# THE EFFECTIVENESS OF USING WORDWALL TO IMPROVE STUDENTS' VOCABULARY MASTERY IN RECOUNT TEXT AT THE EIGHTH GRADE OF SMP N 26 PURWOREJO IN THE ACADEMIC YEAR OF 2022/2023

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#### Abstract

Teaching and learning activities in the classroom cannot be separated from information and communication technology (ICT). Wordwall is one of the learning media that is closely related to the ICT. The problems faced by junior high school students are, among others, lack of vocabulary mastery. To overcome these problems, the researcher applied Wordwall media. In addition, the purpose of this study is to determine whether or not the use of Wordwall media is effective in teaching vocabulary to grade VIII students of SMPN 26 Purworeio in the 2022/2023 academic year. This research uses non-equivalent control group design with 192 students as its population. By employing purposive sampling, the researcher takes 64 students coming from two classes as the sample. The data were taken on March 10th 2023 until May 15th 2023. The technique of the data collection is by giving pre-test and post-test. Meanwhile, the technique of data analysis used descriptive analysis and inferential analysis. From the computation, it is known that the result of post-test shows that the mean score of experiment group is 66.72 categorized good and the mean score of control group is 59.06 belongs to category sufficient. To see whether the hypothesis is accepted or rejected, the researcher uses t-test through IBM SPSS 25. The result of two sided significance value is 0.000. Based on the 0.05 significance level, the computation shows that two sided significance value is lower than 0.05 (0.000<0.05). Therefore, it can be concluded that using Wordwall in Recount Text is Effective.

Keywords: Effevtiveness, Vocabulary Mastery, Wordwall.

#### 1 INTRODUCTION

English as international language, the students of Indonesia has been introduced of English since in elementary school. It can be seen in the curriculum used that English is one of the subjects in elementary school beside the main subjects such as Mathematics, and Natural Science. After getting the introduction of English, the students gets more English in junior high school with more knowledge of English from its culture, texts to be learned and many others. To start learning English, the students must know and master the basic components of it that is vocabulary.

The mastery of vocabulary becomes the main foundation to master English before the mastery of the four basic language skills which is known as listening, speaking, reading, and writing. It is said so because without mastering vocabulary, it is nearly impossible for the students to recognize the sounds of English in listening, to speak the words using correct pronunciation, to comprehend the text in reading, and to write their idea in writing. To master vocabulary, it needs hard work from two sides both the students and the teachers. From the students, they need to put those words into their head so that they can recall those words when they need it. From the teachers, the effort of them in helping the students memorizing those words is by applying certain methods, technique, or media in teaching learning process.

Learning is viewed as an active, constructive process whereby the learner strategically manages the available cognitive resources to create new knowledge by extracting information from the environment and integrating it with information already stored in memory. Learning is a product of interaction. Depending on the epistemology underlying the learning design, learners might interact with instructors and tutors, with content and/or with other people [1]. Proposes that learning is a mental process that depends on perception and awareness, on how additional stimuli and new ideas get integrated into the old knowledge database and on how, through reasoning (a previously acquired mental

mechanism), the entire database gets reorganized which results in alterations of the mental structures and the new creation of new ones (a process called accommodation) [2].

According to [3], vocabulary can be defined as the words we must know to communicate effectively: words in speaking (expressive vocabulary) and words in listening (receptive vocabulary). According to [4], that vocabulary refers to words we use to communicate in oral and print language. As said by [5] that vocabulary learning is a continual process of encountering new words in meaningful and comprehensible contexts. Moreover, [6] finds that while some vocabulary learning occurs in school, it is not just a school-based phenomenon. Many children begin formal schooling "with rich vocabularies but no formal vocabulary instruction" and while they are in school they may continue to learn vocabulary without much direct and explicit help from teachers.

As said by [7] that some consideration might be used by the teacher to improve students' vocabulary are as follows: 1) Accumulative model of expectation, 2) Informational texts, 3) Challenging materials, 4) An integrated model of literacy, 5) An integrated media environment.

In teaching English, there are many media used to help the teachers deliver the materials. According to [8], media are the means for transmitting or delivering messages and in teaching-learning perspective delivering content to the learners, to achieve effective instruction.[9] divides the role of education media into two parts. In the first instance media are used as instructional aids, here media are used exclusively to enhance or enrich the teacher's presentation. [10] give classifications of media into several groups and the detail is as follows: 1) Printed media, 2) Graphic media, 3) Photographic Media, 4)Audio Media, 5) Television/Video, 6) Broadcast Television, 7) Computers, 8) Simulations and Games.

Recount is defined as a piece of text which retells events aimed at giving the description of what happened and when it happened to the audiences or the readers [11] as cited in Yunianto, 2014). Recount is written to retell event, and it has some purposes either informing or entertaining the audiences or readers [12]. According to [13], recount text can entertain the readers by dealing with a sequence of events that establish a relationship between the writer and the readers. It can be summarized that recount text is a text which tells the readers about a story, or retells events or experiences in the past. According to [11] a recount is speaking or writing about past events or a piece of text that retells past events, usually in the order which they happened. Recount text is a kind of written text that retell the researcher experience which occurred in the past by focusing on experience chronological sequence. In addition, [14] says that recount can also be simply defined as a text giving information about activities that happened in the past, in other words, it is used to retell the events.

According to [15], a Wordwall is an intriguing, interactive, and educational game application for the browser This program is intended to serve as a fun learning resource, media, and evaluation tool for kids. [16] says that a Wordwall is game application for the browser is a fun, engaging, and instructive game. [17] states that a Wordwall is a group of words that are displayed on a wall, bulletin board, chalkboard, or whiteboard in the classroom. According to [7], every teacher is different when deciding on how to display, to arrange, and to use Wordwall in the classroom, but there are some common characteristics: 1) All are collections of words that are developmentally appropriate for study by Words are selected for specific instructional purposes, 3) Collections students in the classroom, 2) are cumulative: as new words are introduced: familiar words remain for further study. 4) Activities and talk about Wordwalls provide conversational scaffolds that structure the ways that students study. think about, and use words, 5) Words on walls serve as visual scaffolds that temporarily assist students in independent reading. [17] gives his opinion on the use of Wordwall with the goals can be seen below: 1) Support the teaching of key word and subject-specific terminology, 2) Promote independence in reading and writing by building vocabulary, 3) Provide visual clues and reference for language learners, 4) Help students remember connections between words and concepts. The strengthens of Wordwall games include more relevant, exciting, and easy-to-follow learning for students, as well as topics that can be customized to different learning styles [17].

### 2 METHODOLOGY

The researcher applies quasi experimental design because it has experimental group and control group. The control group here does not have full control out of the variables which is influences the experiment done by the researcher [18]. More specifically, this research belongs to nonequivalent control group design in which the member of the group are not randomly chosen. To make the design clearly, below is the figure describing the design of the research.

Variable refers to a characteristics or attribute of an individual or an organization that can be measured or observed and that varies among the people or organization being studied [19]. Moreover, [20] says that variable is concepts, characteristics, or properties that can vary, or change, from one unit of analysis to another. There are many variables in the research but she takes two variables namely independent variable which function to help explaining the change in the dependent variable and dependent variable whose change the researcher wishes to explain.

Population is a generalization of certain area occurs over the subject or object that has certain quality and characteristics determined by the researcher to be learnt and to be drawn its conclusion [18]. According to [21], sample is the part of the population that is taken to be the object of direct observation and is used as the basis for making conclusions. According to [22] there are eighth ways to collect the samples of the study such as random sampling, stratified sampling, area probably sampling, purposive sampling, propositional sampling, quote sampling, cluster sampling, and double sampling.

A research without data is nothing and to get the data, an appropriate tool is necessary. As a tool to get data of the research, an instrument is needed to get what the writer needs.[22] states that research instrument is a kind of tool which is used by the researcher to collect or to get the data. Here, the researcher employs multiple-choice tests as the tool of gaining data. In making the instrument of the research especially multiple choice tests for vocabulary mastery, she took the theory from [23] which says that the two constructs that are commonly believed as being tested by a multiple-choice vocabulary mastery item are word meaning and word recognition. Moreover, she also follows the principles of making multiple choice tests proposed by [24].In line with the statements above, the researcher must be objective to categorize the students' performance according to their respective classification. Then, the researcher would know the students' level of achievement in English vocabulary mastery [22]. As said by [25] that in order to judge the effectiveness of any test, it is sensible to lay down criteria against which the test can be measured namely validity and reliability.

First of all, the researcher makes a number of questions in the form of multiple choice tests as her instrument. In making the questions, she considers the theory of [23] and [24]. Then, she counts the validity and the reliability of the instrument. [18] says that to count the validity of instrument, she applies correlation formula followed by t-test formula.

Descriptive analysis is analysis in which it employs certain statistics which goals to analyze data got by giving its description without making conclusion for the whole population or called as generalization [18]. The data is shown in meaningful way such as in a table or chart in order to describe the data of the research.[26] state that mean is commonly used measurement of central tendency because the mean takes all score into account. The mean is same as average of score.

As said by [18] that inferential analysis is an analysis of the data which employs certain statistics as its main formula in which it is used to analyze data sample and the result will be done to the population or generalization where the sample were drawn. The sample must accurately represent the population. The statistics used in this analysis is called as inferential statistics. Inferential statistics arise out of the fact that sampling naturally incurs sampling error and thus a sample is not expected to perfectly represent the population.

According to [27], at a significance level of 5% (0.05), if the two-sided significance value (two tailed) is smaller than 0.05 (0.000<0.05), the null hypothesis is rejected and the alternative hypothesis is accepted. Otherwise, the Wilcoxon matched pairs test is used when the data distribution is not normal [28]. When the z- value exceeds than the z-table, the null hypothesis is rejected and the alternative hypothesis is accepted, according to the significance threshold of 5%. [29] describes the necessary steps of SPSS computation to find out the hypothesis of the study as follows:

- 1) Enter data or open the data file to be analyzed.
- 2) Click Analyze, Compare Means, Independent Sample T-Test
- 3) After the dialog box appears, enter the variable before and after sequentially into the Paired box Variables
- 4) Enter the value variable in the Test Variable(s) and box method variable in the Variable Grouping
- 5) The result is as follows: Interpretation:

If Sig. (2-tailed) < (0.05), then there is an effect If Sig. (2-tailed) > (0.05), then nothing influencer

#### 3 FINDING AND DISCUSSION

### 3.1 Data Description

The researcher conducted this research at SMP N 26 Purworejo in the 2022/2023 school year. In this section, the researcher presents the results of the tests he conducted in the experimental groups and control group on the pre-test and post-test. The researcher took two groups of VIII grade students. The total number of students was 64. The researcher collected data from the pre-test and post-test.

#### 3.2 Descriptive Analysis

In this stage, the researcher would thoroughly review the descriptive data from the respondents. The central symptoms tendency and measurement of variation group were calculated using IBM SPSS 25. The results of the SPSS computation were described as follows:

Statistics							
		Exp Pre- Test	Exp Post- Test	Ctrl Pre- Test	Ctrl Post- Test		
N	Valid	32			32		
	Missing	0	0	0	0		
Mean		37,03	8 66,72 52,34		59,06		
Median		35,00	65,00	50,00	60,00		
Mode		30	75 40		50		
Std. Deviation		11,699	17,534	7,534 14,198 8			
Variance		136,870	307,434	201,588	78,125		

Table 4.12 The Descriptive Analysis Using SPSS 25 Computation

Based on table this study found that the results of manual calculation and IBM SPSS 25 were the same. Then, looking at the test results, the mean scores of the experimental group and control group in the pre-test were 37.03 and 52.34 and could be categorized as poor and fairly sufficient based on the scale reference criteria proposed by [22]. Then, seen from the post-test results, the mean score of the experimental group increased by 37.03 points to 66.72 and was categorized as good. Meanwhile, the mean score of the control group was only 52.34 points to 59.06 and categorized as sufficient. The normality test is used to see whether the data distribution is normal or not. In testing the normality of the data, researcher used IBM SPSS 25 using the Kolmogorov-Smirnov normality test. The calculation of the normality test using IBM SPSS 25 can be seen in the table below:

Table Test of Normality Kolmogorov-Smirnov Using SPPS 25 of Experimental Group

One-Sample Kolmogorov-Smirnov Test						
	Unstandardized Residual					
N	32					
Normal Parametersa,b	Mean	0,0000000				
	Std. Deviation	17,32076527				
Most Extreme Differences	Absolute	0,088				
	Positive	0,064				
	Negative	-0,088				
Test Statistic	0,088					
Asymp. Sig. (2-tailed)	.200c,d					

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

According to [28], the data can be said normal if the significance value is higher than the significance level (> 0.05). Meanwhile, the data can be said abnormal if the significance value is lower than the significance level (< 0.05). The computation above showed that the significance value of the pre-test and post-test was 0.20. Thus, the significance value was higher than 0.05. It can be stated that the distribution of pre-test and post-test data is normal.

Table Test of Normality Kolmogorov-Smirnov Using SPPS 25 of Control Group

One-Sample Kolmogorov-Smirnov Test							
	Unstandardized Residual						
N	32						
Normal Parameters <sup>a,b</sup>	Mean	0,000000					
	Std.Deviation	4,60608488					
Most Extreme	Absolute	0,119					
Differences	Positive	0,119					
	Negative	-0,100					
Test Statistic	0,119						
Asymp. Sig. (2-tailed)	.200 <sup>c,d</sup>						
a. Test distribution is Normal.							
b. Calculated from data.							
c. Lilliefors Significance Correction.							
d. This is a lower bound of the true significance.							

According to [28], a data can be said to be normal if the p value is greater than 0.05. The table below shows the results of calculations using SPSS. From the results of the above calculations, it can be seen that the significance value (Asymp. Sig. (2-tailed)) is higher than 0.05 (0.20 > 0.05). This means that the data is normal. The histogram above shows more clearly the normality of the experimental and control group post-test data. After knowing that the data distribution, the researcher computed the test pf homogeneity using IBM SPSS 25 by applied F-test. The result of F-test was as follows:

Table Test of Homogeneity of Variance Using SPSS 25

Test of Homogeneity of Variances								
		Levene						
		Statistic	df 1	df2	Sig.			
Scor	Based on Mean	15,751	1	62	0,000			
e	Based on Median	14,598	1	62	0,000			
Test	Based on Median and with adjusted df	14,598	1	46,99	0,000			
	Based on trimmed mean	15,764	1	62	0,000			

From the table 4.15, it can be seen that the level of significance based on mean is 0.000. [30] says that if the level of significance is lower than a (0.05), it means that the data is homogenous. The researcher found that the test of homogeneity based on mean was 0.000. Before the experimental was conducted, the level of significance to use has been decided. The researcher used 5% (0.05) significance level. The result from the first computation above is 0.000, it is compound with the value of F-table with the numerator was 1 and df of dominator was 62. Based on the table on F-table, it is known that F-value on significant level 0.05 is 4.00. It shows that thevalue of F-value is lower than F-table (0.000<4.00). Therefore, it means that the variance of two score is homogenous.

The researcher obtained 37.03 as the pre-test of the experimental group and 52.34 as the mean of the pre-test of the control group and 66.72 as the mean of the post-test of the experimental group and 59.06 as the mean of the post-test of the control group by calculating using IBM SPSS 25. When the two means were compared, it was seen that the mean of the post-test of the experimental group was greater than the mean of the post-test of the control group, the difference in the mean values of the pre-test and post-test was also greater for the experimental group than the control group. The result of SPSS computation to find out the independent-samples test can be seen in the following table:

	Independent Samples Test									
		Lever Test Equali Variar	for ty of	t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Differen ce	Std. Error Differen ce	95% Con Interval Differe Lower	of the
Score Test	Equal variances assumed	15,751	0,00	2,20 6	62	0,031	7,656	3,471	0,718	14,595
	Equal variances not assumed			2,20 6	45 ,8 00	0,032	7,656	3,471	0,668	14,644

Table 4.16 Result of Independent Samples Test Using SPSS 25

From the SPSS computation, the difference in two means is 15.751. It shows that the treatment is effective. Furthermore, it shows that the Sig. (2-tailed) is 0.000 < 0.05. According to [18], if the Sig. (2-tailed) is less than 0.05, the data is significantly different.

#### 3.3 Discussion

In this part of the thesis, the researcher will discuss more deeply about the data got and the result of the computation in order to answer the formulation of the problem stated in chapter I and also the hypothesis. Below is the discussion of the data analysis done in the previous section of the chapter:

#### 1) Descriptive Analysis

#### a. Pre-test

Before the treatment (*Wordwall* media) was applied, researcher conducted a pre-test for the experimental group and the control group. The purpose is to determine the ability of students before treatment because when research wants to compare between two groups, it must have almost the same quality or ability [18]. The pre-test results showed that in the experimental group, out of 32 students, there were 0 students who scored 80-100, 1 student scored 66-79, 0 students scored 56-65, and 14 students scored 40-55, and 17 students scored >39 based on the rating scale criteria. Meanwhile, seeing from the mean score of the pre-test from experimental group, they got 37.03 and can be categorized poor based on the criterion reference scale. For the control group, the dominant students scored 40-55 (17 students) and 56-65 (6 students). Meanwhile, the rest of them got scores of 80-100 (1 student), scores of 40-55 and >39 (four students). Then, seeing from the mean score of the pre-test of the control group, they got score 52.34 and it can be categorized as sufficient based on the criteria-referenced scale.

#### b. Post-test

After a series of meeting done both in experimental group and control group, the researcher conducts post-test which goal to find out the change of students' mastery on vocabulary. The researcher wants to know their ability whether it is increase, persistence, or decrease. The result of the post-test from the experimental group, the students got score in the category excellent is 9 students (28%), category good is 6 (19%), category sufficient is 8 (25%), category fairly sufficient is 7 (22%), and category poor is 2 (6%). Seeing from the change of the score, the significant change happened in the category excellent (80- 100) because in pre-test, the number of the students got score of 80- 100 is 0 and in post-test, the number of the students increases into 9 students who are included in this category. Then, seeing from the mean score, there is a significant increase that is 29.69 points from 37.03 into 66.72. Then, the mean score of the students' post-test of experimental group can be categorized as good based on the criteria-referenced scale.

#### 2) Inferential Analysis

This discussion is based on the calculation of the inferential analysis in the previous section of this thesis. To determine which hypothesis to accept, researcher use the Sig. (2-tailed) test formula as the main formula. This formula is used when the data is normally distributed and when the data is not normally distributed, the researcher will use a non-parametric formula, namely the Spearman rank order. However, before using the formula, researcher must conduct two initial tests, namely normality test and homogeneity test. The first test is the normality test. From the results of the normality test calculation using the Sig. (2-tailed), it was found that the post-test data from the experimental and control groups were normally distributed. From the results of the homogeneity calculation, it was found that both calculated data (pre-test of experimental group and control group) had the same variance or homogeneous. From the SPSS results obtained 0.00, it is obtained that 0.00<0.05. From this data, it can be stated that the data is homogeneous. After knowing that the data is normally distributed and homogeneous, the researcher uses the Sig. (2-tailed), formula to answer the problem formulation and determine which hypothesis will be accepted.

3) Descriptive Analysis and Inferential Analysis and Their Implication Descriptive analysis and inferential analysis are both used to describe data and make generalizations about populations from existing samples. Inferential analysis is used to make inferences about an unknown population. Although descriptive analysis is only used to describe known characteristics of a sample or population, both are important to help us understand the information better. Therefore, researcher can also identify problems more precisely. Thus, the researcher can quickly devise strategies to solve the problem. If only one is used, it is certainly not appropriate because it will lead to misleading information and interpretation.

#### 4 CONCLUSIONS

From the description of the data, data analysis and discussion, the researcher concludes that there are two main points in this thesis.

- 1) The students' vocabulary mastery belongs to experimental group is categorized good, while those belongs to control group is categorized sufficient based on the criteria reference-scale. Based on the data, the researcher got in pre-test and post-test, the mean score of experimental group is good and the mean score of control group is sufficient.
- 2) It was found that there was a significant improvement in students' English vocabulary mastery because most students were in the category excellent in English vocabulary mastery that were previously in the category poor. It can be concluded that the use of Wordwall media can have a significant effect on students' English listening mastery. This is also supported by the results of the pre-test and post-test of students' English vocabulary mastery. From the results of the paired test calculation, the two-sided significance value (two tailed). Being compared to the significance level, the computation shows that the two-tailed significance value is lower than the significance level. From the computation using SPSS, it shows that the value of significance, which is lower, it can be concluded that Ha is accepted and Ho is rejected. Consequently, the alternative hypothesis (Ha) is accepted. From these findings because (Ha) is accepted, the researcher concludes that Using Wordwall in Recount Text is Effective.

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