

THE INFLUENCE OF THE PROJECT BASED LEARNING MODEL ON THE UNDERSTANDING OF ISLAMIC RELIGIOUS EDUCATION LEARNING IN CLASS 5 STUDENTS AT SD PLUS MUTIARA INSANI PURWAKARTA

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Abstract

This research aims to determine the effect of the project-based learning model on understanding Islamic Religious Education learning for grade 5 students at SD Plus Mutiara Insani Purwakarta. This research method uses a quantitative experimental method with Probability Sampling sampling techniques – the number of samples used as respondents was 30 people. The research and data analysis results show that the project-based Learning learning model and the lecture method have a significant influence, as indicated by the average or mean of the T-Test results. The lecture method was used at 55.41, while the project-based Learning learning model was used at 55.41. 55.41. 78.96, there is an influence between the results of student understanding in learning using the lecture method and the Project Learning learning model, which is indicated by an increase in learning understanding results of around 23%. This is again reinforced by significant results, namely the sig value. (2-tailed) with a value of $0.000 < 0.361$. The Pretest average, with a percentage of 31.96%, is in the poor category, while the Posttest average, with a rate of 70.38%, is in the excellent category. Therefore, it can be concluded that there is an influence between the Project Learning learning model and the lecture method on increasing the results of understanding Islamic Religious Education learning for grade 5 students at SD Plus Mutiara Insani Purwakarta using the Project Learning and lecture learning model.

Keywords: *Project Bed Learning Model; Understanding Islamic Religious Education Learning*

A. Introduction

The learning model is one of the tools that helps a teacher in delivering separated learning. However, at SD Plus Mutiara Insani, it was still found that learning was not effective. Based on the results of interviews with Islamic Religious Education teachers, there were several problems that hindered the Ramadhan fasting factor on students' understanding, including: there were still some students whose PAI understanding scores were below the KKM, method less innovative learning makes students bored of learning

PAI, there are still some students who do not understand PAI learning using conventional methods. The background to the problem is that SD Plus Mutiara Insani Purwakarta has several problems that hinder the Ramadhan fasting factor in students' understanding, including: (a) there are still some students whose PAI understanding scores are below the KKM; (b) less innovative learning methods make students bored of learning PAI and (c) there are still some students who do not understand PAI learning using conventional methods.

The urgency regarding Project Based Learning and understanding PAI learning is that students can know and understand the problems they face themselves, and students can learn with more creative learning models, so that students do not get bored with direct learning (Mergendoller et al., 2006). That way, students will be more interested in learning and can express their various opinions. Students can be more interested in learning and can express their various opinions (Panca & IPradana, 2017). The author chose the Project Based Learning learning model (Suyadi, 2014), because this learning model is building-based learning that presents students with problem situations that can increase understanding of Islamic Religious Education learning in the material of Ramadan fasting to form noble morals (Ayatullah, 2020). Using Project Based Learning can help students connect fasting material with students' situations and experiences, so that students can come up with ideas in the form of solving problems that often occur during Ramadan fasting, and teachers can find out every student's progress in problems during Ramadan fasting (Simanjuntak & Sudibjo, 2019; Simatupang & Surya, 2017; Yunita et al., 2020).

B. Method

The research method used in this research is a quasi experiment with a Nonequivalent Control Group Design (Sugiyono, 2012). This research was carried out by providing treatment to the experimental group and providing a control group as a comparison. This type of quasi-experimental research was determined on the grounds that this research is educational research that uses humans as research subjects. Humans are not the same and are unstable. Therefore, extraneous variables that influence treatment cannot be strictly controlled as desired in pure experimental research. This design consists of two groups, each of which is given a pretest and posttest and then treated using a problem-based learning strategy (project based learning) and without using a problem-based learning strategy (project based learning). Basically, this nonequivalent control group is the same as a pure experimental design of pretest and posttest control group except that the placement of subjects is random. The steps for the quasi-experimental nonequivalent control group design can be described as follows.

Table 1. Research Design Pretest Posttest Control Group Design

Group	Pretest	Treatment	Posttest
Eksperimen	O ₁	X	O ₂
Control	O ₃	-	O ₄

Information:

E = Experimental group (group treated with problem-based learning strategies/project based learning)

K = Control group (group that was not treated with problem-based learning strategies/project based learning)

O1 = experimental group pretest

O2 = experimental group posttest

O3 = pretest control group

O4 = control group posttest

X = Use of problem-based learning strategies (Project Based Learning) in PAI learning

Based on the experimental research method above, used in this research is True Experimental Design in the form of Pretest-Posttest Control Group Design. As explained by Sugiyono (2013), Pretest-Posttest Control Group Design means "there are two groups selected at random, then given a pretest to find out whether the initial conditions are any differences between the experimental group and the control group". In this research, the objectives to be achieved are to determine the effect of the Project Based Learning model on students' understanding of learning in PAI subjects in control class 5A and experimental class 5B at SD Plus Mutiara Insani Purwakarta. The research location is at SD Plus Mutiara Insani which is domiciled on Jl. Ipi Gandamanah No 1 Rt 01/01 Munjuljaya Village, Purwakarta District, Kab. Purwakarta - West Java Province. This research was conducted in class 5A and class 5B. Research Time January semester 2 of the 2022/2023 academic year. This research was carried out in several stages, namely: (1) the initial measurement stage of the Islamic Religious Education learning comprehension ability (pretest) for both groups, (2) the treatment stage for the experimental group and the control group, (3) the final test (posttest) stage of filling in the questions (students). The population is a sample of class V students (Abubakar, 2011). The type of sampling used is total sampling, the reason this type of sampling is used in this research is because of the sample in the research the number it takes is equal to the population. Therefore, researchers only took 30 samples from the total population. Following are the details of the research sample. Type and source of data The type of data used by researchers is interval, namely the type of data in the form of treatment using a Likert scale. The Likert scale is suitable for measuring the attitudes and responses of a respondent (Sugiyono, 2015), in this case the respondent is asked to fill in the questions given by the researcher regarding understanding of PAI learning about Ramadan fasting with the learning model used by researchers in Islamic Religious Education subjects. The percentage of 20-36 is very good. 37- 52 Not good. 53-68 Fairly good. 69-84 OK. 89-100 Very good

Mode is the concentration of data that often appears or is often referred to as the value that has the largest value in a data distribution. To find out the mode. Median is the center of data that is in the middle of a distribution of values that have been arranged starting from smallest to largest. There are two types of data distributions used by medians. Mean is the concentration of data at the average value. Used primarily when

other statistical techniques, such as hypothesis testing are to be performed on the data. The mean is divided into two, including: ungrouped data and grouped data. Each has a separate formula for determining the average or mean. Range is the largest data difference minus the smallest data difference or is reflected in the difference between the frequency distribution between the largest values. Minus the smallest value, Variance is the average of the data deviation quadrants. The variance used is the sample variance, the sample variance is symbolized by S while the population variance is symbolized by α . Standard Deviation or what is better known as standard deviation is a data measure that describes how wide the spread of each data value is to the average value. To find out the value of the standard deviation. Test Prerequisites for Analysis of each Variable.

Analysis of each variable is an interpretation of each research variable. The aim of analyzing each variable is to find out what the initial conditions of each class, both the control class and the experimental class, were to receive different treatment. The prerequisite tests in this research use the normality test and homogeneity test. The Normality Test is a test that measures the data distributed to obtain a normal distribution. The normality test in this study used the Lilliefors technique. To determine the normality test, it is necessary to have levels/guidelines in the normality test as follows: 1. Determine the significance limit for the normality test $\alpha=0.05$. 2. Compare p with the significance tested. 3. If the significance is more than 0.05 then it is normally distributed. 4. If significance is less than 0.05 then it is not normally distributed. (Nuryadi, 2017).

Homegeneity Test a). If the significance value (sig.) > 0.05 , then the variance of two or more population data groups is the same or homogeneous. b). If the significance value (sig.) < 0.05 , then the variance of two or more population data groups is unequal or not homogeneous. Checking homogeneity is an important step in statistical analysis, because if homogeneity is not met, this can affect the results of the statistical analysis and the interpretation of the results. If the data do not meet the assumption of homogeneity, it may be necessary to use more appropriate statistical methods or perform data transformation. Using two different methods. The class that received treatment was the experimental class, while those that did not receive treatment was the control class. To find the value of the two sample t test Hypothesis testing is a test to find out whether research allegations have an influence or not, are accepted or rejected. In this case, the researcher tested the hypothesis using a two sample T-Test. This hypothesis test is intended to determine the differences after treatment between the Experiment class and the Control class. Two Sample T-test hypothesis testing formula.

The provisions in Hypothesis Testing have an effect/no effect, whether H_a/H_0 is accepted or rejected as follows:

1. If $< \alpha$ (0.05), then H_0 is rejected, H_a is accepted
2. If $> \alpha$ (0.05), then H_0 is accepted, H_a is rejected

C. Finding and Discussion

1. Finding

Before carrying out the treatment, the researcher distributed PAI learning comprehension questions to each respondent in each class determined by the researcher. After distributing PAI learning comprehension questions before treatment, the researcher obtained the results data, as follows: Data Before Treatment. Based on the table above, the minimum experimental pretest score = 60, while the control pretest = 50, the maximum experimental pretest = 76, the maximum control pretest = 69, the sum of the experimental pretest = 963, the sum of the control pretest = 947, the mean of the experimental pretest = 68.79, the mean Control pretest=59.19, and Experimental pretest standard deviation=5.206, Control pretest standard deviation=5.492. After carrying out the treatment, the researcher distributed PAI learning comprehension questions to each respondent in each class determined by the researcher. After distributing PAI learning comprehension questions after treatment, the researcher obtained the results data, as follows:

Based on the table above, the minimum score for the Experimental posttest=60, while the Control posttest=50, the maximum Experimental posttest=83, the maximum Control posttest=81, the sum of the Experimental posttest=1070, the sum of the Control posttest=972, the mean of the Experimental posttest=76.43, mean Control posttest = 60.75, and Experimental posttest standard deviation = 6.560, Control posttest standard deviation = 5.191.

Improved Data Analysis

T-Test

The tests used by researchers are (Independent Sample Test). The independent sample test is a T-test with the aim of finding out the influence between two classes with different respondents. In this case, the researcher conducted an independent sample test on class 5A which was the control class and class 5B which was the experimental class. The basis for decision making is if $< \alpha$ (0.05), then H_0 is rejected, H_a is accepted, and if $> \alpha$ (0.05). Paired Sample Test pretest data. Based on the table above, the sig (2-tailed) value is $0.001 < \alpha(0.05)$. With this $< \alpha(0.05)$, then H_0 is rejected, H_a is accepted. Based on the table above, the sig (2-tailed) value is $0.001 < \alpha(0.05)$. With this $< \alpha(0.05)$, then H_0 is rejected, H_a is accepted. Paired Sample Test posttest data. Based on the table above, the sig (2-tailed) value is $0.000 < \alpha(0.05)$. With this $< \alpha(0.05)$, then H_0 is rejected, H_a is accepted. Based on the table above, the sig (2-tailed) value is $0.000 < \alpha(0.05)$. With this $< \alpha(0.05)$, then H_0 is rejected, H_a is accepted.

Change in Results

Based on the table above, there is a change in the results obtained by the experimental class, namely 78.96, while the control class was 55.41. So it can be concluded that there is an influence of the Project Based Learning learning model and the lecture method on the influence of the learning outcomes of class 5 Islamic education subjects at SD Plus Mutiara Insani Purwakarta, there is a significant change.

2. Discussion

Results of Islamic Education Learning Understanding on Fasting Material Before Using The Project Based Learning Model

Researchers distributed learning comprehension questions to grade 5 students at SD Plus Mutiara Insani Purwakarta. The aim is to provide the results of students' learning understanding using a model of knowing the results of students' learning understanding before treatment using the Project Based Learning learning model. Based on data analysis, it can be concluded that Islamic Education learning using the lecture method towards improving learning outcomes has a mean value = 59.81, standard error of mean = 1.229, median = 59.50, mode = 55, standard deviation = 4.916, variance = 24.163, range =14, minimum =55, maximum=69, sum =957. The average percentage of all students is 31.96% which can be categorized as not good, as calculated $1,918/600 \times 100\% = 31.96\%$. According to Sundahry (Sundahry, et al., 2023) in his book, he explains that the lecture method is the learning method most often used by teachers, especially in Indonesia, because this method is practical and easy to use (Putra, 2017).

Results of Islamic Education Learning Understanding on Fasting Material After Using The Project Based Learning Model

Researchers provided questions on the results of grade 5 students' understanding of learning at SD Plus Mutiara Insani Purwakarta. The aim is to determine the results of students' learning understanding using the Project Based Learning learning model experiment. Based on the results of data analysis, it is concluded that the Project Based Learning learning model increases the learning outcomes of class 5 students in Islamic Religious Education subjects. This is proven by the results. Based on the table above, the size of the centralization and distribution of data from the pretest results obtained a value of Mean = 96.07, standard error of mean = 0.567, median = 96.50, mode = 98, standard deviation = 2.129, variance = 4.5333, range = 5, minimum = 93, maximum = 98, sum = 2112. The average percentage of all students is 70.38% which can be categorized as good, as calculated $4,223/600 \times 100\% = 70.38\%$.

According to Daryanto and Rahardjo (2012) the project based learning model has the following advantages (Elvis Napitupulu et al., 2016; Lismaya, 2019).

- a. Increase students' motivation to learn, encourage their ability to do important work, and they need to be appreciated.
- b. Improve problem solving abilities.
- c. Make students more active and successful in solving complex problems.
- d. Increase collaboration power.
- e. Encourage students to develop and practice communication skills.
- f. Improve students' skills in managing resources.
- g. Provide students with learning and practice experience in organizing projects, and making allocations of time and other resources such as equipment to complete tasks.
- h. Provide learning experiences that involve students in a complex manner and are designed to develop according to the real world.

- i. Create a fun learning atmosphere, so that students and educators enjoy the learning process.

The influence of the Project Based Learning Model on improving the understanding of Islamic Education Learning for Class 5 Students

Based on data analysis carried out by researchers using the Paired Samples Statistics T-Test with the help of SPSS 22, it shows that there is an average influence between 2 classes, namely the experimental class and the control class. The experimental class had an average of 78.96%, while the control class had an average of 55.41%. With an increase in learning understanding results of around 23%. This is further strengthened by the 2-tailed significance value of $0.000 < 0.361$, which means that the two classes have an influence. So it can be concluded that the hypothesis test H_0 is rejected and H_a is accepted, in this case the conventional method is not effective in influencing the learning outcomes of grade 5 students in Islamic Religious Education subjects at SD Plus Mutiara Insani Purwakarta, while the learning model Project Based Learning is effective in influencing the learning outcomes of grade 5 students in the Islamic Religious Education subject at SD Plus Mutiara Insani Purwakarta.

E. Conclusion

Based on data analysis and research results, the researchers concluded that, as follows: results of Understanding Islamic Education Learning for Class 5 Students at SD Plus Mutiara Insani Purwakarta before using the Project Based Learning model Mean=59.81, standard error of mean=1.229, median=59.50, mode=55, standard deviation=4.916, variance =24,163, range=14, minimum =55, maximum=69, sum =957. The average percentage of all students is 31.96% which can be categorized as not good, as calculated $1,918/600 \times 100\% = 31.96\%$. Meanwhile, the results of Islamic Education Learning Understanding for Class 5 Students at SD Plus Mutiara Insani Purwakarta after using the Project Based Learning model Mean= 96.07, standard error of mean=0.567, median=96.50, mode=98, standard deviation=2.129, variance =4.5333, range=5, minimum = 93, maximum=98, sum =2112. The average percentage of all students is 70.38% which can be categorized as good, as calculated $4,223/600 \times 100\% = 70.38\%$. Based on data analysis carried out by researchers using the Paired Samples Statistics T-Test with the help of SPSS 22, it shows that there is an average influence between 2 classes, namely the experimental class and the control class. The experimental class had an average of 78.96%, while the control class had an average of 55.41%. With an increase in learning understanding results of around 23%. This is further strengthened by the 2-tailed significance value of $0.000 < 0.361$, which means that the two classes have differences. So it can be concluded that the test hypothesis H_0 is rejected and H_a is accepted, with this there is an influence of the Project Based Learning model on increasing the learning outcomes of class 5 students in Islamic Religious Education subjects at SD Plus Mutiara Insani Purwakarta.

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