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THE EFFECT OF THE PROBLEM-BASED LEARNING MODEL ON CIVICS' CRITICAL THINKING SKILLS OF CLASS V STUDENTS OF SD NEGERI 168 SOUTH HALMAHERA

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ABSTRACT

Abstract: Based on the observations found various problems faced by teachers and students specifically on critical thinking skills, as well as suitable learning models to support learning. students' ability to identify, understand problems, state problems in a simple form, find appropriate solutions to problems and draw conclusions is still very low so the purpose of this research is to determine the effect of learning model problembased learning on the critical thinking skills of fifth-grade students at SD Negeri 168 Halmahera Selatan. pseudo-experimental method (Almost Experimental Design). The population in this study were all fifth-grade students which were divided into 2 classes at SD Negeri 168 Halmahera Selatan, totaling 60 students. The sample in this study used the cluster random sampling technique. namely, the VA class students who became the experimental class which totaled 30 students, and the VB class as the control class which consisted of 30 students. The hypothesis uses the ANOVA test with the aim of seeing the effect of critical thinking skills in the experimental class and the control class. Data collection using instrument test. The results showed that there was a significant influence on the learning model problem based on the thinking skills of fifth-grade students at SD Negeri 168 Halmahera Selata.

Keywords: PBL Learning Model; Critical Thinking Ability; Civics

Introduction

Education is one of the important human needs because education has the task of preparing good human resources for the development of the nation and state. The current implementation of education prioritizes an integrated learning process, teachers should be able to develop children's potential to the fullest for various abilities in solving problems in future life (Panjaitan, 2017). Citizenship Education has a very important role and function in instilling Pancasila ideological values in which there are basic values of humanity and personality which of course form the basis of the concept of global citizens, this is of course as stated in the goals of Citizenship Education (Hadi, 2019)

Through Education Citizenship is expected to form the main personality of young citizens who are smart, kind and reliable, to be able to form global citizens who are smart, good and reliable must have two characteristics, namely an attitude that cares about conditions public and attitudes to be able to make changes for the better. This attitude of caring means How can develop the ability to care not only for the community environment but more emphasis on the context of global society (Busyaeri & Muharom, 2016).

Critical thinking skills (Critical Thinking) is one of the 10 basic skills that students need to prepare and develop in order to survive and be successful in the present and in the future. (Koroh & Ly, 2020) Critical thinking is a skill for conceptualizing, applying, analyzing, synthesizing, and evaluating the information collected through observation, experience, reflection, reasoning, or communication. (Farisi et al., 2017) Critical thinking must always refer to and be based on a standard called universal intellectual standard. Universal intellectual standard is a standardization that must be applied in thinking that is used to check the quality of thinking in formulating problems, issues, or certain situations. Students can be said to be able to think critically when they can speak using the right reasons, both logically and systematically to solve a problem (Nurjanah, 2019). Critical thinking according to is a discipline of independent thinking that exemplifies the perfection of thinking according to a certain mode or realm of thinking (Panjaitan, 2017).

Model Problem-based learning (PBL) is designed in learning activities to train students in solving problems according to real life. Problem-based learning aims to solve problems by lifting from everyday events where students have the opportunity to find new knowledge connected with prerequisite knowledge. According to (Mayasari et al., 2022) in project-based learning, students are required to participate actively in creating innovative solutions to problems through their experiences. Project-based learning demands collaborative learning. This certainly provides an opportunity to improve conceptual understanding and technical skills (Wardani, 2023).

Based on observations made at SD Negeri 168 South Halmahera, various problems were found that were faced by teachers and students specifically on critical thinking skills, as well as suitable learning models to support learning. Based on the results of observations in class V SD Negeri 168 South Halmahera, the average score of completeness in Civics learning was still low or below the minimum completeness criteria (KKM), namely 75. It was also found that students' abilities in identifying, understanding problems, stating problems in a simple form, finding the right solution to the problem and drawing conclusions is still very low. This is because in Civics learning students only focus on memorization in solving problems even though it is not certain that memorizing can solve problems in Civics. Besides that, teachers are still overwhelmed or confused and have difficulty in determining and using appropriate learning media in learning, this causes students to feel bored, bored and the competencies that exist in students cannot be explored optimally.

Based on the background, the formulation of the problem used in this study is whether the learning model problem based learning effect on the critical thinking skills of Civics students of class V SD Negeri 168 Halmahera Selatan? The purpose of this study is to determine the effect of the learning model problem based on the critical thinking skills of Civics students of class V SD Negeri 168 South Halmahera. The hypothesis proposed in this study is that there is a significant influence of the learning model problem-based learning on the critical thinking skills of fifth-grade students at SD Negeri 168 Halmahera Selatan

Research Method

The research method used is quantitative in the form of a quasi-experimental method (Almost Experimental Design). The independent variable (X) in this study is the learning model problem based learning, while the dependent variable (Y) in this study was the critical thinking skills of Civics students of class V SD Negeri 168 South Halmahera semester 2 of the 2022/2023 academic year. The research design used in this study is a control group pretest-posttest design. The research design was carried out in 2 classes, namely the first class, class and as an experimental class or by using a learning model problem-based learning, and the second class is class VB as a control class or not by using a learning model problem-based learning or conventionally.

The population used in this study were all fifth-grade students which were divided into 2 classes at SD Negeri 168 Halmahera Selatan, totaling 60 students. The sample in this study was taken using the technique of cluster random sampling. The sample in this research is class V students A which became the experimental class which consisted of 30 students and class VB as a control class of 30 students. variable free in this study namely learning by using the learning model problem-based learning. The dependent variable in this study is the critical thinking skills of Civics students of class V SD Negeri 168 Halmahera Selatan which are expressed by test scores.

The data collection technique used in this study is an observation which aims to observe student activities in learning in the classroom, a test in the form of an essay totaling 5 items which aims to determine the critical thinking skills of Civics students of class V SD Negeri 168 South Halmahera and documentation of several student documents and the evaluation value of critical thinking skills of Civics students of class V SD Negeri 168 South Halmahera. Hypothesis testing in this study used the ANOVA test with the aim of seeing the effect of critical thinking skills in the experimental class and the control class. Before conducting data analysis, namely by conducting a data prerequisite test first, namely the normality test and homogeneity test (Maolidah et al., 2017).

The normality test is carried out using Kolmogorov-Smirnov with the aim of knowing whether the sample comes from a normally distributed population using data analysis techniques coefficient product moment at a significance level of 5%. A homogeneity test

was carried out to find out whether the groups studied had the same variance by using the F test with a significance level of 5% with the test criteria if Fcount< Ftable face H0 accepted and Ha rejected (homogeneous), if Fcount> Ftable face H0 rejected and Ha accepted (not homogeneous). Test the hypothesis by using test Anova with the aim of seeing the effect of the critical thinking skills of Civics students of class V SD Negeri 168 Halmahera Selatan in the control class and the experimental class. Test criteria with a significance level of 5% with decision making, namely if the probability of error <0.05; then the null hypothesis (H0) is rejected, and if the probability of error is> 0.05; then the null hypothesis (H0) is accepted.

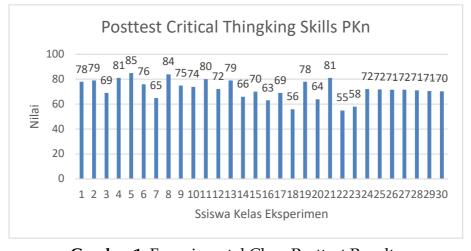
Result And Discussion

The number of items about the critical thinking skills of Civics students of class V SD Negeri 168 South Halmahera is 5 essay questions or essays which were tested on 25 students. The results of the validity test are 5 questions, all of which are valid. The following presents the results of the validity test pearson product moment.

Table 1. Instrument Validity Test Results

| No Questionnaire Items | Validity Coefficient | Decision |
|------------------------|----------------------|----------|
| 1 | 0.436 | Valid |
| 2 | 0.683 | Valid |
| 3 | 0.583 | Valid |
| 4 | 0.596 | Valid |
| 5 | 0.706 | Valid |

Based on the results described in Table 1 shows that the results of the validity test on instrument Civics critical thinking skills stated that there were 5 questions that were declared valid so that they could be used to measure the Civics thinking skills of fifthgrade students at SD Negeri 168 South Halmahera. After the Instrument is declared valid, the next step is to do a reliability test instrument by using Cronbach alpha. The following presents the results of the reliability test instrument.



Gambar 1. Experimental Class Posttest Results

Table 2.Instrument Reliability Test Results

| Variable | Reliability Coefficient | Reliable Criteria | Decision |
|----------------------------------|--------------------------------|-------------------|----------|
| Critical Thinking Ability | 0,913 | r > 0.7 | Reliable |

Based on the results presented in Table 2, it is stated that the estimated reliability instrument of the Civics critical thinking ability test obtained a score of 0.913 in the high-reliability category. So that instrument the test can be used to see the critical thinking skills of Civics students of class V SD Negeri 168 South Halmahera.

Results of Data Processing

From the results of data processing on the critical thinking skills of Civics students of class V SD Negeri 168 South Halmahera in the experimental class, the pretest scores or students' initial abilities were obtained before using the learning model problem based learning i.e. the average value/mean = 60.7000, standard deviation (SD) = 6.43884, lowest score = 50, highest score = 72. All students have not reached the specified KKM score (75). The following data is presented via graphs.

Posttest scores or students' final abilities in experimental or learning classes using learning model problem-based learning have an average score/mean = 88.3667, standard deviation (SD) = 7.19427, lowest score = 75, highest score = 100. So that all students have reached the specified KKM, which is 75. The following is presented in the form of a diagram.

The pretest score of students' Civics critical thinking skills in the control group or class by not using the problem-based learning model or conventional learning has an average/mean score = 62.7667, standard deviation (SD) = 5.69745, lowest score = 53, highest score = 75. So that in the initial ability of the control class there was only 1 student who achieved the set KKM, which was 75. The following is presented in the form of a diagram.

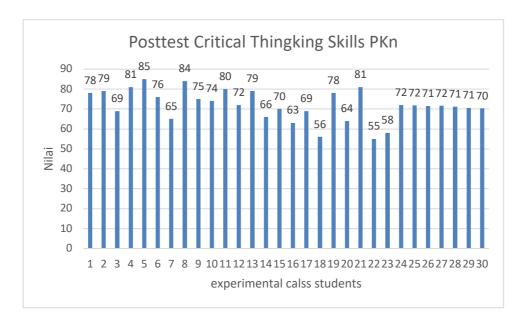


Figure 2. Experimental Class Posttest Results

The posttest scores of students' Civics critical thinking skills in the control group or classes that do not use problem-based learning or conventional learning have an average score/mean = 71.8667, standard deviation (SD) = 7.74033, lowest score = 55, highest score = 85. So that in the final ability after learning in the control class there were only 9 students who achieved the set KKM, namely 75. The following is presented in the form of a diagram.

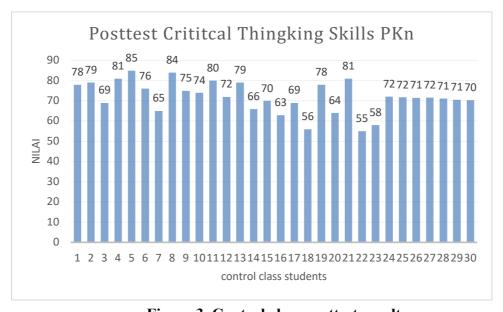


Figure 3. Control class posttest results

Based on the results obtained, it can be concluded that the pretest and posttest values of the experimental class are superior to the pretest and posttest values of the control class.

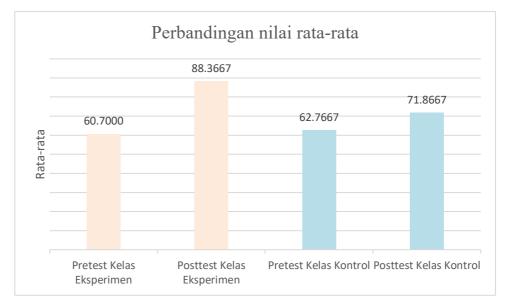


Figure 4. Comparison diagram of the experimental class and the control class

Prerequisite test results

The prerequisite test in this study is the normality test using the Kolmogorov-Smirnov test to find out whether the research data on students' Civics critical thinking skills is normally distributed or not. The following shows the results of the normality test (Khotimah et al., 2019).

Table 3. Normality Test Results

| Class | Variable | Kolmogorov- Smirnov | | Conclusion |
|---------------------|-----------------------------------|------------------------|-------|------------|
| | | WITH | Say. | |
| Canal Class | Pretest critical thinking skills | 0.148 | 0.094 | Normal |
| Control Class - | Posttest critical thinking skills | 0.122 | 0.200 | Normal |
| Experiment Class | Pretest critical thinking skills | 0.148 | 0.092 | Normal |
| | Posttest critical thinking skills | 0.116 | 0.200 | Normal |

Based on the research results described in table 3 shows that the value themselves greater than 0.05, Up to H₀ accepted. Thus, based on data on students' critical thinking skills which consist of a control class or a class using conventional learning and an experimental class or by using a learning model problem-based learning normally distributed samples (Prihono & Khasanah, 2020).

The next stage is the homogeneity test. The data tested for homogeneity is the data on students' critical thinking skills. The results of the homogeneity test of critical thinking skills are presented in the following table (Davidi et al., 2021).

| | Table 4. data tested for homogeneity | | | |
|--------|---|----------|---------------|-------------|
| Da | Data Homogeneity Test Critical Thinking Ability Pretest | | | |
| | Conditi | | | |
| N0 | Data Type | MarkSay. | О | Information |
| | | | n | |
| 1 | Pretest Class Control | 0.522 | >0.05 | Homogeneo |
| and Ex | and Experiment | 0.022 | ~0.0 5 | us |

Homogene

ous

>0.05

Based on the homogeneity test data presented in the table, the significance value of the pretest data for critical thinking skills is 0.522, then the post-test data for students critical thinking skills is 0.709, these results indicate that the significance of the pretest and post-test data for critical thinking skills is homogeneous.

0.709

Hypothesis Test Results

Posttest Class Control

and Experiment

Based on the results of the prerequisite test it is known that the data on students' Civics critical thinking abilities come from a population that is normally distributed and homogeneous and thus meets the requirements for the next stage, namely hypothesis testing (Meilana et al., 2021). The hypothesis test in this study is by using the ANOVA test to determine the effect of thinking skills of critical Civics students in the experimental class or class using the learning model problem based learning and control class or class with conventional learning. The following table presents the results of the ANOVA test.

| Critical thinking skills with learning models problem based learning | | | |
|--|---------|-------|--|
| Variable | F Count | Say. | |
| Critical thinking skills | 63.618 | 0.001 | |

Based on the results of the ANOVA test presented in the table, it can be concluded that the critical thinking ability variable for the fifth grade students at SD Negeri 168 Halmahera Selatan obtained a valueF Count of 63,618 and a significance value of 0.001 or less than 0.05, so that based on the agreement rules in making decisions then 0.001 <0.05 so H0 is rejected and it can be concluded that the application of the learning model problem based learning effects on the critical thinking skills of PKN grade V students at SD Negeri 168 South Halmahera. So that the hypothesis can be stated, the application of the learning model problem-based learning is effective on the critical thinking skills of PKN grade V students at SD Negeri 168 South Halmahera.

Discussion

This research aims to see effective learning model problems based on the critical thinking skills of Civics students of class V SD Negeri 168 South Halmahera. The results of the ANOVA test obtained on learning model problem-based learning on critical thinking skills that is obtained a valueF Count of 63,618 and a significance value of 0.001 or less than 0.05. so that H_a accepted, and H₀ rejected so that it can be concluded that there is an influence of the learning model problem based learning on the critical thinking skills of fifth-grade elementary school students.

This is in line with research conducted by (Koroh & Ly, 2020) where there is a significant influence between learning model problem based learning and critical thinking skills. This is because, through the learning model, problem-based learning can encourage students to be better at giving simple explanations, building basic skills, using strategies, and solving existing problems. In line with (Bourgel, 2017) it is said that in the learning model problem, based learning students are given the opportunity to dig and find their own strategies, and solutions, and draw conclusions on the problems presented so that they are aligned with the process of thinking skills critical. Continued by (Alexander, 2016) in their research stated that by carrying out phases in the learning model of problem-based learning active involvement of students in solving problems can make students have excellent critical thinking skills.

Conclusion

Based on the results of analysis, testing, and discussion, this research can be concluded that the learning model problem is based on the critical thinking skills of Civics students of class V SD Negeri 168 South Halmahera. Based on the conclusions of the research results, several suggestions are put forward for future; for teachers, teachers can take advantage of learning model problem based learning and learning media in Civics learning for fifth grade elementary school students to help students' difficulties in improving critical thinking skills. Students are expected to be able to understand Civics learning in accordance with learning objectives, as well as improve critical thinking skills in learning by using learning model problem based learning. For future researchers, the

results of this study can be used as a reference or reference material to determine the effect of the learning model problem-based learning on critical thinking skills.

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