

The Influence of Problem Based Learning Model on Critical Thinking of Grade VI Elementary School Students in Pancasila and Citizenship Education Learning



Isyarotul Mu'allimah¹, Mohamad Naim², Muhammad Irfan Hilmi³

¹ Student in Masters of elementary education FKIP Universitas Jember-Indonesia

^{2,3} Lecturer in Masters of elementary education, FKIP Universitas Jember-Indonesia

ABSTRACT: The aims of this research is to examine the effect of the Problem Based Learning model on students' critical thinking skills in Pancasila and Citizenship Education Learning at SDN Citrodiwangsan 02 Lumajang. The type of research used is quantitative research with an experimental approach. The sample selected was grade VI students with 3 classes, each consisting of 27 students. Critical thinking ability data was obtained through student critical thinking tests. Data testing was carried out with a significance level of 5%. Data processing was carried out using SPSS with the One Way Anova test. Based on the results of data processing, it can be seen that there was an increase in the average value in each class. In addition, the results of the hypothesis test with a significance level of 5% showed a result of $0.028 < 0.05$ so that H_0 was rejected and H_a was accepted. So the results showed that there was an effect of the Problem Based Learning model on Students' Critical Thinking Skills in Pancasila and Citizenship Education Learning at SDN Citrodiwangsan 02 Lumajang.

KEYWORDS: Problem Based Learning, Critical Thinking, Pancasila and Citizenship Education Learning

I. INTRODUCTION

Education is an inseparable aspect of efforts to shape and create quality human resources. Therefore, education must be able to foster and develop humans so that they can grow and develop in accordance with the demands of the times that are constantly changing and increasingly competitive. Through quality education, humans will be able to answer various demands, face competition, and be able to adapt to the environment both nationally and globally. This is in line with Wartono's opinion that current education aims to produce intelligent and characterful Indonesian people (Ramadhani et al., 2021).

Through Pancasila and Citizenship Education Learning, it is expected that students will be able to create attitudes that are in accordance with the Pancasila principles in everyday life. Therefore, Pancasila and Citizenship Education needs to be given to all students to equip them with logical, critical, communication, and collaboration thinking skills. Critical thinking skills are important for every student, both at school and in everyday life. Students who have critical thinking skills have the capital to be able to solve a problem.

Based on the results of observations, the critical thinking skills possessed by students are relatively low. The majority of students have not been able to provide solutions to problems. This shows that students' critical thinking skills need to be cultivated and developed. Critical thinking skills can be developed through the application of learning models when learning is carried out in schools. Problem Based Learning is one of the learning models that can be applied. The Problem Based Learning model is a learning model whose initial learning presents a problem to solve existing problems in order to provide active learning conditions for students (Septiana & Kurniawan, 2018). PBL, a learning approach, begins a certain topic with complex problems (Suparman, Juandi, & Herman, 2021). It is selected as one of the best solutions because its design can accommodate the enhancement of learning quality by developing students' critical thinking and problem-solving skills (Suparman, Juandi, & Tamur, 2021b; Yew & Goh, 2016).

In the Problem Based Learning model, students' abilities can be optimized, one of which is through direct observation and group work so as to develop critical thinking skills to solve problems and encourage students to be more active and open up opportunities to foster students' natural curiosity to help develop the ability to ask questions and find answers based on existing evidence to improve their critical thinking attitudes. Problem-solving and critical thinking skills are the main objectives of the Problem Based Learning model. Learning is attempted to develop students' critical thinking skills so that the lessons learned at school are not just about doing questions, but are also useful for everyday life.

The Influence of Problem Based Learning Model on Critical Thinking of Grade VI Elementary School Students in Pancasila and Citizenship Education Learning

Several previous studies have shown that the Problem Based Learning learning model can improve students' critical thinking skills. The results of the study by Maqbullah, Sumiati, & Muqodas (2018) stated that the application of the Problem Based Learning model can improve students' critical thinking skills in science learning in elementary schools. The results of the study by Fahrurrozi, Sari, & Fadillah (2022) stated that the application of the Problem Based Learning model can improve students' critical thinking skills in science learning in elementary schools. Likewise, the results of the study by Adawiyah et al (2022) stated that through the Problem Based Learning approach, it can stimulate an increase in critical thinking.

Based on the description above, it can be concluded that the implementation of Problem Based Learning in schools can have an impact on aspects of student success after the learning process. With Problem Based Learning, students are given problems in the learning process so that it has a good influence on improving critical thinking. By providing problems, it can encourage students to improve their thinking skills in solving complex problems in real life so that students' critical thinking culture can grow. With the Problem Based Learning model, learning is no longer centered on the teacher but rather centered on the students. Thus, students have the opportunity to convey ideas, express opinions, and think critically.

II. LITERATURE REVIEW

A. Problem Based Learning

Febrita & Harni (2020) stated that the Problem Based Learning model can help students develop their abilities, especially the ability to identify a problem, conclude a result, and also develop skills in managing time. Meanwhile, according to Evi & Indarini (2021) the Problem Based Learning model is a learning model that uses real problems as material for students to learn to think critically and be skilled in solving a problem so that later students will gain knowledge and meaning from learning. Based on several opinions above, it can be concluded that the Problem Based Learning learning model is a student-centered learning model and can facilitate students to solve contextual problems so that students' critical thinking skills develop.

According to Cahyani et al., (2021) the steps of the Problem Based Learning model, namely (1) Orienting students to the problem, at this stage the teacher explains the learning objectives and prepares the facilities and infrastructure needed. In addition, the teacher motivates students to be actively involved in solving real problems that have been given. (2) Organizing students to learn, at this stage the teacher helps students to describe and organize learning tasks related to the problems that have been oriented in the previous stage. (3) Guiding investigations both individually and in groups, at this stage the teacher provides stimulus to students to collect information and conduct experiments needed to help the process of solving existing problems. (4) Developing and presenting the results of the work obtained, at this stage the teacher helps students in dividing tasks and planning work as a result of solving problems in the form of reports, videos, and so on. (5) Analyzing and evaluating the process of solving problems, at the last stage the teacher helps students to reflect and evaluate the problem-solving process that has been carried out.

B. Critical Thinking

Robert Ennis (1996) stated that, "Critical thinking is a process, the goal of which is to make reasonable decisions about what to believe and what to do." Critical thinking is a process, reasonable thinking to decide what to believe and do. Meanwhile, Judge, et al. (2009) stated that "Critical thinking is essentially a questioning, challenging, approach to knowledge and perceived wisdom." Critical thinking is essentially a questioning, challenging, approach to knowledge and perceived wisdom. Facione (1990: 2) defines critical thinking as "purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or contextual considerations in which that judgment is based".

Based on several opinions above, it can be concluded that critical thinking is a person's ability to reason, analyze, and solve a problem rationally.

C. Pancasila and Citizenship Education Learning

Pancasila and Citizenship Education is one of the compulsory subjects in every elementary school. Civics learning according to BSNP (2006), has the following characteristics: training students to think critically; training students to recognize, choose and solve their own problems; training students to think according to reality and training students to think and socialize with the surrounding environment.

According to Arafat (2020), the objectives of Pancasila and Citizenship Education learning in elementary schools are: (1) Having the ability to think critically, have a nationalistic attitude, and have the spirit of Pancasila; (2) Having national insight in supporting the high NKRI with a sense of nationalism; (3) Having a sense of unity and togetherness in defending the Indonesian nation towards a better one; (4) Having a mindset in solving problems that occur in the country; (5) Having innovative work to raise dignity and honor in front of other countries; (6) Embracing the values of Pancasila in everyday life. Based on the objectives of PPKn learning, teachers are expected to be able to form students' critical thinking skills. To form critical thinking skills in students, teachers must be able to help students develop the abilities they have.

The Influence of Problem Based Learning Model on Critical Thinking of Grade VI Elementary School Students in Pancasila and Citizenship Education Learning

D. Research Conceptual Framework

In this study, the framework of thinking aims to explain the relationship and interrelationship between variables, namely the influence of the Problem Based Learning model on critical thinking of elementary school students in the Pancasila and Citizenship Education subject.

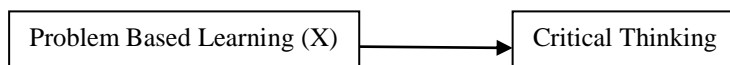


Figure 1: Research Conceptual Framework

E. Research Hypothesis

Ho: There is no influence of the Problem Based Learning model on students' critical thinking.

Ha: There is an influence of the Problem Based Learning model on students' critical thinking.

II. METHODOLOGY

This research design uses a quasi-experimental design because it is intended to study the effects of an action or treatment on a pre-existing group, without randomizing the group as a whole. The research was conducted in the form of a pretest-posttest nonequivalent control group design. This type of research is used based on the results of observations, namely that the control group and sample are better selected randomly. The research instruments used in this study were test instruments and non-test instruments. The researcher used a quasi-experiment in this study because the researcher could not fully control the two groups studied because not all external variables could be controlled, so that the changes that occurred were not entirely due to the influence of the treatment. The data collection technique was carried out in two stages, namely pretest and posttest. The pretest was given in order to see the initial abilities of students. At this stage it was carried out before treatment was given to both samples. The results of the pretest are expected that both classes have the same initial abilities. The posttest was given in order to see the results after being given treatment. This study aims to determine the effect of using the Problem Based Learning model on students' critical thinking in PPKn lessons, with the independent variable being the Problem Based Learning model and the dependent variable being students' critical thinking. Internal data was obtained by conducting written tests on 27 students at SDN Citrodiwangsan 02 Lumajang. External data sources come from previous research in the form of journals and theses.

III. RESULT

Based on the results of the research that has been conducted, the data on students' critical thinking skills were obtained after the students were given a test. In the initial stage, the researcher conducted an interview with the homeroom teacher of grade VI SDN Citrodiwangsan 02 Lumajang to find out the problems experienced by students in learning. During the research, the control group and the experimental group were given an initial test (pretest) to measure the initial conditions of each group. Then, the experimental group was given treatment while the control group was not given treatment. The final stage, the three classes were given a final test (posttest) using the same measuring instrument as the pretest. The following are the results of the pretest and posttest of critical thinking skills of grade VI students of SDN Citrodiwangsan 02 Lumajang:

Table 1. Level of Students' Critical Thinking Skills

Kelas	Jenis Tes	Rata-rata
A	Pretest	50,85
	Posttest	88,40
B	Pretest	48,40
	Posttest	85,37
C	Pretest	49,48
	Posttest	81,92

Based on the table above, it can be seen that there is an increase in students' critical thinking skills. During the pretest, the average score in class A was 50.85. After receiving treatment by applying the Problem Based Learning model, the average score of class A increased to 88.40. In class B, the average pretest score was 48.40 and the average posttest score increased to 85.37. In class C, the average pretest score was 49.48 and the average posttest score increased to 81.92. This shows that students' critical thinking skills increased during learning where each question given refers to the critical thinking indicator. After obtaining the average class score, the data was tested using SPSS 21.00 for windows using the One Way Anova test with the following results:

The Influence of Problem Based Learning Model on Critical Thinking of Grade VI Elementary School Students in Pancasila and Citizenship Education Learning

Table 2. One Way Anova Test Results

	Sum Squares	of df	Mean Square	F	Sig.
Between Groups	567.877	2	283.938	3.764	.028
Within Groups	5884.667	78	75.444		
Total	6452.543	80			

IV. DISCUSSION

Based on the results of the One Way Anova analysis, it was obtained at a sig level of $0.028 < 0.05$ so that it can be concluded that there is an influence of the Problem Based Learning model on the critical thinking of grade VI students in Pancasila and Citizenship Education Learning at SDN Citrodiwangsan 02 Lumajang. Based on the data, students' critical thinking using the Problem Based Learning model has increased. Students' critical thinking with the application of the Problem Based Learning model is better and more effective than conventional learning. This can be seen from the increase in the average class score. The Problem Based Learning learning model is generally able to make students think critically. The factor that causes differences in critical thinking in students is that the Problem Based Learning learning model directs students to develop critical thinking. The Problem Based Learning learning model orients on one problem then students are given a problem at the beginning of the learning process that has been planned so that it can be solved. In this step, students are trained to think and be able to work independently at the beginning in solving the problems given by the teacher. This aims to ensure that students are able to hone their abilities to find solutions to a problem. In the Problem Based Learning learning model, the teacher encourages students to be active and interact with friends in their group discussions. The teacher only monitors and guides in solving problems. In the Problem Based Learning learning model, students are required to be able to analyze and evaluate the problem-solving process where other groups can respond to the group that is presenting. The teacher re-presents the problem at the beginning and encourages students to try to answer the problem with the concept they get and evaluates the students' answers. Therefore, this model is able to make students think critically where students are actively involved and are able to provide simple explanations, conclude, provide further explanations, organize strategies and tactics, and build basic skills. In implementing the Problem Based Learning learning model, students are given problems related to real life in everyday life, then in groups look for alternative solutions to investigate the problem because it is a model that can make students always challenged to always learn and work together in teams when looking for solutions to real problems and increase curiosity and the ability to analyze from initiatives on subject matter. In addition, learning is also not focused on the teacher but learning focuses on students. The teacher simply acts as a facilitator and motivator. Based on the results of the One Way Anova analysis to determine whether there is an interaction between the learning model and students' critical thinking, a significance of $0.028 < 0.05$ was obtained, meaning that there is an interaction between the use of the PBL model and students' critical thinking skills. The results of this study can also strengthen previous research. The results of the study stated that Problem Based Learning provides an increase in critical thinking skills in learning. In its implementation, students also become more active and enthusiastic in expressing individual and group opinions. In addition, students can also exchange ideas with their friends (Ulya, 2023). Kurniawati (2023) in her research said that the application of the PBL model can improve critical thinking skills in solving problems as evidenced by an increase from the initial value to the final value of students in each cycle. Other studies also state that the application of the PBL model can improve students' critical thinking skills (Maulida et al., 2023). From several research results that have been conducted previously, it can be proven that the application of the Problem Based Learning learning model can improve students' critical thinking skills.

V. CONCLUSIONS

Based on the results of the discussion, there was an increase in the average of students before and after using the Problem Based Learning learning model. In addition, the results of the One Way Anova test with a significance level of 5% showed a result of $0.028 < 0.05$ so that H_0 was rejected and H_a was accepted. It can be concluded that the Problem Based Learning learning model has a significant effect on the critical thinking skills of grade VI students in Pancasila and Citizenship Education Learning at SDN Citrodiwangsan 02 Lumajang. The Problem Based Learning learning model is considered successful in improving students' critical thinking skills in Pancasila and Citizenship Education Learning subjects so that this learning model can be used by teachers in the teaching and learning process. This study proves that the use of the Problem Based Learning model can help solve a problem in students through critical thinking skills. Improvement can also occur because in learning the teacher creates a comfortable environment and students can be open to exchanging ideas in solving problems so that students are able to learn optimally.

The Influence of Problem Based Learning Model on Critical Thinking of Grade VI Elementary School Students in Pancasila and Citizenship Education Learning

REFERENCES

- 1) Adawiyah, F. R., Andini, M., Maghfiroh, L., Dita, Y. S., & ... (2022). Meningkatkan Kemampuan Berpikir Kritis Siswa SD Dalam Pembelajaran PPKn Melalui Pembelajaran Berbasis Masalah. *Snhrp*, April, 1119–1125. <https://snhrp.unipasby.ac.id/prosiding/index.php/snhrp/article/view/441%0Ahttps://snhrp.unipasby.ac.id/prosiding/index.php/snhrp/article/download/441/384>
- 2) Arafat Lubis, Maulana. (2020). *Pembelajaran Pancasila dan Kewarganegaraan (PPKn) di SD/MI*. Jakarta: Prenada Media Grouppp.
- 3) Badan Standar Nasional Pendidikan. (2006). *Standar Isi*. Jakarta
- 4) Cahyani, H. D., Hadiyanti, A. H. D., & Saptoru, A. (2021). Peningkatan Sikap Kedisiplinan dan Kemampuan Berpikir Kritis Siswa dengan Penerapan Model Pembelajaran Problem Based Learning. *Edukatif: Jurnal Ilmu Pendidikan*, 3(3), 919–927.
- 5) Ennis, Robert. (1996). *Critical Thinking*. New York. United States of America
- 6) Evi, T., & Indarini, E. (2021). Meta Analisis Efektivitas Model Problem Based Learning Dan Problem Solving Terhadap Kemampuan Berpikir Kritis Mata Pelajaran Matematika Siswa Sekolah Dasar. *Edukatif: Jurnal Ilmu Pendidikan*, 3(2), 385–395.
- 7) Facione, P. (1998). *Critical Thinking: What It Is and Why It Counts*. Researchgate, 1–16.
- 8) Fahrurrozi, F., Sari, Y., & Fadillah, J. (2022). Studi Literatur: Pemanfaatan Model Problem Based Learning terhadap Kemampuan Berpikir Kritis dalam Pembelajaran Pkn Siswa Sekolah Dasar. *Edukatif: Jurnal Ilmu Pendidikan*, 4(3), 4460–4468.
- 9) Febrita, I., & Harni. (2020). Model Problem Based Learning dalam Pembelajaran Tematik Terpadu terhadap Berfikir Kritis Siswa di Kelas IV SD. *Jurnal Pendidikan Tambusai*, 4(2), 1619–1633. <https://doi.org/10.31004/jptam.v4i2.627>
- 10) Kurniawati, M., & Hardini, A. T. A. 2023. Pengaruh Model Problem Based Learning Dan Problem Solving Terhadap Berpikir Kritis Siswa Kelas V Pada Pembelajaran PPKn. *Jurnal Pendidikan*, 32(3), 393–402.
- 11) Maulida, R., Prasetyaningtyas, F. D., & Setyawardhani, E. 2023. Peningkatan Kualitas Pembelajaran Pendidikan Pancasila Melalui Model Problem Based Learning Berbantuan Media Audiovisual. *PERISKOP: Jurnal Sains dan Ilmu Pendidikan*, 4(1), 8–15.
- 12) Maqbullah, S., Sumiati, T., & Muqodas, I. 2018. Penerapan model Problem Based Learning (PBL) untuk meningkatkan kemampuan berpikir kritis siswa pada pembelajaran ipa di sekolah dasar. *Metodik Didaktik: Jurnal Pendidikan Ke-SD-an*, 13(2).
- 13) Ramadhani, S. P., Ms, Z., & Fahrurrozi, F. (2021). Analisis Kebutuhan Desain Pengembangan Model IPA Berbasis Project Based Learning Untuk Meningkatkan Berpikir Kritis Siswa di Sekolah Dasar. *Jurnal Basicedu*, 5(4), 1819–1824. <https://doi.org/10.31004/basicedu.v5i4.1047>
- 14) Suparman, S., Juandi, D., & Herman, T. (2021). Achievement emotions of female students in mathematical problem-solving situations. *Journal of Physics: Conference Series*, 1806(1), 1–7. <https://doi.org/10.1088/1742-6596/1806/1/012106>
- 15) Suparman, Juandi, D., & Tamur, M. (2021b). Review of problem-based learning trends in 2010–2020 : A meta-analysis study of the effect of problem-based learning in enhancing mathematical problem-solving skills of Indonesian students. *Journal of Physics: Conference Series*, 1722(012103), 1–9. <https://doi.org/10.1088/1742-6596/1722/1/012103>
- 16) Yew, E. H. J., & Goh, K. (2016). Problem-based learning: An overview of its process and impact on learning. *Health Professions Education*, 2(2), 75–79. <https://doi.org/10.1016/j.hpe.2016.01.004>
- 17) Ulya, F. (2023). *Pengaruh Model Pembelajaran Problem Based Learning (Pbl) Terhadap Kemampuan Berpikir Kritis Mata Pelajaran Pkn Di Kelas Iii Sdn 1 Tunjungharjo* (Doctoral Dissertation, Universitas Islam Sultan Agung).



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0) (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.