

THE EFFECT OF PROBLEM-BASED LEARNING METHOD ON LEARNING OUTCOMES OF PANCASILA EDUCATION FOR GRADE V STUDENTS OF SDN BARU 06

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ABSTRACT

These research focuses on growing learning outcomes and determining feasibility there is an influence at Pancasila Education learning outcomes using the Problem Based Learning learning method for students at V SDN Baru 06 for the 2023-2024 academic year. The The discussion technique applied is a quantitative discussion technique using an applied discussion design being Quasi Experiment by Posttest-only Control Group Design type and the sampling technique used is Purposive Sampling. Next, the data was analyzing for the The conditional experiment is the Normality experiment applying the Liliefors experiment, obtaining the control class $Lo < Lt$, namely $0.1478 < 0.1674$ and the experimental class $Lo < Lt$, namely $0.1353 < 0.1645$, so it the conclusion drawn is both data are distributed well. The results of the homogeneity experiment using Fisher's experiment are $Fcount < Ftable$, namely $1.342 < 1.898$, So the conclusion is drawn that the homogeneity experiment found homogeneous group variance data distribution. On hypothesis testing, the t-test was using to obtain $tcount > ttable$, namely $3.303 > 2.004$. Thus, H_0 are rejected also are is accepted, which states that impact was found of the problem based learning method at the Pancasila learning outcomes acquisition of class V grader at SDN Baru 06. With the acquisition of impact size trials 0.817, which means the impact at the problem based learning technique is very high at the results. Teaching Pancasila Education for Class V Students of SDN Baru 06.

KEYWORDS *Effect of Problem Based Learning Method, Learning Outcomes, Students.*



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INTRODUCTION

The 1945 Constitution and Law No. 20/2003, which are based on religious values, culture, and the scientific and technological progress, require educators for design learning methods that are in accordance with the dynamics of education being experienced by this nation.

In creating the ability to think and constructivism-the creation of knowledge-

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is a potential that can be realized. but less in the training of students' analytical skills due to the lack of giving analytical questions known in research (Ardianti *et al.*, 2021; Kartini and Dewi, 2021; Rahman, 2022)..

In general, the subject of Pancasila Education is one of the disciplines that is considered poorly understood by students. The students clearly showed this in class V of SDN Baru 06 Pagi in the 2023/2024 academic year obtained 60% of students did not have the ability to solve problems in Pancasila Education lessons and found it difficult to follow and understand the learning. (Asrifah *et al.*, 2020; Ridhuan *et al.*, 2021; Putri *et al.*, 2023). According to analysis results made at SDN Baru 06 and obtaining joint interviews Pancasila Education instructor.

Given the aforementioned problems, alternative education is needed to improve teaching standards through imaginative and creative activities, one of which is providing content that is interesting and engaging for students (Triyanto and Fadhilah, 2018; Ridwan *et al.*, 2021; Ndraha and Juwita, 2023; Yuliyanto *et al.*, 2023). Among the methods that can be implemented to make the learning process more interesting is by implementing the *Problem Based Learning* learning method.

In Problem Based Learning, the first rule is to give a problem. The learning process begins when students are confronted with the real-world problem structure that allows them to understand why they need to study educational information. They will collect and examine data from the learning material given to them in order to be able to answer the problems they face. The issue must also be able to extend the relevant concepts and ideas. By applying problem-based learning methods, students will learn how to use interactive processes to dig up the knowledge they have, identify the necessary information, collect data, and collaborate to evaluate hypotheses based on the information collected. Meanwhile, teachers act more as facilitators and tutors in exploring and finding hypotheses and making decisions.

Problem Based Learning or Problem-Based Learning is a process of applying each learning method to the learning process. According to (Astutik 2023) presenting the steps of problem based learning are as follows :

Table 1. The Steps of Problem Based Learning

Step	Teacher and Student Activities
1. Orientation of students to problems	The teacher outlines the purpose of the lesson as well as the equipment or logistics required. The teacher encourages the student to participate in the real-world problem-solving exercise that has been selected or determined.
2. Organize students to learn	Educators help students in understanding and planning learning tasks that relate to the problem will be the focus on the previous step.

3. Guiding individual and group research	Teachers encourage students to conduct experiments and obtain relevant data to obtain the clarity needed to solve problems.
4. Formulate and present the work	As a result of problem solving, teachers help students in planning or creating relevant work, which can be reports, videos, or methods.
5. View and evaluate problem-solving activities	Teachers support students in reflecting or assessing how they solve challenges.

1. Stage 1: Guiding the student towards the problem, the teacher clearly explains the purpose of learning, gives motivation for the lesson, and explaining what is expected of the student. The teacher gives a detailed explanation of the learning process and procedure.
2. Stage 2 : The organization of students to learn requires the development of their competences. Therefore, students need help in planning their tasks.
3. Stage 3: directing individual or group investigations. The investigation process can be independently or collaboratively guided. Investigation techniques can involve the collection of experimental data and the formulation of hypotheses.
4. Stage 4: Create and display the work. The teacher asked several individuals or groups to present the results of their problem solving and to help students in difficulty. This activity helps teachers to assess the students' understanding and mastery of questions related to the learning they are learning.
5. Stage 5: Learning and highlighting the problem-solving process. It helps teachers analyse and evaluate students' thinking processes, research skills, and intellectual abilities. At this stage, the teacher asks the student to reconstruct the reasoning and activity that he has experienced during the various stages of learning.

By offering students real-world challenges, the PBL paradigm puts students at the center of the studying activity and encourages them to find solutions. This method places the emphasis of the lesson on problems that the students themselves must solve. The role of the educator is limited to that of a facilitator, offering advice to students while they work through their own challenges and fix their own problems, with the educator's responsibility only to facilitate and guide students. (Fatimah *et al.*, 2023; Ningsih *et al.*, 2023). The benefits of the PBL method include: increasing learning activities for students, pushing the limits of their abilities and giving them a sense of achievement when they learn new information; teaching them how to apply their knowledge to solve real-life problems; and supporting them as they develop new knowledge and take responsibility for their education. (Akhyar and Dewi, 2022; Pambudi *et al.*, 2023).

Students should be taught the values of Pancasila because they will be the heirs of the nation and continue the leadership of the present. Through Pancasila Education training, elementary school children are taught the importance of upholding the principles of Pancasila. The purpose of Pancasila education is to develop attitudes and behaviors of individuals and groups, as well as their knowledge and ability to implement the Pancasila values. Engagement in society and social life is also the basis for secondary education. The basic skills taught in each session are aligned with the character aspects contained in Pancasila's prayer. Particularly in basic education, the cultural practices that originate from Pancasila are not and are not immediately adopted by the system of implementation of Pancasila's ideals in educational institutions. One way of applying the theme of citizenship is by looking at how globalization has evolved, by considering the ideals of Pancasila that are the basis of the values of his character. Therefore, customization becomes an indirect means of achieving most of the implementation of Pancasila's ideals.

Thus, the competence required by students is to be statesmen and societies that have a strong sense of national identity and love for their country, as well as ready to live in a democratic and civilized society that has a strong feeling of national Identity, loves its country, and lives in a civilised society. In addition, it is expected that the students will develop into competitors who behave well and actively participate in fostering a peaceful life based on Pancasila values in building a quiet life that is based on the ideals of Pancasila. In this case, it is impossible to separate nationality, values, and philosophy from the educational talents of students.

Based on the above problems, the objectives to be achieved in this research are to ascertain its effect *Problem Based Learning* Method on the Learning Outcomes of Pancasila Education Class V Students of SDN Baru 06.

RESEARCH METHOD

This study used a quantitative variants of experimental study by a quasi-experiment design with a posttest-only control group design. The study populations was every fithth grades learner at SDN Baru 06 in the 2023/2024 school year consisting of 3 classes, namely classes V-A, V-B, and V-C. The samples used were V-B grade students with 28 students and V-C grade students with 29 students. V-A students were not sampled because they did not get permission from the school. The methods for obtaining data that are applied include an objective experiment at form multiple choices totaling 30 questions. The experiment instrument is using for measure learners Pancasila Education learning outcomes on the subject matter that had been given by the teacher. (Haryanto *et al.*, 2016). Data were obtained through assessment as part of the teaching module learning. The data description test applied using a t experiment to determine whether there was no effect on learner studying outcomes by PBL learning method by significantly degree $\alpha = 0.05$. The formula used are the t-test formula to test the similarity of two averages.

RESULT AND DISCUSSION

Data Description

The data obtained is data from research at SDN Baru 06 in the 2023/2024 school year. The data is in the form of control class scores and Pancasila Education experimental classes in class V. The research data is described in more detail as follows:

Data Analysis of Control Class Learning Outcomes

Based at the research conducted, the highest control class learning outcome was 100 also lowest result was 70. The *mean* value is 83 median 85 mode 86 and standard deviation 8. The untensity distribution at the control group studying outcome data is as follows:

Table 2. Data Analysis of Control Class Learning Outcomes

No.	Interval Class	Center Value	Real Limit	Frequency		
				Absolut	Cumulative	Relative
1.	65 - 70	67,5	64,5 - 70,5	4	4	14,29%
2.	71 - 76	73,5	70,5 - 76,5	5	9	17,86%
3.	77 - 82	79,5	76,5 - 82,5	2	11	7,14%
4.	83 - 88	85,5	82,5 - 88,5	9	20	32,14%
5.	89 - 94	91,5	88,5 - 94,5	5	25	17,86%
6.	95 - 100	97,5	94,5 - 100,5	3	28	10,71%
Total				28		100%

According to the above accumulated gains, the following histogram and polygon graphs can be made:

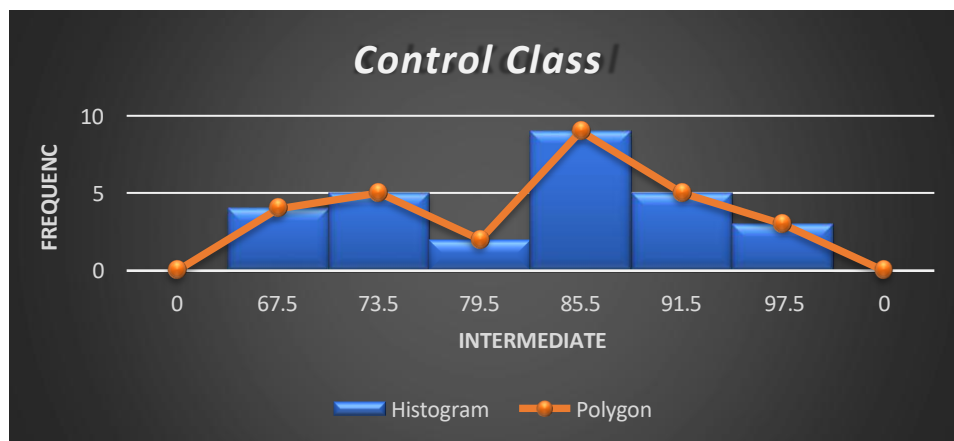


Figure 1. Histogram and Polygon Graph of Control Class

Accordindg by table also graph at the frequency distribution of learning outcomes of the Pancasila Education control class, can be found lest most learners getting the most results at interval between 83-88 as many as 9 students or 32%. The highest score in the 95-100 interval was 3 students or 11%. As for the lowest score with the interval 65-70 as many as 4 students or 14%.

Data Analysis of Experimental Class Learning Outcomes

Based at the research conducted, the highest experimental class learning outcome was 100 also lowest result was 70. The *mean* value is 90 median 92 mode 95 and standard deviation 7. Distribution of teaching intensity of the experimental group outcome data is as follows:(Edison, 2023)

Table 3. Frequency Distribution of Experimental Class

No.	Interval Class	Center Value	Real Limit	Frequency		
				Absolut	Cumulative	Relative
1.	65 - 70	67,5	64,5 - 70,5	1	1	3,45%
2.	71 - 76	73,5	70,5 - 76,5	0	1	0%
3.	77 - 82	79,5	76,5 - 82,5	4	5	13,79%
4.	83 - 88	85,5	82,5 - 88,5	4	9	13,79%
5.	89 - 94	91,5	88,5 - 94,5	10	19	34,48%
6.	95 - 100	97,5	94,5 - 100,5	10	29	34,48%
Total				29		100%

According to score of accumulations, the following histogram and polygon graphs can be made:

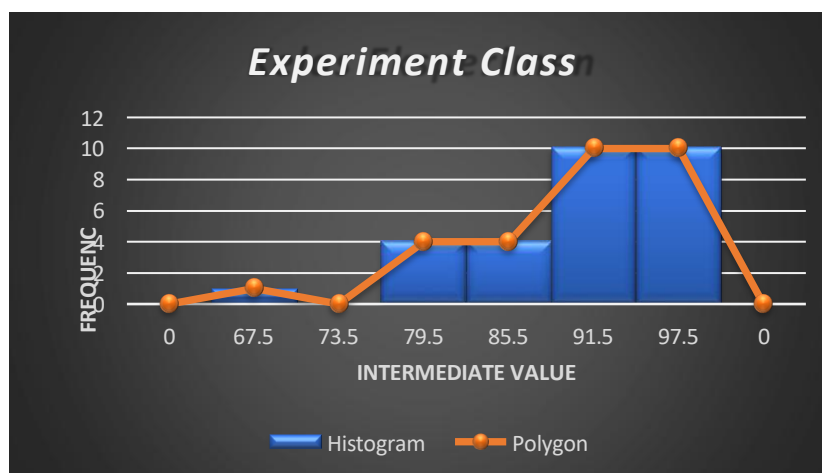


Figure 2. Experimental Class Histogram and Polygon Graphs

Accroding to table also graph at the frequency distribution of studying outcomes at the experimental group, can founded that most students get the most results with intervals between 89-94 as many as 10 students or 34%. The highest score in the 95-100 interval was 10 students or 34%. As for the lowest score with the interval 65-70 as many as 1 student or 3%.

Analysis Requirements Testing

Before conducting hypothesis testing, researchers first tested the appropriate analysis requirements, namely the normality experiment using the *Liliefors experiment* also homogeneity experiment using the *Fisher experiment*. The data from normality experiment also homogeneity experiment results are as follows:

Control Class Data Normality Test

H0 : The sample comes from a normally distributed population

H1 : The sample comes from an abnormally distributed population

After doing the calculation, *Lcount* was obtained as 0.1478. When compared with the *Liliefors* table have a significantly degree of $\alpha = 0.05$ and $n = 28$, *Ltabel* = 0.1674 is obtained. Thus H0 is accepted because $Lcount < Ltabel$, namely $0.1478 < 0.1674$. So the conclusion is the control group learning outcome data through a well-distributed population.

Normality Test of Experimental Class Data

H0 : The sample comes from a normally distributed population

H1 : The sample comes from an abnormally distributed population After doing the calculation, *Lhitung* is 0.1353.

When compared with the *Liliefors* table have significantly degree of $\alpha = 0.05$ and $n = 29$, the *Ltabel* = 0.1645 is obtained. Thus H0 is accepted because $Lcount < Ltabel$, namely $0.1353 < 0.1645$. Found the essence of the experimental group data through a well-distributed population.

Table 4. Calculation Results of Normality Test

Class	n	Lhitung (Lo)	Ltabel (Lt)	Criteria	Description
Control class	28	0,1478	0,1674	$Lo < Lt$	Normally Distributed Data
Experimental class	29	0,1353	0,1645	$Lo < Lt$	Normally Distributed Data

Homogeneity Test

H0 : The variances of the two sample data are homogeneous

H1 : The variances of the two sample data are not homogeneous

Table 5. Homogeneity Test Calculation Results

Group	n	Variance (Fh)	Fcount (Ft)	Ftable	Criteria	Description
Control Class	28	69,312				Homogeneous
Experimental class	29	51,663	1,342	1,898	$Fh < Ft$	Sample Data

From the control class and experimental class data obtained, $S^2 = 69.312$ and $S^2 = 51.663$ with a significant level of $\alpha = 0.05$ with dk numerator = $28-1 = 27$ and dk denominator = $29-1 = 28$. Then $\alpha = (0.05, 27, 28)$ Price *Ftable* = 1.898. Because *Fhitung* is smaller than *Ftabel*, namely $1.342 < 1.898$, it can be concluded that H0 is accepted that the variance of two class is homogeneous.

Hypothesis Testing

The hypothesis being tested is:

Hypothesis

H0 : There's no effect of PBL method at the learning outcomes Pancasila education of fifth grade students of SDN Baru 06. (H0: $\mu_1 = \mu_2$).

H1 : There's a impact the PBL Method at the Learning Outcomes of Pancasila

Education of Fifth Grade Students of SDN Baru 06. ($H_1: \mu_1 \neq \mu_2$).

Hypothesis Testing

Reject H_0 if $t_{count} \geq t_{table}$. Then there's at the PBL method at the studying outcomes of Pancasila education of fifth grade students of SDN Baru 06.

Accept H_0 if $t_{count} < t_{table}$. Then there's no impact at the PBL Method on the learning outcomes of Pancasila Education for fifth grade students of SDN Baru 06.

With the characteristics experiment accept H_0 when $t_{count} < t_{table}$ and otherwise reject H_0 when $t_{count} > t_{table}$. Hypothesis testing using the t-test by testing the difference between two means of paired data. The acquisition t-experiment acumulatio are obtained at this table:

Table 6. Hypothesis Test Calculation Results

thitung	ttable	Description
3,303	2,004	$t_{count} > t_{table}$ Reject H_0 with the conclusion that there's an impact of the PBL method at the learning outcomes of Pancasila education for learner of SDN Baru 06.

According the t-experiment acumulation in the table, it can be seen that the t table uses a significant level of $\alpha = 0.05$ with $dk = 57$, $dk = 57 - 2 = 55$, so the t table price is 2.004. While the t_{count} is 3.303. So the $t_{count} > t_{table}$ is $3.303 > 2.004$. Accroding on the testing characteristics H_0 are rejected and H_1 is accepted.

The essence in these study that the H_1 hypothesis are accepted, which states that there's an effect of the PBL method at the studying outcomes Pancasila Education for learner of SDN Baru 06.

Effect Size Test

Based on the acquisition at the above calculations, the experiment group average is 89.655 for the control group average of 82.857 and for control group standard deviation of 8.325. Then get a result of 0.817. From the data above, extract was taken a high influence of the PBL method at the studying outcomes of Pancasila Education for learners of SDN Baru 06.

Table 7. Effect Size Test

Effect Size	Description
$ES < 0.2$	Low
$0.2 < ES > 0.8$	Medium
$ES > 0.8$	High

Discussion

The learning outcomes assessed in this study are the cognitive aspects resulting from the results of the control class and the experimental class on Pancasila Education subjects. From the data analysis above, the average value of the control class is 83. It can be seen that the average value of the experimental

class is higher than the average value of the control class because the teacher uses problem-based learning methods before students work on problem.

The problem-based learning method emphasizes that students are actively involved in the problem-based learning process, therefore the cognitive value of students in the experimental class is better than the control class. Apart from the average value of the experimental class, to strengthen the research results that the *Problem Based Learning* method also affects the Pancasila Education learning outcomes of fifth grade students, it is evidenced by the t-test which shows the tcount value is greater than the ttable ($3.303 > 2.004$). It can be concluded that the *Problem Based Learning* method has a positive effect on the learning outcomes of Pancasila Education of fifth grade students of SDN Baru 06.

The learning outcomes of Pancasila Education of fifth grade students of SDN Baru 06 are very visible between students who take part in the learning process using the *Problem Based Learning* Method and students who take part in the learning process using conventional learning methods, due to differences in treatment of learning steps and material delivery processes. (Istiadah, 2020; Astutik, 2023). The *Problem Based Learning* method focuses more on student learning activities by being actively involved and directly involved in learning while conventional methods such as lectures emphasize memorization and rarely involve students in the learning process. The conclusion is that the use of the *Problem Based Learning* Method can affect the learning outcomes of Pancasila Education of fifth grade students of SDN Baru 06 in a better direction.

CONCLUSION

The conclusion in this study is that the H0 hypothesis is rejected, H1 is accepted, which means there is an impact of the Problem Based Learning Method on the learning outcomes of the Pancasila student V SDN New 06. Problem Based Learning methods have an impact both on improving learning outcomes and student values on pancasila education learning. Using this method also affects both the response and activity of students in the learning activities of pancasila education, because in this case students have a greater role in learning activities in solving problems. It appears that learning outcomes in the experimental class obtained an average score of 90 with the treatment of the learning method Problem Based Learning is greater in comparison with the learning outcome in the control class with an average rating of 83 without confession. This research is expected to provide a solution or alternative for teachers or readers to innovate in creating a learning environment using learning methods. This method becomes one of the solutions to improve student learning outcomes so that learning becomes more effective and meaningful. This method can be applied to teaching teachers to improve students' learning outcomes. With this, it must be concluded that the Problem Based Learning method has a positive influence on the learning outcomes of students of the fifth grade.

Politically, the method of Problem Based Learning can be applied in the upper class, that is, class V, because students are actively involved to contribute

ideas/opinions. Then with the use of the method Problem Based Learning applied to the learning activities students will improve their learning outcomes because they better understand learning and train the courage and confidence of students. In the case of researchers, subsequent researchers who will be motivated to study these findings using sections or levels and alternative samples can take advantage of the Problem Based Learning approach. Furthermore, in order for problem-based learning activities to provide valuable experience and insights during the research process, researchers can have a deeper understanding of this approach.

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