

Original Research Article

EFFECTIVENESS OF USE OF INTERACTIVE WORDWALL MEDIA IN CLASS VII PROCEDURE TEXT MATERIALS AT MTS AL-HIDAYAH SUNGKAI

Abstract:

Using appropriate, effective, and efficient media is one way to improve learning quality. Proper, effective, and efficient media can optimally influence student learning processes and outcomes. This research aims to see the effectiveness of using word wall learning media in class VII procedure text material at MTs Al-Hidayah. The method used was quasi-experimental, with a sample of Class VII 1 students as the control class and Class VII 2 as the experimental class, and applying a pretest-posttest design. The difference test was conducted to calculate variations in the effectiveness of word wall learning media compared to ordinary learning. The results of this research show that there are differences in learning outcomes between students who use learning media and those who do not use learning media. The effectiveness of using learning media on learning outcomes can be seen from the average percentage of N-Gain for the experimental and control classes. The average N-Gain percentage of the practical class was 58.32% in the quite effective category, and the control class obtained an average N-Gain percentage of 18.32% in the ineffective category. This research has implications for developing appropriate, effective, and efficient media in learning Indonesian to improve student learning outcomes.

Keywords: effectiveness, word wall learning media, procedure text

INTRODUCTION

Technological development is one of the developments of the times that needs to be followed by the world of education. Technology is required as a learning innovation that can later meet learning objectives. Miasari et al., (2022) stated that technology is needed in the learning process as a bridge to learning reform for more advanced education in Indonesia. Li et al. (2020) also noted that education needs technology. This technological development requires everyone to be able to innovate, such as in terms of learning media.

In the teaching and learning process, teachers must be able to utilize digital media to increase knowledge and create appropriate learning media for students' conditions (Smaragdina et al., 2020). Tang & Chaw (2015) and Bereczki & Kárpáti (2021) recommend that learning must be blended to ensure technology's involvement in learning. Meanwhile, Aprilia et al. (2017) argue that using digital media makes the learning process more exciting and interactive. Students do not get bored of being fixated on learning by watching textbooks. Innovations like this can be a solution for teachers to overcome students' boredom during learning.

One of the most critical factors in the learning process is using learning media. Learning media, according to Lim & Morris (2009), Sangsawang (2015), and Jundu et al. (2019), plays a vital role in improving student learning outcomes. As an educator, you must be able to master learning methods, models, and media so that learning outcomes can be met. This is in line with the opinion of Budiharto and Suparman (2017) and Trif-boil (2022), who state that there are several factors that influence learning success. These

factors include, among others, the students themselves, educators, a curriculum in accordance with government policy, and learning components such as methods, models, and learning media.

Implementing the teaching and learning process in the education sector always faces various challenges, obstacles, and technical problems. According to Akbar & Noviani (2019), several obstacles or challenges in implementing learning in the education sector include lack of infrastructure provision, weak use of technology, lack of legal instruments in the education sector, and the high costs of procuring and using educational facilities. In general, the learning process in schools is still oriented towards mastering concepts alone, and more attention needs to be paid to the process, thus potentially causing students to feel bored. According to research by Munthe and Sibuea (2017), using appropriate learning methods or strategies can increase students' motivation and interest in learning and reduce their boredom with learning. Tafonao (2018) stated that using appropriate learning media can reduce students' boredom with learning.

One learning media that can be used is Wordwall learning media. Wordwall is a learning media in the form of an online game (Oviliani & Susanto, 2023) so that students can use it interactively. This media guides students to play games but remains in the learning context. This media requires students to complete the game within the context of the material set by the teacher. Apart from attracting students' attention, this media also builds interaction between teachers and students. Theoretically, Tatsa (2022) conveys several advantages of Wordwall: free basic options with several templates. Apart from that, games that have been created can be sent directly via WhatsApp, Google Classroom, or others. This software offers many types of games, such as crosswords, quizzes, random cards, and many others. Another advantage is that the games that have been created can be printed in PDF form, so it will be easier for students who have network problems. Wordwall media is also designed to involve various activities requiring students to continue to be active to create a pleasant learning atmosphere (Abdul Rahman et al., 2023). A pleasant learning atmosphere tends to increase learning effectiveness.

According to Rohmawati (2015) and Lotulung et al. (2018), learning effectiveness can be said to be a measure or condition that shows the success and achievement of a predetermined learning goal. The indicator that is used as a benchmark that states that the teaching and learning process is said to be successful is the capacity to absorb the learning material taught to achieve high achievement, both individually and in groups that have been set in the teaching objectives (Mekonnen, 2020; Yuliana & Mashudi, 2020). Based on this description, the effectiveness of learning media is a measure of the success of the learning process that uses learning media. This is done to see the effectiveness of the media in helping the student learning process and improving student learning outcomes.

One form of student learning outcome in Indonesian language learning is mastery of the "Procedural Text" material. According to Kusumah et al. (2019), A procedural text explains how to do something as clearly as possible. The procedure text contains the method and purpose of making or doing something sequentially, step-by-step, to produce the desired goal (Suyati, 2019). In line with this, Alam (2017) also states that procedure texts are essential to master because they explain the steps or methods clearly, precisely, and in detail. For this reason, procedure texts need further understanding because these texts are often found in everyday life and usually contain writing that contains methods, tips, or tutorials for carrying out specific steps. In the procedure text, there are also imperative words (commands) to do something so that the reader can follow the steps contained in the text.

Based on the results of observations and interviews with one of the teachers at MTs Al-Hidayah Batanghari, the use of media in learning is used quite often. However, the use of media tends to be print media. For media use that utilizes technology, such as video media or PowerPoint. The use of learning-oriented media, such as games on websites, has yet to be used. Meanwhile, based on interviews with several students, technology-based media is rarely used. However, learning feels fun and exciting when learning uses media, or the teacher provides games and quizzes. So far, in general learning, most media use is printed books or online books sent via WhatsApp, except for science or arts and culture subjects, which require tools as learning media. Thus, it is necessary to research to determine the effectiveness of

using word wall learning media in interactive procedural text writing material in class VII MTs Al-Hidayah. The results of this research can be used as a reference for teachers to develop similar learning media so that the learning process in schools in the "Indonesian Language" field of study can run more effectively and efficiently.

RESEARCH METHODS

This research is quantitative research with the type of research, namely experimental research. This research is classified as Quasi Experimental Design research. According to Hastjarjo (2019), quasi-experimental designs have a control group but cannot fully function to control external variables that influence the implementation of the experiment. The research design used is Nonequivalent Control Group Design. This design compares the experimental and control groups, but the sample is taken non-randomly. The two groups were given a pretest, then given treatment, and finally given a post-test. The quasi-experimental design in this research involved two classes: the experimental and control classes. The control class is the group that was not given treatment; that is, they did not use Wordwall learning media. Meanwhile, the experimental class is a class that is given treatment, namely by using word wall learning media.

Population and Sample

According to Amin et al. (2023), the population is the entire research object/subject, while the sample is a part or representative with representative characteristics. According to Supardi (1993), determining the research population and sample is very important because research results will generally draw broad conclusions (generalization of research results). Precision and accuracy in determining the research population and sample will give weight and quality to the research results. In this research, the population used was all MTs Al-Hidayah class VII students, totaling 76 people. The sample in this study consisted of two classes: one experimental class and one control class. The sampling technique is the method that will be used to take samples. The sampling technique in this research used a simple random sample. The samples taken by researchers were classes VII 1 and VII 2. Class VII 1 was the control class, and Class VII 2 was the experimental class, which would be given learning treatment using word wall learning media.

Research variable

This research has two variables: the independent variable and the dependent variable. The independent variable (X) is usually called the independent variable, which influences or is the cause of the change or emergence of the dependent variable (Sena Wahyu. et al., 2022). The independent variable in this research is word wall learning media. The dependent variable is a variable that is influenced or results from an independent variable's existence. It is called the Dependent Variable because the independent variable influences this variable (Martono, 2014). The dependent variable in this research is student learning outcomes in the material of writing procedure texts.

Data collection technique

Data collection techniques are methods used by researchers to collect data originating from research samples. To collect data in this research, several methods were used as follows:

- 1) Student activity observation sheet in learning: This instrument is used to manage student activities in learning. This observation sheet contains items that will be observed during the learning process.
- 2) Test learning outcomes using word wall learning media, which is carried out at the beginning and the end after being given a series of actions. The form of test that can be used is a multiple choice test. Before the test is used, the instrument is first tested

3) Documentation is part of the research that indicates the legality of the research carried out.

Data analysis technique

This research uses the technique of analyzing data with the t-test. The t-test is carried out after going through the test requirements, namely the normality test, homogeneity test, and hypothesis test. The data used results from learning abilities during the pretest and post-test. Effectiveness decision-making uses the N-gain score. As in table 1 below:

Table 1. The basis for decision-making is based on the N-gain Score.

Mean N-Gain (%)	Category
> 76	Effective
56-75	Effective enough
40-55	Less effective
< 40	Ineffective

RESULTS AND DISCUSSION

This study had two tests: an initial test (pretest), carried out before the students received treatment, and a final test (post-test) after the students received treatment. The data management results using SPSS version 26 for Windows software. Inferential analysis was obtained from the experimental class, which studied using word wall learning media, and the control class, which used conventional learning.

Table 2 Pretest and Posttest Results for Experimental and Control Classes

Groups	Pretest Score			Posttest Post-test Score		
	Highest	Lowest	mean	Highest	Lowest	mean
Experiment	80	10	40,50	95	60	74,75
Control	75	20	52,37	85	35	60,79

Based on Table 2 above, it is known that the pretest in the experimental class obtained the highest score, namely 80, with the lowest score being ten and an average of 40.50. Meanwhile, the highest post-test score was 95, and the lowest was 60, averaging 74.75. Based on the table above, it can also be seen that the control class obtained the highest pretest score of 75 and the lowest 20, with an average of 52.37. Meanwhile, the highest post-test score was 85, and the lowest was 35, with an average of 60.79.

The next test is the normality test. The normality test was carried out with the help of SPSS 26 software with the test criteria: if the significance value $> \alpha = 0.05$, then the data is normally distributed, and if the significance value $< \alpha = 0.05$, then the data is not normally distributed. The normality test results obtained in Table 3 are as follows:

Table 3. Tests of Normality

	Groups	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Learning Outcome	Pretest experiment	.168	20	.142	.949	20	.349
	Posttest Experiment	.140	20	.200	.952	20	.392
	Pretest Control	.172	19	.140	.949	19	.376

Posttest Control	Post-test	.154	19	.200	.963	19	.628
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*. It is a lower bound of the true significance

a. Lilliefors Significance Correction

Based on the results of the normality test above, it can be seen that the initial data or pretest for the experimental class obtained a significance value of 0.142, and the pretest for the control class obtained a significance value of 0.140. Based on the test criteria, the data is usually distributed if the significance value is $> \alpha = 0.05$. The significance value of the experimental class pretest data is $\text{sig } 0.142 > \alpha = 0.05$. In contrast, the control class pretest data is $\text{sig } 0.140 > \alpha = 0.05$, meaning that the experimental and control classes' initial or pretest data are typically distributed. The final data for the experimental class obtained a significance value of 0.200, and the control class obtained a significance value of 0.200. Based on the test criteria, the data is usually distributed if the significance value is $> \alpha = 0.05$. The significance value of the experimental class and control class data is $\text{sig } 0.200 > \alpha = 0.05$, which means that the final data for the experimental class and control class are normally distributed.

The next stage was carrying out a homogeneity test to determine the homogeneity of the two samples, namely the experimental and control classes. The two classes tested for previous research samples were tested for homogeneity first to determine whether the two classes were homogeneous. The homogeneity test was conducted using SPSS 26 software with the test criteria. The data is homogeneous if the homogeneity test results show that $P > \alpha = 5\%$ or the probability is greater than 0.05. The results of the homogeneity calculation test are as follows:

Table 4. Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Learning Outcome	Based on Mean	2.148	1	37	.151
	Based on Median	1.448	1	37	.236
	Based on the Median and with adjusted df	1.448	1	33.470	.237
	Based on trimmed mean	2.106	1	37	.155

Based on the results of hypothesis testing on data using SPSS26, it can be seen that the significance value obtained is 0.151; this shows that the significance value obtained is more than 0.05 or a sig value of $0.151 > 0.05$, which means the data is homogeneous. So, it can be concluded that the experimental class and control class data are the same.

Based on the results of the normality test and homogeneity test that have been carried out show that the data is usually distributed and has homogeneous variants. To test the difference in post-test scores for the experimental and control classes, you can use the independent sample t-test. This test was carried out to determine whether there was a significant difference between the post-test scores of the experimental class, which used word wall media, and the control class, which did not use word wall media in learning.

The independent sample t-test was carried out using SPSS 26 software. The results of the independent sample t-test were as follows:

Table 5. Independent Samples Test

t-test for Equality of Means							
		t	df	Sig. (2- tailed)	Mean Differenc e	Std. Error Differenc e	95% Confidenc e Interval of the Difference
						Lower	Upper

Learning Outcome	Equal variances assumed	2,148	0,151	3,792	37	0,001	13,961	3,682	6,501	21,421
	Equal variances are not assumed			3,766	33,766	0,001	13,961	3,707	6,425	21,496

The basis for decision-making for the independent t-test is that if the sig value (2-tailed) < 0.05, there is a significant difference in learning outcomes between the experimental and control classes. Meanwhile, if the sig value. (2-tailed)>0.05, so there is no significant difference between the learning outcomes of the experimental and control classes. Based on the independent sample t-test in Table 5, the sig value is obtained. (2-tailed) of 0.001<0.05. Based on these results, it can be concluded that there is a significant difference between student learning outcomes in the experimental class and the control class. Next, carry out a hypothesis test by using the t-test, which aims to prove whether there are differences in learning outcomes between students who study using learning media and those who do not. After testing the hypothesis with the t-test, determine the effectiveness of the learning media by using the normalized gain test. The results of the Normalized Gain test are as follows:

Table 6. Descriptives

Group		Statistic	Std. Error	
N-Gain	Experiment	Mean	58.32	1.916
		95% Confidence Interval for Mean	Lower Bound	54.31
			Upper Bound	62.32
		5% Trimmed Mean		57.90
		Median		57.14
		Variance		73.400
		Std. Deviation		8.567
		Minimum		45
		Maximum		79
		Range		33
	Interquartile Range		8	
	Skewness	.833	.512	
	Kurtosis	.661	.992	
	control	Mean	18.23	2.024
		95% Confidence Interval for Mean	Lower Bound	13.97
			Upper Bound	22.48
		5% Trimmed Mean		18.03
		Median		18.18
		Variance		77.819
		Std. Deviation		8.821
Minimum			0	
Maximum			40	
Range			40	
Interquartile Range		11		
Skewness	.352	.524		
Kurtosis	1.203	1.014		

Based on Table 6, the average gain of N-Gain for the experimental class by learning word wall media obtained an average of 58.32, which is included in the N-Gain effectiveness category, namely quite effective. Meanwhile, the average N-Gain for the control class with learning without using word wall media was 18.32, which was included in the effectiveness category, namely, not effective. It shows that learning Indonesian on procedural text material using word wall media is more effective than learning without using image media.

The results of this research prove that the use of word wall media in learning Indonesian procedural text material is more effective than classes in the control group. The results of this research align with those of Hafsah et al. (2023), who found that using Wordwall learning media affects learning outcomes. In addition, Pamungkas et al. (2023) also found that using Wordwall learning media affected learning motivation. Thus, Wordwall learning media is vital in student learning processes and outcomes.

Furthermore, the sig value was obtained based on the results of the independent sample t-test (in Table 4). (2-tailed) of $0.001 < 0.05$, meaning there is a significant difference between student learning outcomes in the experimental and control classes. These results show the superiority of Wordwall learning media, as stated by Wahyuni et al. (2019) that the use of Wordwall learning media can create new things so that learning in class is not dull and not monotonous or static, the interest of students in the tools used can encourage students to be more enthusiastic about learning. This enthusiasm and motivation ultimately encourage and improve student learning outcomes (Deni Okta, 2022).

Referring to the learning concept presented by Hanafy (2014), learning is interpreted as changing behavior due to individual interactions with their environment. Behavioral changes resulting from learning are continuous, functional, cheerful, active, and directed. Changing behavior can occur in various conditions based on explanations from education and psychology experts. It means that effective Wordwall learning media encourages behavioral changes in students, especially the ability to master lesson material. According to M. Ismail (2019), learning is a personality change that expresses itself as a new pattern rather than a reaction in the form of skills, attitudes, habits, intelligence, or understanding. It means that using Wordwall learning media effectively can improve skills, attitudes, habits, and intelligence, especially in the context of Indonesian language learning.

The research results imply that every teacher, especially Indonesian language teachers, needs to consider Wordwall learning media as an alternative to learning. The results of this research provide confidence for teachers that the Wordwall learning media allows learning objectives to be achieved optimally. On the other hand, the results of this research can also be considered for future researchers to test whether the Wordwall learning media also has a practical effect on subjects other than Indonesian. Therefore, it is recommended that further research be carried out regarding the use of Wordwall learning media in learning, both at primary, secondary, and tertiary education levels.

CONCLUSION

Based on the data analysis obtained above, there are differences in learning outcomes between students who use learning media and those who do not. This right can be seen from the independent sample t-test analysis results with a calculated t-value = 3.792 with a significance of 0.001. The significance value shows $0.001 < \alpha = 0.05$, so H_0 is rejected, which means there are differences in learning outcomes between students who use learning media and those who do not. Effective learning media is used to improve student learning outcomes. The effectiveness of using learning media on learning outcomes can be seen from the average percentage of N-Gain for the experimental and control classes. The average N-Gain percentage of the experimental class was 58.32% in the quite effective category, and the control class obtained an average N-Gain percentage of 18.32% in the ineffective category. Based on this, word wall media is effectively used in class VII Indonesian language subjects at MTs Al-Hidayah in procedural text material for the 2023/2024 academic year.

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