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The Effect of Using the Sparkol Video Scribe Application on Learning Outcomes of Natural Sciences Students of UPT SMPN 3 Pitu Riase

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ABSTRACT

Background. The population in this study were all students of class VIII UPT SMP Negri 3 Pitu Riase and the sample in this study were students of class VIII UPT SMP Negri 3 Pitu Riase.

Purpose. This study uses quantitative methods and experimental research types that aim to examine the effect of the use of sparkol videoscribe on science learning outcomes of class VIII UPT SMP Negri 3 Pitu Riase students.

Method. There are 2 variables in this study, the first is the independent variable, namely the effect of using sparkol videoscribe (x) and the second is the dependent variable, namely the science learning outcomes of class VIII students (y).

Results. The test result data that has been collected is then analyzed using the mean formula. Based on the results of data analysis, it is obtained that the value of X = 78.88> Y value = 70.11 so that it can be seen that there is an effect of using sparkol videoscribe on the science learning outcomes of class VIII students of UPT SMP Negri 3 Pitu Riase.

Conclusion. This shows that the working hypothesis which states that there is an effect of using sparkol videoscribe on the science learning outcomes of class VIII UPT SMP Negeri 3 Pitu Riase students. accepted.

KEYWORDS

Learning Outcomes, Sparkol, Videoscribe

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INTRODUCTION

Education is an important means to improve the quality of human resources (HR) in ensuring the progress of a nation and state. Improving the quality of human resources can be realized in the face of today's global competition. Education has a very important role in the survival of a country. (Wahyullah, 2016) . Education is an asset of a nation, a great nation will be seen from its education

system (Ibrahim, 2021) . In this regard, in the National Education System Law No. 20 article 3 of 2003 wich states that: Educating the life of the nation and developing the life of the Indonesian people as a whole, namely human beings who believe and fear God Almighty and have noble character, have knowledge and skills, physical and spiritual unity, a solid and independent personality and a sense of social and national responsibility .Seeing the developments and technological advances that have occurred, researchers consider that the lecture method or conventional methods in learning Natural Sciences are no longer relevant (Ahmad Fadillah & Bilda, 2019) .

Learning media is a means so that students are not bored in participating in lessons and the greatest effect is that students are expected to be motivated and make it easier to accept subject matter. The use of learning media is an inseparable part and is already an integration of the learning method used. Video media is an audio-visual medium, meaning that it can present images and sound simultaneously. Thus the video media has the ability in the form of audio, visual, and film. Video is suitable for showing movement or something moving. The characteristics of video media are overcoming the limitations of distance and time, videos can be repeated if necessary to add clarity, the messages conveyed are quick and easy to remember, and develop the thoughts and opinions of students. Therefore researchers are interested in developing one type of media that is packaged using an application program in the form of Sparkol Videoscribe (Ahmad Fadillah & Bilda, 2019) .Effective learning can be created by using the right media in learning . Sparkol videoscribe is an application that can make videos in the form of animation, images, writing and sound. (Rahayu & Masniladevi, 2020) Lusidawaty et al., 2020 in (Sunami & Aslam, 2021) Natural Sciences is a subject that must be taught in junior high school because it learns about the surrounding environment and daily activities. This subject discusses various discoveries, conducts experiments and is associated with theory during learning process because it is very important to apply to junior high school students.

Based on the interviews and observations that have been made by researchers that teachers still use conventional methods or lectures and still use subject books in the learning process so students tend to feel bored and pay less attention to existing lessons because Natural Science material is packaged less attractively. Learning using the Sparkol videoscribe

application has not been carried out by Natural Science teachers at the school, this is due to the lack of teacher knowledge in designing learning using the application sparkol videoscribe.

RESEARCH METHODS

The approach used in this study is a quantitative approach, because research data is in the form of numbers and analysis uses statistical analysis (Hasan & Baroroh, 2019)This type of research uses an experimental research type that aims to examine the effect of using the Sparkol Video Scribe Application on Natural Science Learning Outcomes of Class VIII UPT SMP Negeri 3 Pitu Riase.This study uses 2 variables, namely the use of the Powtoon application The independent variable (X) in this research is the use of Sparkol Videoscribe as a tool in the learning process.The dependent variable (Y) in this study is the learning outcomes of Natural Science UPT SMP Negeri 3 Pitu Riase

Operational Definition

application program or software that can be used to create video presentations, with animated hands moving on a white board.

Learning outcomes are the results obtained by students after taking the test at the end of learning Population and sample

To clarify the scope of this research, it is necessary to state the definitions of the termsused as follows:

The Powtoon application is a web-based presentation application used in this study.

Learning outcomes are the values that students will get after taking the test at the end of learning.

Science is a compulsory subject at the senior high school level which is the focus of this research.

Population and Sample

According to (Sugiyono, 2013: 80) Population is a generalization area consisting of: objects/subjects that have certain q and characteristics determined by researchers to be studied and then drawn conclusions. The population used was class VIII UPT SMP Negeri 3 Pitu Riase.

For more details, see the following table:

Table 3.1 State of the Research Population

No	Class	L	P	Amount
1	VIII A	8	9	18
2	VIII B	9	9	18
	Amount	18	18	36

(Data Source of SMP Negeri 3 Pitu Riase)

Sample

The sampling technique used is saturated sampling. Sampling technique when all members of the population are sampled. The sampling technique in this study used the saturation sampling technique, in which all populations in this study were sampled.

so the sample in this study were 36 students from class VIII UPT SMP Negeri 3 Pitu Riase. The results of the sample, divided into two groups, namely, experimental and control

Data Collection Techniques

The data collection techniques used in this study are as follows

Documentation

The documentation technique in the form of attendance was used to obtain data on the number of students in class VIII UPT SMP Negeri 3 Pitu Riase.

Test

The test technique uses a multiple choice form of 30 numbers to measure student learning outcomes in class VIII natural science subjects at UPT SMP Negeri 3 Pitu Riase.

Data Analysis Techniques

In this technique the collected data is analyzed using descriptive statistical techniques in the mean form .

the amount is converted to a value in the formula below:

$$N = \frac{SP}{SM} \times 100$$

Source: Arifin (2012:96)

Figure 3.1. Student scoring convention

Information:

N = Value

SP = Acquisition Score of Each Student

SM = Maximum Score

100 = Standard Score

To find out whether there is an effect of using Sparkol Videoscribe- based on student learning outcomes in class VIII Natural Sciences subjects at UPT SMP Negeri 3 Pitu Riase.

Then the mean formula is used as follows:

$$M_y = \frac{\sum f_y}{N_y} \qquad M_x = \frac{\sum f_x}{N_x}$$

Source: Arifin (2012:96)

Information:

M x: Symbol Mean X

M y : Symbol Mean Y

x: Variable Value x

y: Variable Value y

∑fx : The number of frequencies of each individual value x

∑f y : The number of frequencies of each individual y value

Nx : Number of individual X

Ny : The number of individual Y

The results of the analysis of the data obtained through the formula will be used to test the hypotheses that have been proposed. If the data processing results are greater than the hypothesis rejection limit, then the proposed hypothesis is rejected, but if the data analysis is smaller than the hypothetical rejection limit, it means that the proposed hypothesis is accepted.

RESULTS AND DISCUSSION

The research was conducted in class VIII at UPT SMP Negeri 3 Pitu Riase. The class chosen as the sample was class VIII UPT SMP Negeri 3 Pitu Riase. In this study it was divided into 2 groups, namely the experimental group which in the process of learning activities would use the

Sparkol Videoscribe application and the control group where the learning activities would not use the Sparkol Videoscribe application . After carrying out the teaching and learning process the two groups were given a test.

Data presentation

From the results of research that has been carried out using documentation and tests in the form of multiple choice as data collection instruments, the following results are obtained:

Data with variable X is data on natural science learning outcomes using the Sparkol Videoscribe application (experimental group)

Data with variable Y is data on natural science learning outcomes that do not use the Sparkol Videoscribe application (control groupFrom the results of studying natural sciences in the Experimental Group above, it shows that none of the students scored 100. The highest score was 90, then the lowest score was 70.

Based on the results of natural science learning in the experimental group and the control group in tables 4.1 and 4.2, it shows that the highest score obtained by the experimental group was 90 and the lowest score was 70 while the highest score obtained by the control group was 86 and the lowest score was 50.

Analysis Data

To find out whether there is an effect of using the Sparkol Videoscribe application on social science learning outcomes for Class VIII UPT SMP Negeri 3 Pitu Riase.

so data results Study second group will processed and analyzed in table calculation mean as following.

Table 4.4 Mean calculation work

Group Experiment			Results Study	Group Control		
fx 2	Fx	F	X/Y	F	Fy	fy 2
8,100	90	1	90	-	-	-
14,792	172	2	86	1	86	7,396
27,556	332	4	83	1	83	6.889
12.800	160	2	80	1	80	6.400
28.880	380	5	76	1	76	5.776
10.658	146	2	73	2	146	10.658
9.800	140	2	70	2	140	9.800
-	-	-	66	2	132	8.712
-	-	-	63	1	63	3.969
-	-	-	60	5	300	18.000
-	-	-	56	1	56	3.136
-	-	-	50	2	100	5.000
112.586	1,420	18	∑	18	1,262	85,736

Data Source: Processed from table 4. 3

The mean of the experimental group (X) and the control group (y) with the formula:

$$Mx = \frac{\sum FX}{Nx}$$

$$M\,x = \frac{1.420}{18}$$

$$= 78.88$$

$$my = \frac{\sum Fy}{Ny}$$

$$My = \frac{1.262}{18}$$

$$= 70.11$$

Based on the calculations, it was found that the experimental group students had a higher average score of 90 than that of the control group students, namely 86 . This difference shows the influence of using the Sparkol Videoscribe application on the learning outcomes of Natural Sciences students of class VI I I UPT SMP Negeri 3 Pitu Riase.

This is influenced by the use of the Sparkol

Videoscribe application in the learning process. With the Sparkol Videoscribe application it can make students more interested and enthusiastic in participating in the learning process, attention is more focused on the Sparkol Videoscribe application and students' comprehension of material in the experimental class is more dominant when compared to the control class.

Discussion of Research Results

The purpose of this research is to find out whether the Sparkol Videoscribe application influence on the learning outcomes of students in class VII I at UPT SMP Negeri 3 Pitu Riase, by taking samples from 36 students in class VII I UPT SMP Negeri 3Pitu Riase. Students from the experimental and control groups were identified using the saturated sampling method.

The results of the experimental group using the Sparkol Videoscribe application on process Study obtain mark Which more tall compared to with control group that did not use the Sparkol Videoscribe application during the learning process . This can be seen from the results of the acquisition of data analysis performed shows the average value of the experimental group (Mx = 7 8 , 88) while the control group (My = 70,11). The value shows that the value of Mx is more big in comparison My (7 8,88 ≥ 70.11).

Class VII I students of SMP Negeri 3 Pitu Riase who use the Sparkol Videoscribe application in the learning process are better than students who carry out the learning process without using the Sparkol Videoscribe application , according to research findings comparing learning outcomes. Given students' final exam scores, the findings of these studies are comparable.

Based on the gain obtained in the statement above, the hypothesis states that there is an effect of using the Sparkol Videoscribe application on the learning outcomes of Natural Science students in class V III UPT SMP Negeri 3 Pitu Riase "accepted" . The consequence of this rejection is the value hypothesis which states that there is no effect of using the Sparkol Videoscribe application Against Learning Outcomes in Natural Science Subjects for Class VII I Students UPT SMP Negeri 3 Pitu Riase " rejected"

Thus it can be concluded that the Sparkol Videoscribe application can have a beneficial impact on learning outcomes in subjects Class VII Natural Science UPT SMP 3 Pitu Riase . This is shown by the student learning outcomes which are quite good when compared to student learning outcomes where Sparkol Videoscribe is not used in learning activities.

CONCLUSION

Based on the description of the research results regarding the effect of using the Sparkol Videoscribe application on the learning outcomes of Natural Sciences class VIII UPT SMP Negeri 3 Pitu Riase, it can be concluded that there is an effect of use the Sparkol Videoscribe app on the learning outcomes of Natural Sciences class VIII UPT SMP Negeri 3 Pitu Riase . This indicates that the Sparkol Videoscribe can used For process learning because media learning based on the Sparkol Videoscribe application This is very useful for educators as well as participants students in carrying

out learning activities that are more interesting and can be grow interest And motivation Study for participant educate.

Based on the research results, in accordance with testing the hypothesis through data analysis, the average value was obtained, namely Mx = 7 8.88 > My = 70.11 . This means that the difference in the average value indicates the effect of using the application Sparkol Videoscribe on the learning outcomes of Natural Science students in class V III UPT SMP Negeri 3 Pitu Riase. The results of the analysis using the mean formula show that students are learning using the Sparkol Videoscribe application has a positive impact compared to students who do not use the Sparkol Videoscribe application

AUTHORS' CONTRIBUTION

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

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