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The Effectiveness of Using Nearpod Learning Media on the Public Relations Learning Outcomes of Class XI OTKP SMKN 4 Surabaya

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Abstract

This research aims to determine the effectiveness of using Nearpod learning media on the public relations learning outcomes of class XI OTKP students at SMKN 4 Surabaya. This research is a type of quasi-experiment with a Nonequivalent Control Group Design. This research was conducted at SMKN 4 Surabaya with 60 class XI OTKP students. The data collection technique used is a test in the form of a post-test. Based on the prerequisite test, it is known that the data is not normally distributed but homogeneous, so a T-test analysis is then carried out using the Mann-Whitney test. The results of the data analysis show the value of Asymp. Sig (2-tailed) is 0.040 < 0.05, which means H1 is accepted. So, using Nearpod learning media in class is appropriate for effective public relations communication materials.

Keywords: Learning media, Nearpod, Learning outcome, Vocational high school.

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INTRODUCTION

Education is a means for humans to make changes for the better through a learning process that aims to develop their potential. To achieve this, teachers as learning planners play a role in creating an effective learning process by formulating learning objectives, determining learning methods and learning media, and evaluating learning appropriately. An effective and enjoyable learning process cannot be separated from choosing learning methods and using appropriate learning media. A teacher is required to be able to create exciting learning media by integrating technology into it. Using technology-based learning media is more than just easy and effective for learning. Still, it can also support creating a learning process that is fun, memorable, and interesting and provides direct learning experiences for students using technology (Lindberg et al., 2017; Pratiwi et al., 2018; Zweekhorst & Maas, 2015). Therefore, in optimizing their role during the learning process, teachers must be able to provide exciting learning media as a form of learning facility adapted to current technological developments.

Learning media is a means or tool that helps deliver learning material to achieve learning objectives. Arsyad (2017) explains that learning media is an element that cannot be separated from the learning process to realize educational goals in general

and learning goals at school in particular. The use of appropriate and varied learning media can stimulate students' interest in learning (Febrita & Ulfah, 2019; Tafonao, 2018) and make it easier to understand learning material (Mardhiah & Ali Akbar, 2018); besides that, it can also optimize student learning outcomes (Rusdewanti & Gafur, 2014). One of the learning media currently being developed and used is ICT-based learning media, which uses computers/laptops, cell phones, LCDs, and the internet as tools and facilities so that the learning process is not limited by space and time. Nearpod is an ICT-based learning media that also offers student involvement (Qi et al., 2021).

Nearpod is a web-based platform created by Nearpod. inc. Nearpod itself is learning software that facilitates and controls online and offline learning experiences, which allows teachers and students to interact both directly and indirectly (Hakami, 2020; Minalti & Erita, 2021; Oktaviani & Nurhamidah, 2023). Nearpod helps make it easier for teachers to create learning materials (Perez, 2017) and allows them to design the learning media used in the learning process (Delacruz, 2014). In addition, students have more opportunities to collaborate and be more active in learning in class (Daniela et al., 2018). Nearpod media provides a pleasant learning experience (Rahayu et al., 2022) because it can be a solution to increase student learning activity in class through existing features (Mattar, 2018), student interaction, as well as supporting learning resources and can be accessed in smartphones, tablets, and laptops (McClean & Crowe, 2017).

One way in which the learning process in class is successful can be seen in student learning outcomes. Learning outcomes describe students' understanding of the material the teacher presents (Harefa et al., 2023). Learning outcomes are essential in the learning process because they can inform teachers to what extent students have learned the material, they are studying (Harefa, 2020) and student progress in achieving learning goals (Harefa et al., 2023). Student learning success can be influenced by student learning motivation (Rahayu et al., 2022) and also active learning (Putri et al., 2019). So, a teacher needs to increase students' learning motivation, one of which is by using fun learning media.

Based on the results of initial observations in class, this can be seen in how students pay less attention to learning by playing with smartphones and talking to themselves. Only a few students seemed enthusiastic about the material. This is because the learning process for public relations subjects uses the lecture method by utilizing print media in modules, PowerPoint presentations, learning videos, and Google Classroom. The use of PowerPoint media has not been able to increase students' interest in learning because the content of the presented material uses more text, making students feel bored and pay less attention to learning. The power point cannot be maximized when displayed on a smartphone (device). So, from the explanation above, the researcher wants to conduct research on the "Effectiveness of Using Nearpod Learning Media on the Public Relations Learning Outcomes of Class XI OTKP SMKN 4 Surabaya".

RESEARCH METHOD

This research uses quantitative research methods with a quasi-experimental research type (Quasi Experimental Research). The experimental research design used is a Nonequivalent Control Group Design. According to (Hastjarjo, 2019), in the design, namely Posttest only control design with nonequivalent groups, a pretest

was not carried out because it was based on the assumption that if a pretest were carried out, it would make the subjects more understanding and sensitive so that it would influence the Posttest score. This research was conducted on class XI OTKP students at SMKN 4 Surabaya with material on Effective Public Relations Communication. This research used 60 class XI OTKP students at SMKN 4 Surabaya as the population and sample.

The effectiveness of using Nearpod learning media is measured from student learning outcomes through posttests. Before the researcher provides treatment, the researcher determines the control and experimental classes. The Posttest was used to determine whether there was an effect of treatment between learning using and without Nearpod media. The data collection technique used was a test with a multiple-choice instrument of 20 questions. Researchers then conducted normality and homogeneity tests after getting the posttest score results. Meanwhile, researchers carried out a T-test to prove the hypothesis that the use of Nearpod learning media has an influence on effective public relations communication materials. The SPSS 23 for Windows program was used to carry out normality, homogeneity, and T-tests.

RESULTS AND DISCUSSION

Results

This Nearpod learning media results from Research and Development (R&D) research carried out previously. In this follow-up research, Nearpod learning media was tested on class XI OTKP students at SMKN 4 Surabaya with Effective Public Relations Communication material to determine its level of effectiveness. Learning effectiveness can be reflected in student activities, student responses and mastery of the material, as seen in increased learning outcomes (Violla & Fernandes, 2021).

Learning outcomes are one factor determining the effectiveness of using Nearpod learning media in this research, so the researcher gave a posttest to assess the student's mastery of the material by giving 20 multiple-choice questions at the end of the learning process. Previously, the researcher treated the experimental class, namely, carrying out the learning process using Nearpod media, while the control class only used PowerPoint media. The results of the posttest scores in the experimental class and control class can be seen in Table 1 below:

Table 1. Percentage of Experimental Class and Control Class Student Learning Results Tests

Skor Interval	Category	Experiment Class		Controls Class	
		Frequency	Percent (%)	Frequency	Percent (%)
93-100	Excellent	6	20	0	0
84-92	Good	15	50	6	20
75-83	Satisfactory	7	23.3	7	23.3
< 75	Fail	2	6,7	17	56.7
Total		30	100	30	100

Based on the table above, the posttest scores obtained by students in the control class were 17 students or 56.7%, who were below the minimum completeness criteria set by the Public Relations subject teacher, namely 75; the remaining 23.3% were in the sufficient category and only 20% in the good category. Meanwhile, in the experimental class, there were only 2 students, or 6.7%, whose scores were failing, and 50% of the students were in a good category and 20% in the excellent category. In the next stage, after obtaining student learning results based on the posttest, analysis is carried out based on the normality test, homogeneity test, and also the T-test. The test results can be explained as follows.

Normality Test Results

The normality test used the Kolmogorov-Smirnov test to determine whether the residual values were normally distributed. The results of the normality test analysis using SPSS can be seen in Table 2 below:

Table 2. Posttest Normality Test Results for Experimental Class and Control Class

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Post-Test Eksperimen	.268	30	.000	.740	30	.000
Post-Test Control	.169	30	.028	.870	30	.002

a. Lilliefors Significance Correction

Table 2 shows the result of the normality test for the experimental class and control class on learning outcomes based on the post-test results. The normality test uses the Kolmogorov-Smirnov test with SPSS 23.0 for Windows. Data is said to be not normally distributed if it is significant < 0.05, but if it is significant > 0.05, then the data is normally distributed. Based on the posttest data from the experimental class and control class above, the data is not normally distributed because it is significant < 0.05.

Homogeneity Test Results

After carrying out the data normality test, the researcher then carried out a data homogeneity test to obtain an analysis of whether the posttest data had homogeneous variance or not. The results of the homogeneity test analysis using SPSS can be seen in Table 3 below:

Table 3. Posttest Homogeneity Test Results for Experimental and Control Class

		Levene Statistic	**df1**	**df2**	**Sig.**
Student Learning Outcomes	Based on Mean	.696	1	58	.408
	Based on Median	1.056	1	58	.308

	Based on Median and with adjusted df	1.056	1	54.459	.309
	Based on trimmed mean	1.002	1	58	.321

Based on Table 3 above, this is a posttest homogeneity test for the experimental class and control class. This homogeneity test uses the Levene test with SPSS 23.0 for Windows. Posttest data is said to be "homogeneous" if it is significant > 0.05, but if it is significant < 0.05, then the posttest data is said to be "not homogeneous (heterogeneous)". Based on the posttest data from the experimental class and control class above, it is known that the significance value (Sig.) Based on the Mean is 0.408 > 0.05, the data is said to be "homogeneous".

Hypothesis testing

After the normality test and homogeneity test, a T-test is carried out to find out whether the hypothesis is accepted or rejected. Based on the previous prerequisite tests, it is known that the data is not normally distributed but is homogeneous. So then, a T-test analysis was carried out using the Mann-Whitney test with the help of SPSS 23 for Windows to find out whether there were differences between the experimental class and the control class on public relations learning outcomes, especially on effective public relations communication material, on the basis of deciding if the sig value was > 0.05 then H1 rejected and if the sig value <0.05 then H1 is accepted. The hypotheses in this research are:

H1: The use of Nearpod media has an influence on the learning outcomes of class XI OTKP students at SMKN 4 Surabaya.

The results of the T-test analysis using the Mann-Whitney test assisted by SPSS 23 for Windows can be seen in Table 4 below:

Table 4. Mann-Whitney Posttest Results for Experimental and Control Class

	Hasil Belajar
Mann-Whitney U	314.000
Wilcoxon W	779.000
Z	-2.055
Asymp. Sig. (2-tailed)	.040
Mann-Whitney U	314.000

Based on Table 4 above, which is the result of the Mann-Whitney test, it is known that the Asymp. Sig (2-tailed) is 0.040 < 0.05. Based on the basic decision-making of the Mann-Whitney test, H1 is accepted. This means that there is a significant difference in learning outcomes between experimental class students who use Nearpod learning media and control class students who do not use Nearpod learning media.

Discussion

An effective and enjoyable learning process must be distinct from choosing learning methods and using appropriate learning media. This is reinforced by (Violla & Fernandes, 2021), who states that integrating technology into the learning process can make learning fun and interesting. Technology can be used as a learning medium. The use of appropriate and varied learning media can stimulate students' interest in learning (Febrita & Ulfah, 2019; Tafonao, 2018) and make it easier to understand learning material (Mardhiah & Ali Akbar, 2018); besides that, it can also optimize student learning outcomes (Rusdewanti & Gafur, 2014). Nearpod is an ICT-based learning media that also offers student involvement (Qi et al., 2021) and helps make it easier for teachers to create learning materials (Perez, 2017).

Based on the results of data processing using the T-test and the Mann-Whitney test, the Asymp value was obtained. Sig (2-tailed) is 0.040 < 0.05, which means H1 is accepted. This explains that there are differences in learning outcomes between the control class and the experimental class, which used Nearpod learning media. This is because the use of Nearpod media can increase student interactivity in the learning process (McClean & Crowe, 2017). Students are also more enthusiastic about Nearpod media because it contains games, so they do not feel bored; this shows that Nearpod media can support the learning process in the classroom (Risky et al., 2023). So, it can be concluded that the use of Nearpod media can improve learning outcomes (Atsira & Zukdi, 2022; Ismah & Zuliarni, 2022; Rahmawati et al., 2022) and is one solution to increase student learning motivation (Feri & Zulherman, 2021). Basically, according to (Yanuarto et al., 2023), students prefer an interactive learning process that can increase learning motivation and understanding of the material, such as using Nearpod media.

The use of Nearpod learning media in this research was proven to be the right learning media for effective public relations communication material. Because the use of appropriate learning media can improve student learning outcomes (Fareza & Zuhdi, 2023). The use of Nearpod is highly recommended for educators because Nearpod is considered to have innovative and educational features that can make learning interactive (Aslami, 2021), making it easier for teachers to create learning materials (Perez, 2017) and also providing freedom to design learning media. Will be used in the learning process (Delacruz, 2014).

CONCLUSION

Based on this research, it can be concluded that the use of Nearpod learning media in class can be seen from the distribution of post-test scores after receiving treatment in both the experimental and control classes. Apart from that, looking at the results of the T-test using the Mann-Whitney test, it is known that the significance value is 0.040, which means it is smaller than 0.05 (0.040 < 0.05), which means H1 is accepted. Based on the results of this research, teachers are expected to utilize Nearpod as an interactive learning medium in the classroom by selecting the features available in the application according to students' needs. Meanwhile, future researchers can further investigate the effectiveness of Nearpod learning media in improving 21st-century skills, including creative thinking, critical thinking and problem-solving, communication, and collaboration (4C).

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