



# The Effect of Problem-Based Learning Model Assisted By Animation Video on Learning Outcomes of Islamic Education Primary School in Deli Serdang District

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## Abstract

The objective of this study is to comprehend the impact of video age and PBL on Islamic Education grade V primary school students in Deli Serdang District. This examination configuration depends on aggregate insight. One approach taken is the non-equivalent group control design. Utilizing the group arbitrary example technique, all understudies in grade V Deli Serdang District were chosen as subjects for this review. Information was gathered utilizing a pretest-posttest plan. In this experiment, the information retrieval method used is t test with a gain of  $2,317 > t_{table} = 2,012$  for the first school and  $2,041 > t_{table} = 2,019$  for the second one with a threshold of 0.05, respectively, indicating that  $H_1$  is accepted while  $H_0$  is rejected. It is important to note that using video animation as part of the PBL model in both primary schools results in better outcomes.

**Keywords:** Learning outcomes, Problem Based Learning, Video animation

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## INTRODUCTION

Education is a long process that has become an integral part of life in the world, because through a good education cycle individuals can obtain and master information for their lives. Hamalik (2009:3) asserts that training is a cycle that affects students so that they can adjust well to their current situation and bring changes to society.

According to Arifin (2011:4), education is also defined as mental, moral and actual preparation that can produce civilized individuals. This is in line with the idea that schools develop character and instill a sense of duty. So to foster a good personality, a strict school is needed. Islamic religious education that is taught in accordance with religious teachings is one of them with the aim of producing someone who has good character, faith and devotion to Allah SWT. In addition, the goal is to produce individuals who are honest, fair, disciplined, and socially responsible.

In essence, Islamic Education is a regulatory effort to assist individuals or groups of students in fostering an Islamic worldview (the most effective method for living and engaging life according to Islamic lessons and values), an Islamic worldview appears in one's capacity to live daily life. (Primadoniati, 2020: 78). Islamic Education learning in elementary schools still emphasizes a lot on the reasoning aspect or usually mahfuz which then becomes dominant,

making students sluggish and less enthusiastic in this lesson. This will greatly affect student learning outcomes because it is difficult to understand what the teacher has taught.

It should be possible for educators to provide clear models and clarifications to students. Learning models that are tailored to the material to be taught to students also have a very important influence. The resulting learning should provide concrete explanations to students such as introducing the types of Allah's book through videos or pictures shown or applying various ways and models of learning to enable concrete forms to be understood by children.

Given the impact of perceptions made in primary schools in Deli Serdang, including SDN 104197 Kambir and SDN 101744 Kambir, which can be concluded to still predominantly apply a teacher-focused learning process and have not seen the results they expected, it can be seen that the problems that are often seen in learning completed by teachers in these schools are that students often latently just get data and do not give serious reactions. In addition, during the learning process there are no activities that involve students to express opinions and seek additional information from other references. According to the Islamic Education teacher's analysis, there were several students whose learning outcomes remained below the KKM on the post-test exam in the previous material, such as from the data from interviews with Islamic Education teachers at SDN 104197 Klambir, there were 15 out of 25 students whose scores did not meet in class 5A. This was also seen at SDN 101744 Klambir, there were 17 out of 23 students who did not complete, which shows that the mean student learning outcomes are still low and it is proposed to take remedials. Based on interviews and observations, teachers only use the direct instruction learning model, causing students to become repetitive.

Given the information on Islamic Education learning outcomes and the implementation of discovery that has been done, educators should also foster the nature of learning. As a result, teachers are able to understand students who continue to use learning models that are less effective, less effective in providing satisfactory learning outcomes for students. PBL model is one of the models that can be used.

A learning strategy that encourages students to learn is Problem-Based Learning by challenging them with logical problems (Surjono.2016:181). By utilizing the PBL model in Islamic Education learning, it develops students' potential to be sensitive to critical thinking in receiving the learning taught by the teacher and provides contextual activities for students to do during the process of learning. The PBL model directs students to solve problems using what you already know. Students who build their own insights, develop their abilities and increase student courage. In the PBL model, the educator's responsibility is limited to encouraging students to participate fully in the learning process. The directions given can be facilitated with the help of learning media such as animated videos to support the material to be learned.

Getting the hang of utilizing recordings will emphatically affect understudies in doing learning exercises freely since, supposing that the media is utilized in a roundabout way, the feelings of understudies will all the more effectively catch and answer the substance or material showed from the video (Salahuddin, et al.2020: 152). The animated video presented can be shown to students as per the material to be instructed so that the use of the PBL model will be easier to implement and student learning outcomes will increase. The animated videos presented can be taken from references that have been developed on social media or self-made animated videos. Teachers present animated videos for students to observe and stimulate learning to not be monotonous so that students have an understanding of critical thinking and problem solving in understanding the material that has been introduced. Understudies who comprehend the material profoundly will positively impact the learning results they accomplish. Learning outcomes are changes experienced by students after experiencing the growth of experiences both mentally, emotionally, and psychomotorically. Learning outcomes according to Kunandar (2015: 62) are certain cognitive, affective, and psychomotor competencies or abilities obtained by students after completing the KBM process.

The Problem-Based Learning model is ideal for improving student learning outcomes because it involves students directly in making connections between the content they learn and the surrounding environment. finally students can see firsthand how the ideas they learn are discovered. In this way learning will be dynamic and fun (Muhammadi & Handayani. 2020:79). Thus, the test will intend to decide the effect of the Issue Based Learning model helped by video animation into accounts on grade school Islamic Education learning results in Deli Serdang.

## **METHODS**

A quasi-experimental design (Quasi Experiment design) is used in this quantitative study. The plan of the type of semi analysis utilized is non-equivalent group control design. This research was conducted at SD Negeri 104197 Klambir on July 22 to 24, 2024 and SD Negeri 101744 Klambir on July 25 to 27, 2024

Hamparan Perak. The populace in this review were all 5th grade understudies of elementary schools in Deli Serdang District. Test method used to indicate the trial room and observation class was the likelihood test. The Cluster Random Sampling technique was utilized for sampling the study. Cluster random sampling, according to Lestari et al. (2017), is a regional sampling method applied to select representatives when the subject or item to be investigated or the source of information is very broad.

For this research, a control class sample and an experimental class sample are required. Before determining the sample, information was sought on the value of the normality test and homogeneity test. Schools were randomly selected to be sampled after the data were normalized and homogenized. Then two representative primary schools were selected to be sampled with each having a test room and an observation room. After obtaining the research sample, a random selection of classes was carried out which would be used as observation rooms and test rooms. Then randomized once again, the test class became class VA and the control class became class VB.

Information collection in this test was applied by conducting initial tests on the trial class as well as the control class to obtain initial information about student dominance in the material "Knowing the Book of God". Then the analyst led the learning using the PBL model in the test class assisted by the energized recording. After the PBL model was given to the test room, the class teacher used conventional learning to teach the observation class using the lesson plan he made himself. Then the scientist led a post-test in the control class and the experimental room to monitor changes in student learning outcomes. According to the type and plan of this test, specifically the non-equivalent pretest-posttest control meeting plan.

Research information through learning scores, especially pretest and posttest results. The device used in the test is a test instrument composed as a goal test consisting of 20 approved decision questions. According to Lestari & Yudhanegara (2017), the validity test is carried out on grade VI subjects at least one stage higher than the subject being examined or who have obtained or obtained the material to be examined.

The information inquiry method is completed to answer the problem definition and test the theory. The information inquiry in this exploration is as a t-test, which is completed after the examination conditions of the t-test are met. The information inquiry in this exploration is an essential test for investigation and theory testing. The essential test of the examination consists of the consistency test with the Lilifors test and the homogeneity test with the F test.

## RESEARCH RESULT

The research information was first collected through the completion of the pretest as a preliminary step towards the control and exploration classes to obtain preliminary information on students' dominance of the material in the books of God. Then using animated videos and Problem Based Learning model for assessment in the experimental room. The observation room studied either conservative learning or lecture after the experimental class was taught using the PBL model, depending on what the teacher used every day. After that, a posttest was used to collect data from both the control room and the experimental room to see changes in children's learning scores. Data collection was conducted at two primary schools in Deli Serdang District, namely SDN 104197 and SDN 101744 Klambir. Each of the two schools has one control room and one test room, including the test room for class VA and the observation room for class VB.

In light of the consequences of the review, to see the underlying grades of Islamic Education material on the books of God, the preliminary room and the perception room at SDN 104197 Klambir can be found in the table underneath:

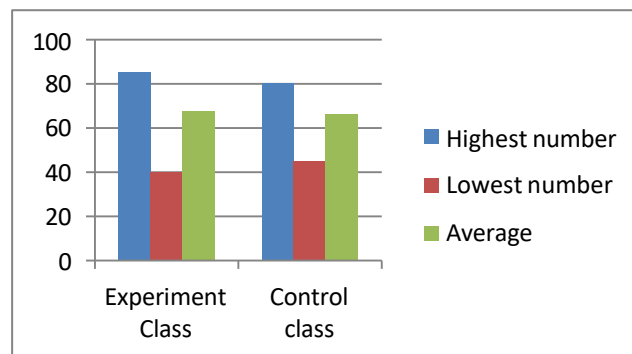
**Table 1. Recap of Pre-Test Results of Learning Outcomes of SDN 104197 Klambir**

Indicators	Pre-Test	
	Experiment Class	Control Class

<b>Total</b>	25	23
<b>Highest number</b>	85	80
<b>Lowest number</b>	40	45
<b>Average</b>	67,60	66,08
<b>SD</b>	13,77	10,76
<b>variance</b>	189,83	115,810

Based on the table above, the test room which amounted to 25 children got the top result of 85 and the bottom result of 40. From the results of the trial room, the SD was 13.77, the variance was 189.83, and the average was 67.60. While the control room of 23 understudies got the least consequence of 45 and the top aftereffect of 80. From the consequences of the perception class, the average was 66.08, the SD was 10.76 and the variance was 115.810. A

correlation graph of the pretest consequences of the test and control classes in Islamic Education learning should be visible underneath for additional data:



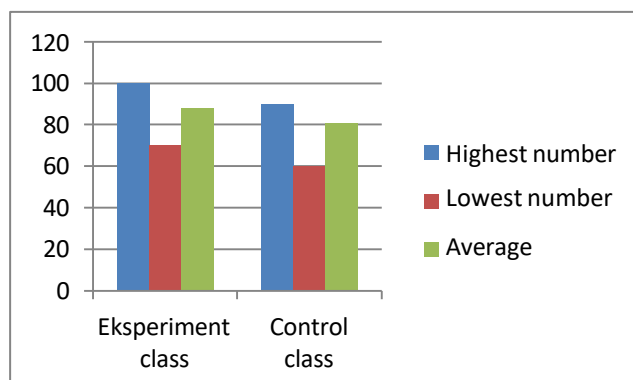
**Diagram 1. Diagram of Initial Test Results Test Room and Control Room**

To find out the impact after receiving Problem-Based Learning treatment assisted by energy recordings in the book of Allah in the trial class, the two sample classes at SDN 104197 Klambir were given a posttest. The following is a table of experimental and observation room learning outcomes based on posttest scores:

**Table 2. Recap of Post-Test Results of Learning Outcomes of SDN 104197 Klambir**

<b>Indicators</b>	<b>Post-Test</b>	
	<b>Experiment Class</b>	<b>Control Class</b>
<b>Total</b>	25	23
<b>Highest number</b>	100	90
<b>Lowest number</b>	70	60
<b>Average</b>	88,00	80,65
<b>SD</b>	6,77	9,33
<b>Variance</b>	45,83	87,05

Based on the table above, the test room of 25 understudies had a top number was 100 and a lowest number was 70. A typical score of 88, a SD of 6.77, and the variance value 45.83 were derived from the test room scores. While the control class got scores ranging from 60 to 90 as many as 23 students. The standard deviation was 9.33, the variance value was 87.05. The average result of the observation class is 80.65. The following diagram shows that the learning scores of the test room in the material of the books of God are superior compared to the observation room:



**Diagram 2. Post-Test Score Diagram Test Room and Control Room**

In view of the assessment of pre-test and final test data at SDN 104197 Klambir on the learning scores of the test and control classes, there is a distinction in learning result scores between the two classes. The trial class had a normal pre-test score of 72, while the observation room had a mean initial test score of 66.08. While the test room had a final test result of 88, the observation room had a final test result of 80.65. The table shows the differences in pre- and final test scores between the control and exploration rooms.

**Table 3. Difference in Initial and After Test Results in Sample Room**

Area	Mean		Upgrade
	Pre-Test	Post-Test	
Eksperiment Class	67,60	88,00	20,40
Control Class	66,08	80,65	14,57

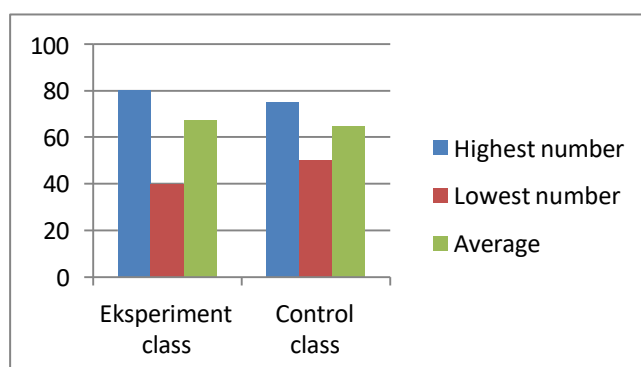
Then to see the consequences of examination in the subsequent example school, in particular SDN 101744 Klambir, specifically the learning aftereffects of the Islamic Education pre-test worth of the material of the books of God, the test room and the control room should be visible in the table underneath:

**Table 4. Recapitulation of Initial Test Scores of Learning Outcomes of SDN 101744 Klambir**

Indicators	Pre-Test	
	Experiment Class	Control Class
Total	23	20
Highest number	80	75
Lowest number	40	50
Average	67,39	64,75
SD	12,95	8,50

<b>Variance</b>	167,885	72,30
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Based on the table above, the exploration class of 23 students obtained the top result of 80 and the bottom result of 40. From the results of the exploration room, the average value is 67.39, the SD was 12.95 and this variance was 167,885. While the 20 students in the control class received the highest score of 75 and the lowest score of 50, The average score of the observation was 64.75, the SD was 8.50, and the change was 72.30 from the score. For more information, a comparison diagram of the trial and observation class pretest results on Islamic Education learning can be found below:



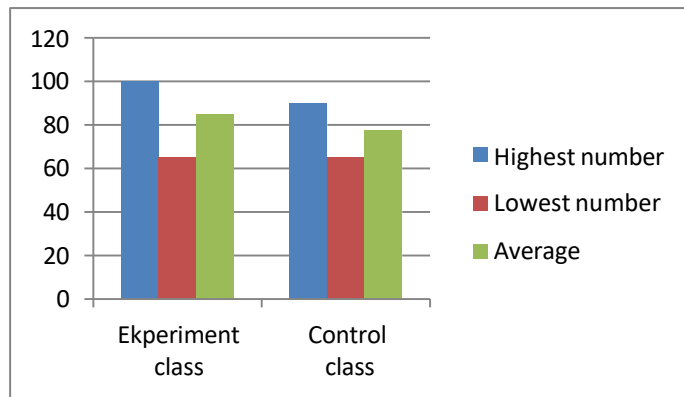
**Diagram 3. Initial Test Score Diagram Test Room and Observation Room**

In seeing the impact after the PBL learning model assisted by animated videos was used on the books of God in the trial class, both sample classes at SDN 101744 Klambir were given a posttest. The following table shows the learning results of the trial room and observations based on the final test scores:

**Table 5. Recapitulation of Post-Test Results of Learning Outcomes of SDN 101744 Klambir**

<b>Indicators</b>	<b>Post-Test</b>	
	<b>Experiment Class</b>	<b>Control Class</b>
<b>Total</b>	23	20
<b>Highest number</b>	100	90
<b>Lowest number</b>	65	65
<b>Average</b>	84,78	77,50
<b>SD</b>	9,94	6,78
<b>Variance</b>	98,81	46,05

The experimental class of 23 students obtained a top result of 100 and a bottom result of 65 as shown in the table above. The mean score of the experimental room was 84.78, the SD was 9.94, and variance was 98.81. While the observation class with a total of 20 children got the top result of 90 and the smallest score of 65. The SD was 6.78, variance was 46.05. Average of the control class was 77.50. The following diagram shows that the learning outcomes of the experimental class on the material of the books of Allah are superior compared to the observation room:



**Diagram 4. Diagram of Final Test Results Test Room and Observation Room**

Considering the examination of preliminary and final test information at SDN 101744 Klambir. Average worth of the pre-test of the trial class was 67.39 and average worth of the pre- test of observation class was 64.75. While the post-test aftereffect of the perception room was 77.50, the last test consequence of the exploratory room was 84.75. The connection of the underlying and last grades between the trial and control rooms ought to be found in the table.

**Table 6. Correlation of Initial and After Scores in the Sample Room**

Area	Mean		Upgrade
	Pre-Test	Post-Test	
Eksperiment Class	67,39	84,78	17,39
Control Class	64,75	77,50	12,75

Before conducting speculation testing, the ordinarieness test and homogeneity test were first completed to decide the effect of the Issue Based getting grasped learning model helped by jazzed up accounts on the learning results of grade 5 primary school understudies in Deli Serdang District on the material of the books of God. Test the ordinarieness of learning results in the example class utilizing the Liliefors test. The ordinarieness test upsides of the underlying and last test information in the test room and perception room of SDN 104197 Klambir should be visible in the rundown underneath:

**Table 7. At SDN 104197 Klambir, the Findings of the Normality Test Calculation of the Sample Space Were Obtained**

Class	Data	L <sub>o</sub>	L <sub>table</sub>	N	Descr.
Eksperiment Class	<i>Pretest</i>	0,129	0,180	25	Normal Distribution
	<i>Posttest</i>	0,151	0,180	25	Normal Distribution
Control Class	<i>Pretest</i>	0,098	0,184	23	Normal Distribution
	<i>Posttest</i>	0,158	0,184	23	Normal Distribution

The continued impact of the early-test and final-test information trials on exploration class and observation class at SDN 101744 Klambir should be visible in the table underneath:

**Table 8. At SDN 101744 Klambir, The Findings Of The Normality Test Calculation Of The Sample Space Were Obtained**

Class	Data	$L_0$	$L_{table}$	N	Descr.
Eksperiment Class	<i>Pretest</i>	0,171	0,184	23	Normal Distribution
	<i>Posttest</i>	0,163	0,184	23	Normal Distribution
Control Class	<i>Pretest</i>	0,161	0,190	20	Normal Distribution
	<i>Posttest</i>	0,165	0,190	20	Normal Distribution

From the results of the table above, both sample schools are normally distributed, it can be seen that the price of  $L_0 < L_{table}$ . After the normality test was carried out, homogeneity is tested using the F test. The pretest of control room and experimental class at SDN 104197 Klambir has a homogeneous variance (the same) because  $F_{count} < F_{table} = 0.610 < 2.00$ . In addition, the variance of the final test of the observation room and the trial is declared homogeneous (the same) because  $F_{count} < F_{table} = 1.89 < 2.00$ . Then in the F test at SDN 101744 obtained  $F_{count} < F_{table} = 0.430 < 0.468$  so that the pretest has a homogeneous difference (the same). Furthermore, the final-test of the observation and exploration class also obtained  $F_{count} < F_{table} = 0.466 < 0.468$  so that the posttest changes were homogeneous (the same).

Perform hypothesis testing using the t test so that if  $t_{count} > t_{table}$ , so  $H_1$  was accepted and  $H_0$  was rejected after directing essential checks with normality and homogeneity tests. The value calculated using the research results from SDN 104197 Klambir  $2.317 > 2.012$  and at SDN

101744 obtained a value of  $2.041 > 2.019$ . Then it can be concluded that the hypothesis in the study in both sample schools specifically animated videos and problem-based learning models have a significant influence on the learning results of fifth grade elementary school students on the material of the books of God in Deli Serdang District.

In light of the consequences of the review, there is a distinction in learning results between the preliminary class that uses an issue-based learning model supported by energized recordings and the observation room that utilizes regular learning with educators explaining. The t-test results in two sample schools show this, namely at SDN 104197 obtained  $t_{count} = 2.317 > t_{table} = 2.012$  and at SDN 101744 obtained  $t_{count} = 2.041 > t_{table} = 2.019$ .

The following is an explanation of learning explained using animated videos and issue-based learning models in the testing room, as well as learning explained in the observation room using conventional models in both sample rooms. The learning process carried out in the test room using the PBL model combined with observation of the animated video as an initial explanation of the material to be taught requires students to think critically, be active in cooperating with groups, be able to solve problems and willing to share their thoughts to find solutions and encourage students to learn how to solve context-specific problems. This is certainly in line with Surjono's (2016:181) belief that the PBL model motivates students to learn by presenting contextual problems. In addition, he also agrees with Fathurrahman (2016) who argues that the goal of the issue-based learning model is to help students become more assertive thinkers, and become dynamic and valiant students.

The application of PBL assisted by animated videos will provide good things for understudies in completing learning exercises autonomously since, supposing that the media is utilized in a roundabout way, the feelings of understudies will all the more effectively catch and answer the substance or material showed from the video and make social connections in the work gathering and understudies comprehend the thoughts coordinated, because students will find it independently.

On the other hand, conventional learning was utilized for learning in the control class. Through learning, the teacher controls the educational experience while the learners only get the material from the educator. Learning activities usually follow the lecture method, which emphasizes the verbal communication of information. Educators consider so many parts but children are usually boring because children only



understand the material they understand.

According to Sanjaya's assessment (2013: 261), the reason for regular learning is that students as recipients of data are not involved and educators act as determinants of the course of the developing experience. As a result, students in the control class whose learning uses regular learning techniques such as lectures become inactive and bored in class because there are no activities that encourage students to solve their own problems given by the teacher so as to make them active learners.

## CONCLUSIONS

In view of the examination and conversation of exploration information, it tends to be reasoned that vivified recordings assist understudies with learning better while showed utilizing the Issue Based Learning model. the books of Allah are greater in contrast and student learning scores show using normal learning, namely the lecture method in grade V primary school in Deli Serdang District. This is shown by the consequences of the t test with a degree of importance of 5% (95% certainty level) in the two sample schools obtained  $t_{count} > t_{table}$ , namely at SDN 104197 obtained  $t_{count} = 2.317 > t_{table} = 2.012$  and at SDN 101744 obtained  $t_{count} = 2.041 > t_{table} = 2.019$  indicating learning outcomes in Islamic Education learning material on the books of God of the two schools in the experimental and control rooms are relevant / significant different.

The above assertion is reinforced by the difference in normal scores after implementing learning in the experimental group and benchmark group. Respectively at SDN 104197 and SDN 101744, the experimental group used the PBL model with animated videos to learn Islamic Education materials, and the control room used ordinary learning with lectures to learn Islamic Education materials of the book of Allah 80.65 at SDN 104197 and 77.50 at SDN 101744 Klambir. So it tends to be reasonable that the PBL model assisted by energized recordings fundamentally affects the learning scores of students in Islamic Education learning in both sample classes of fifth grade primary school students in Deli Serdang District.

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