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THE EFFECTIVENESS OF YOU TUBE MEDIA IN LEARNING SCIENCE MATERIALS GREEN PLANTS CLASS 5 PRIMARY SCHOOL

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ABSTRACT

Science learning in elementary schools requires serious handling. Planning and using appropriate media requires innovation and variation. Students need media that can reduce students' level of learning boredom. One media that is easy to use is YouTube. , the aim of the research is to describe the effectiveness of YouTube media in learning science material on green plants in grade 5 elementary schools, and to describe the learning process of YouTube media in learning science material on green plants in grade 5 elementary schools. The research method uses pretest and posttest experimental methods in one group. The research results show that YouTube media can improve science learning outcomes using green plant material. The process begins with watching material from YouTube and ends with an evaluation.

Abstrak

Pembelajaran IPA disekolah daar memerlukan penanganan yang serius. Perencanaan dan pemakaian media yang tepat perlu inovasi dan variasi. Siswa memerlukan media yang dapat menekan tingkat kebosanan belajar siswa. Salah satu media yang mudah digunakan adalah you tube. , the aim of the research is to describe the effectiveness of YouTube media in learning science material on green plants in grade 5 elementary schools, and to describe the learning process of YouTube media in learning science material on green plants in grade 5 elementary schools. Metode penelitian menggunakan metode eksperimen pretes dan postes dalam satu kelompok. Hasil penelitian menunjukkan bahwa media you tube dapat meningkatkan hasil belajar IPA pada materi tumbuhan hijau. Proses diawali dengan menonton materi dari you tube dan diakhiri dengan evaluasi.

INTRODUCTION

Learning media are learning tools used by someone to facilitate the delivery of material during teaching at school. Through YouTube, students can learn independently and share information in the form of knowledge and practice through videos (Christy, 2020). The use of YouTube as a learning medium can be considered effective by students in increasing interest and understanding of learning concepts. Effectiveness here is measured from the perspective of student assessment during learning using a survey in the form of a learning interest questionnaire using YouTube as a learning medium. Media can be sourced from various ways, starting from gadgets and other communication tools (Junida, D. S., & Mutmainnah, 2023).

The millennial generation now makes gadgets a primary need, where their gadget use is always connected to the internet (Anggraini, 2019). They are the generation that accesses and uses the YouTube networking site the most in everyday life. They use YouTube for entertainment activities such as watching films, watching tutorials or seeing various developments in the world. It is used in everyday life because you can see its real form, such as sound and visuals, so the level of use is very high. Abroad, it has even been used as a learning medium by students. YouTube is used as an interactive learning medium between teachers and students. Where they can study various kinds of lesson tutorials uploaded by their teachers. YouTube also allows for distance learning and can facilitate online learning, especially in the current digital era (Jenny Ramadona, et al: 2021). Learning natural sciences at the elementary school level today requires the introduction of accurate information technology. Elementary students should be properly introduced to how to use YouTube for independent learning. Teachers become facilitators and evaluators of learning. Research from Asani, S. N. (2023) states that media, not only YouTube, can be Android-based. Likewise, Luthfi, et al, 2023 et al., stated that today's learning must be digital-based, because it is to adapt and face the increasingly rapidly developing information era. Rahmatica, 2021, which highlights online learning, which is very important in introducing elementary school students early. Students are accustomed to studying independently online. This research is important in order to measure the success of the YouTube media used by teachers and at the same time fill the research gap that is still occurring (Jannah, & Atmojo, 2022).

One of the elementary schools that continues to improve its teaching system and learning quality is SDN 05 Pademangan Timur, North Jakarta. This elementary school uses various learning method approaches. One of them is the You Tube media for learning science on green plants. This research question is how effective is the You Tube media in learning science material about green plants in grade 5 elementary school?, and what is the process of learning You Tube media in learning science material about green plants in grade 5 elementary school? Meanwhile, the aim of the research is to describe the effectiveness of YouTube media in learning science material on green plants in grade 5 elementary schools, and to describe the learning process of YouTube media in learning science material on green plants in grade 5 elementary schools.

METHOD

This research uses a type of experimental research, a pre-experimental design research method with a one-group pre-test-post-test design type. experimental method with a pre-Experimental method design type one-group pre-test-post-test design is an experimental method carried out by only one treatment or one group without any comparison group. The following is a pre-experimental research method design with a one-group pre-test-post-test design type.

Table 1. Disain eksperiment

O1	X	O2

Information :

X = Treatment (You tube)
O1 = Pre-test (before treatment)
O2 = Post-test (after treatment)
Data is taken by means of tests and documentation. The data was processed using SPSS version 25. The data was tested for normality and homogeneity of the data as well as the paired sample t test. The data that has been processed will be concluded. The number of respondents was 30 grade 5 elementary school students.

RESULT AND DISCUSSION

After carrying out the project-based method, students are given a test to determine the effectiveness of the project-based learning method. or images must be numbered and referred to in the text. The following are the results of SPSS 25 data processing.

Case Processing Summary

Kelas		Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
	Postes	30	100.0%	0	0.0%	30	100.0%
	pretes	30	100.0%	0	0.0%	30	100.0%

The results show that the respondents were 30 students. All data is processed. Both pretest and posttest data. After going through the above process, the data is again processed for normality and homogeneity tests, the results are,

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
pretest	.172	30	.000	.673	30	.000
Postest	.172	30	.023	.943	30	.109

a. Lilliefors Significance Correction

In the Normality assumption test there is a Shapiro wilk sig value. 0.673 > 0.005 which means the data is normally distributed. Likewise with the Kolmogorov value of 0.172 > 0.005 which means the data is normally distributed.

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
	Based on Mean	5.485	1	58	.053
	Based on Median	4.910	1	58	.031
	Based on Median and with adjusted df	4.910	1	46.945	.032
	Based on trimmed mean	5.462	1	58	.023

In the homogeneity table, there is a Sig value> 0.005. Sig value. 0.053> 0.05 which means the data comes from homogeneous data. Data can be continued in the t sample paired test.

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Before - After	-18.16667	6.11095	1.11570	-19.64853	-15.08480	-14.466	29	.000

In the Paired sample test table, the sig value. 0.000 < 0.005 which means there is a difference in pretest and posttest scores. Based on the data above, it can be concluded that the effectiveness of the you tube method can improve the outcome.

Based on the results above, it can be said that YouTube media can increase learning outcomes by 3.08 points. This is a consideration for teachers so that YouTube becomes an alternative media that needs to be considered for use in other materials. The learning process starts with the teacher's explanation and provides a YouTube link about learning green plant science for grade 5 elementary school. The link *is https://www.youtube.com/watch?v=ed_geWoswWg*. The next step is for the teacher to discuss the material together, then the teacher gives students time to pay

attention to the plants around the school for 10 minutes, after that they take notes and make oral reports about the types of plants.

In the final stage students form groups. Then they gave their opinions about green plants which had been explained on YouTube. Students are given questions. The teacher concludes and gives an evaluation to the students.

DISCUSSION

This research reflects that students need a process that suits their learning style. Students who have a visual learning style enjoy learning more with YouTube. They are fun to watch. Teachers can accompany them in their learning, this serves to anticipate obstacles in the field so that they can be overcome quickly and well. Apart from that, it is important for teachers to understand students' pre-learning conditions. That way, teachers can provide motivation that is appropriate to these conditions so that students can carry out learning activities happily without being forced to (Widiana et al,2019),. Teachers should be able to position themselves as facilitators in the learning process by 'taking into account' their students (Sari, 2023). The results of this research are in accordance with the results of research from Yudha, J. R. P. A., & Sundari, S. (2021) which states that YouTube media can improve student learning outcomes. You Tubu can provide a variety of stories and quickly change images, so students don't get bored quickly.

CONCLUSION

YouTube media is effective in improving science learning outcomes on green plant material for 5th grade elementary school students. The learning process starts with watching YouTube, discussing together, practicing outside the classroom by looking at green plants, discussing reports and evaluating. Teachers should be able to vary YouTube media with other media.

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