0.281 > 0.05. This states that the pre-test and post-test data are normally distributed. In other words, the pre-test data meets the assumption of normality and can be said to be normally distributed.

N – Gain

To determine the effect of using Wordwall.net media in class 7.4 in this research, use the N-gain test. The test results can be seen in the following the Table 3:

Table 3. N-Gain Test

N-Gain	Result	Interpretation
Mean N-Gain Score	0.5605	Moderate Effect
Mean N-Gain Percentage	56.04%	Quite Effective

Based on the Table 3, the N-gain test that the average value for the N-gain score is 0.56 and then according to the classification of the N-gain score, it is included in the medium category because it is in the range 0.3 < N-gain < 0.7. Then for the average percentage value of N-gain is 56.04%. Then according to the classification of N-gain values, this is categorized as quite effective because it is in the range of 56% - 75%.

Hypothesis Testing (Paired Sample T-Test)

A paired sample t-test is used to test whether the effect of Wordwall.net can improve students' vocabulary mastery, as measured through pre-test and post-test scores. The following are the results of the t-test using a paired sample t-test:

Table 4. Paired Sample T-Test

Paired Sample T-Test						
		N	Mean	Std. Deviation	Std. Error Mean	Sig. (2-tailed)
Posttest - Pretest	Experimental Class (7.4)	29	26.224	5.50554	1.02235	.000

Based on the Table 4, it can be seen that the Sig. column (2-tailed) is 0.000 (0.000 < 0.05). Besides, the value of t-count is higher than t-table (t-count > t-table) which is 26.224 (26.224 > 2.048). The t-count value is 26.224, and with a t-table of 2.048 (because n - 1 = 28) and the sig value obtained is 0.000. So, the null hypothesis Ho is rejected and the alternative hypothesis Ha is accepted.

Discussion

The findings of this study indicate that the use of Wordwall.net significantly improves the vocabulary mastery of seventh-grade students, particularly in understanding descriptive texts. The average student score increased from 48.53 in the pre-test to 75.34 in the post-test, with an N-Gain score of 0.56 (56.04%), categorized as medium effectiveness. Additionally, the t-test result (26.224 > 2.048) with a significance level of 0.000 < 0.05 confirms a statistically significant difference after the treatment. These results are in line with previous studies, such as those by Bandjarjani & Efrata (2023) and Yezzie Amelia et al. (2022), which highlighted the role of interactive media in improving vocabulary acquisition. The challenges faced during the study, such as students' difficulty with unfamiliar vocabulary and limited access to digital devices, also support the findings of Puspita & Muhajir (2021) and Purwitasari (2022). Vocabulary items that are rarely used in daily life—such as *greasy*, *brunch*, *ladle*, and *mop*—were harder for students to remember without sufficient context or repetition. Despite these obstacles, Wordwall.net successfully engaged students and created a more interactive learning atmosphere.

CONCLUSION

This study concludes that the use of Wordwall.net has a significant positive effect on the vocabulary mastery of seventh-grade students, particularly in learning descriptive texts. The increase in the average post-test score and the medium level of N-Gain score demonstrate that Wordwall.net is effective in supporting vocabulary acquisition. In addition to improving students' learning outcomes, it also creates a fun, interactive, and engaging learning environment. However, challenges such as unfamiliar vocabulary and limited access to digital tools suggest the need for further support through contextual practice and infrastructure.

Overall, Wordwall.net can be a valuable tool for vocabulary teaching at the junior high school level when used with sufficient time and planning.

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