

# The Effect of Demonstration Method Through Kahoot on Learning Outcomes The Theme of Various Jobs Subthemes Types of Jobs in Class IV Students at Curahpoh 01 Bondowoso State Elementary School

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**ABSTRACT:** *The use of learning methods has an impact on student learning outcomes. Therefore, in every learning activity, the teacher must be able to choose the right learning method so that learning outcomes can be achieved effectively. One of the learning methods that have high effectiveness is the demonstration method. The demonstration method is a learning method by showing and demonstrating about a process. The implementation of the demonstration method can be more effective if it is done through Kahoot, a quiz platform based on learning games. The problems in this research are: is there any effect of using demonstration method through kahoot on learning outcomes of various work themes, sub-themes of types of work for fourth grade students at Curahpoh 01 Bondowoso State Elementary School? To solve this problem, a quasi-experimental study was conducted with the pattern of Non-equivalent control group pretest-post-test design. The research subjects were 36 students of class IV and IV-b State Elementary School Bulk Pos I Bondowoso. The main data collection method is test. After the data is collected completely, then the data analysis is carried out using the t-test data analysis technique and the relative effectiveness test. The results of the t-test data analysis showed that  $t\text{-count} > t\text{-table}$  was  $2.696 > 0.339$  so it could be concluded that there was an effect of using the demonstration method through kahoot on student learning outcomes. The results of the relative effectiveness test show that the use of the demonstration method through kahoot has a moderate level of effectiveness.*

Keywords: demonstration method through Kahoot; student learning outcomes.

## INTRODUCTION

Education is an important foundation in human resource development. Education is also a factor in increasing the progress of a country. Success in an education is characterized by above average learning outcomes and a broad way of thinking of students. Learning is an effort in the success of education by developing the potential of students. Success in an education is also determined by several factors such as the learning method used by the teacher. Innovative and constructive learning methods are needed to develop the potential of students. The teacher has a role as a determinant of success in learning, action by choosing an appropriate learning method will result in innovative learning (Ingriyani, dkk., 2020).

Based on this, the Indonesian government uses the latest curriculum, namely the 2013 curriculum with thematic lessons. Thematic in learning prioritizes student involvement. Students are required to be more active in the learning process and problem solving process, thus triggering their creativity and tendencies that are different from one another. Learning that is happening at this time is very modern and creative according to the development of the times.

Education in this era of globalization, faced with the development of information and communication technology makes a revolution that affects the world, especially in Indonesia. Currently, teachers must have the ability to use and prepare teaching materials that can be easily accessed by students. Avoiding the negative impacts of using technology, the teacher has the task of guiding the use of technology appropriately. There have been many students who have been held by mobile phones due to the times. The current implementation of schools requires students to learn to operate technology independently with the help of their parents. Utilization of mobile communication technology (mobile phone) is used to make learning more interesting and not easily bored during the learning process. Therefore, the learning process must be adapted to the demands of the existing science and technology development.

The need for technology cannot be ruled out and has become a necessity in this era of globalization. Mastery of technology has become a lifestyle in various circles, especially elementary school children. Responding to the challenges of the current digital era, it is necessary to have learning media that can be used to improve student learning performance.

The results of a preliminary study conducted through a review of the results of previous studies indicate that there is a significant difference between the average scores of the experimental class and the control class. Likewise, observations made on April 19, 2021, observations made at Curahpoh 01 Bondowoso State Elementary School consisted of teaching methods carried out by teachers in the classroom during the learning process. The results obtained after making observations are the lack of creativity of

teachers in using the method in the classroom because they still use the lecture method, causing the activeness of students in responding to learning in low classes, it can be proven by a quantitative count of a total of 42 students consisting of 2 classes, as many as 12 active children ask after the teacher explains the material. The results obtained are where only  $\frac{12}{42} \times 100\% = 28,57\%$  of respondents are active in 2 classes, meanwhile respondents are  $\frac{15}{42} \times 100\% = 35,71\%$  less active and respondents are  $\frac{15}{42} \times 100\% = 35,71\%$  not active.

Then the interview was on the same date with the teacher and student representatives from 4A and 4B, questions were asked about the learning methods used in the classroom, the obstacles during the learning process and whether they had ever used the demonstration method of education games with kahoot. The results of the interview can be concluded that the method used by the teacher is a conventional method consisting of lectures, discussions, questions and answers, assignments, and group work. In the use of media, it was explained directly by the classroom teacher that it was still rare on the grounds that the opportunity to use media in the classroom was limited and looking for media that was easily obtained by adjusting the learning materials. Constraints faced by teachers when teaching are not much different, namely the lack of conducive class during learning takes place. The homeroom teachers of grades 4A and 4B have never used the demonstration method via kahoot. The results of interviews with 6 students representing classes 4A and 4B with the results that 3 respondents rarely asked questions and 3 respondents never asked when they had difficulty understanding the learning material.

Based on the results of the preliminary study, it can be concluded that the use of the demonstration method through kahoot in several schools is quite small. In general, teachers who use kahoot in learning are still at the junior high school, high school / vocational school, and student levels, for elementary school students are still very layman because of the need for sufficient preparation. According to Inggriyani, the use of kahoot helps learning evaluation activities to be interesting, interactive, and conducive because the learning process includes games and it is easy to monitor student learning outcomes, because the learning outcomes of students can be seen directly by the teacher.

According to Liu and Shi, as quoted by Petter (in Westwood, 2008) the learning method is a set of principles, procedures, or strategies that must be applied by the teacher to achieve the desired learning in students. Judging from the use of appropriate learning methods can generate motivation and stimulation of learning activities to increase. One method of learning with technology-based games with learning is kahoot. Kahoot is an online platform or application that is packaged like a game that can be used as a learning medium and in the form of fun quizzes (Lubis, 2020). It is undeniable that learning using the demonstration method with games helps the learning process more effectively because it stimulates verbal and visual learners.

Based on the description above, it is necessary to carry out research and researchers raise research on the effect of using the demonstration method through kahoot on learning outcomes of theme 4 subtheme 1 learning 1 in fourth grade students at Curahpoh 01 Bondowoso State Elementary School.

## RESEARCH METHOD

The research design applied in this research is experimental research. The research will be conducted by comparing one or more experimental variables treated with one or more control variables. Because the subject of this research is related to humans, it is not possible to apply the actual experimental research design. This is due to several considerations related to human morality. Therefore, in this study a quasi-experimental research design was used.

The quasi-experimental research pattern used is the nonequivalent control group design. The nonequivalent control group pattern of this design is that the grouping of sample members in the control group is not done randomly, the experimental group and the control group are still compared with the same pre-test and post-test, with the same level of questions, only they are not chosen randomly.

The experimental class and control class were each given a pre-test to measure the ability of each student or group. The experimental class was given treatment or (treatment) by applying the education game method using kahoot, while the control class was given no treatment or (treatment). The experimental class and control class were then given a final test (post-test).

The data collection methods used to complete this research are observation, interviews, tests, and documentation. This study used data collection instruments, namely interview guides, documentation guides, and question sheets. Data collection instruments facilitate the course of research to obtain results on the subject to be studied.

The time of the research was carried out in the even semester 2020/2021 academic year. The group division consisted of 4A totaling 21 students and 4B totaling 21 students. The subjects of this study were students of Curahpoh 01 Bondowoso State Elementary School class IVA and IVB. The homogeneity test data was obtained from the mid-semester test scores. This homogeneity test is to determine the experimental class and the control class.

The results of the field validity test were calculated using SPSS version 21, then it could be seen that the 25 items of the test instrument were 5 invalid items and 20 valid items. The test instrument can be said to be valid because the value of Sig (2.tailed) < 0.05 so it can be said that the test instrument has represented the tested variable, and vice versa the test instrument is said to be invalid because the value of Sig (2.tailed) > 0.05 so that the instrument can be the test has not or does not represent the tested variable. The next step is to test the reliability of the instrument.

The reliability test was carried out in several stages. The first stage is calculating the correlation between the first test score and the second test score using the Pearson product moment correlation formula according to (Masyhud, 2016, p. 305) as follows:

$$r_{xy} = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{[N\sum X^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2]}}$$

$$r_{xy} = \frac{42 \times 57.250 - (1.510)(1.420)}{\sqrt{[(42 \times 61.550) - (1.510^2)][(42 \times 56.950) - (1.420^2)]}}$$

$$r_{xy} = \frac{2.404.500 - 2.144.200}{\sqrt{[2.585.100 - 2.280.100][2.391.900 - 2.016.400]}}$$

$$r_{xy} = \frac{260.300}{\sqrt{[305.000][375.500]}}$$

$$r_{xy} = 0.76$$

**Description :**

rx<sub>y</sub> : Correlation coefficient of odd item score with even item score  
 X : Score of odd items  
 Y : The item score is even  
 N : Number of samples

The result of the correlation of the number of odd hemisphere scores with the even hemisphere scores is 0.76. These results were consulted with the r-table at a significance level of 5%, namely 0.304. The correlation value obtained is 0.76 > 0.304, so the item can be declared reliable. The correlation results are then tested and re-analyzed using the formula *Spearman-Brown* according to Hughes, 1994 (in Masyud, 2016:304) as follows.

$$R_{11} = \frac{2 \times r_{xy \text{ splithalf}}}{1 + r_{xy \text{ splithalf}}}$$

$$R_{11} = \frac{2 \times 0.76}{1 + 0.76}$$

$$R_{11} = \frac{1.52}{1.76}$$

$$R_{11} = 0.86$$

**Description :**

R<sub>11</sub> : Coefficient of reliability  
 r<sub>xy</sub> split-half : The result of the correlation of halves

Coefficient result the reliability obtained is 0.86, so it can be seen in the reliability test criteria table that the reliability coefficient value of 0.86 is included in the high reliability category.

**RESEARCH RESULTS AND DISCUSSION**

Normality test is used to determine whether a data is normal or not. In this statistical test using the One-Sample Kolmogorov-Smirnov (KS) contained in SPSS 21.

	Tests of Normality						
	Class	Kolmogorov-Smirnova			Shapiro-Wilk		
		Statistics	df	Sig.	Statistics	df	Sig.
NGain_Score	4a	.174	18	.158	.904	18	.068
	4b	.193	18	.074	.923	18	.147

Based on the output above, it can be seen that the value of Sig. in class 4A of 0.147 > 0.05 and the value of Sig. Class 4B is 0.068 > 0.05. The hypothesis if the value of Sig. > 0.05 then the data is normally distributed and vice versa if the value of Sig. < 0.05 then the data is not normally distributed. So it can be concluded from the data above that the data values for class 4A and 4B are normally distributed.

Separate sample t-test was chosen because the data obtained were data from two different classes, namely the experimental class and the control class. After that, analyze the data from the results of the difference between the pre-test and post-test, which is

used to determine the difference in learning outcomes between students who are taught by the demonstration method with kahoot and students who are not taught by the demonstration method with kahoot. The interpretation is based on the sig value at the output with the condition that  $t\text{-count} > t\text{-table}$  then alternative hypothesis is ( $H_a$ ) accepted ( $H_0$ ) rejected, there is influence the use of the demonstration method through kahoot on learning outcomes of theme 4 sub-theme 1 learning 1 for fourth grade students at Curahpoh 01 Bondowoso State Elementary School.

**Group Statistics**

	Class	N	mean	Std. Deviation	Std. Error Mean
NGain_Percent	4a	18	13.4007	11.31370	2.66667
	4b	18	33.7227	29.91725	7.05156

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig.(2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of The Difference	
									Lower	Upper
NGain_Percent	Equal variances assumed	4.176	.049	-2,696	34	.011	-20.32202	7.53894	-35.64300	-5.00105
	Equal variances not assumed			-2,696	21,765	.013	-20.32202	7.53894	-35.96663	04.67741

The calculation of the t-test using the SPSS 21 program with t-table a value at the 95% confidence level or a significance level of 0.05 with a two-way test (two trail) which means it is two-way. Obtained t-count by -2,696. A negative result means that it is not an error, but the average value of the first group's learning outcomes is lower than the average value of the second group's learning outcomes. Then the value t-count can mean positive that is 2,696. These results were consulted with t-table the value at the 5% significance level with db = 34, so that it was obtained t-table = 0.339. The results of the t-test showed t-count > t-table that it was  $2.696 > 0.339$ . Thus the alternative hypothesis is  $H_a$  accepted  $H_0$  rejected, then there is a significant effect of learning outcomes between students who use the demonstration method of education games.

After knowing the results of the t-test, it is necessary to do a relative effectiveness test to calculate the level of effectiveness of a treatment compared to other treatments for a group. The relative effectiveness test can be done using the following formula (Masyhud, 2016, p. 384).

$$ER = \frac{MX_2 - MX_1}{\left[\frac{MX_1 + MX_2}{2}\right]} \times 100\%$$

$$ER = \frac{33.7 - 13.4}{\frac{13.4 + 33.7}{2}} \times 100\%$$

$$ER = \frac{20.3}{47.1} \times 100\%$$

$$ER = 43.1\%$$

**Description:**

- ER = Relative effectiveness rate
- MX1 = Average value before using e-module
- MX2 = Average value after using e-module

The results obtained from the calculation above for the ability in student learning outcomes of 43.1% which fall into the category of moderate effectiveness, so it can be seen that the achievement of student learning outcomes in the experimental class with the demonstration method through kahoot shows 43.1% results. more effective when compared to the control class which did not apply the demonstration method via kahoot in the Various Jobs theme.

## **CONCLUSION**

Based on the results of this research analysis, the results of the normality test, namely the value of Sig. in class 4A of  $0.147 > 0.05$  and the value of Sig. Class 4B is  $0.068 > 0.05$ . The value hypothesis of Sig.  $> 0.05$  then the data is normally distributed. Hypothesis testing can be seen that there is a difference in the value of the pretest and posttest tests and the results of the t-test show, that  $t\text{-count} > t\text{-table}$ ,  $2.696 > 0.339$ , so it can be said that  $H_a$  is accepted and  $H_0$  is rejected. The results of the calculation of the relative effectiveness test, which is 43.1%, are included in the category of moderate relative effectiveness. Thus, it can be concluded that there is influence the use of the demonstration method through kahoot on learning outcomes of theme 4 sub-theme 1 learning 1 for fourth grade students at Curahpoh 01 Bondowoso State Elementary School

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