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THE EFFECT OF PROBLEM BASED LEARNING MODEL ON CRITICAL THINKING SKILLS

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Article history:		Abstract:		
Received Accepted: Published:	26 st September 2022 26 th October 2022 30 th November 2022	Education that is able to support humans in change is education that develops students' potential. The development of students' potential cannot be separated from the learning process that can develop students' thinking skills or abilities. Critical thinking skills are very important to make decisions in solving problems. To improve students' critical thinking skills, the model is used in arts, culture and crafts subjects. This study aims to determine the effect of the problem based learning model on the critical thinking skills of fifth grade students at SDN 5 in Kabila Bone. This research is a quasi-experimental research with a design model known as "nonequivalent pretest-post test control group design," the determination of the sample using random sampling. Data collection techniques using essay tests. The research data were statistically analyzed using the SPSS Anova for windows program. The results of the research analysis show that there is an effect of the Problem Based Learning model on the critical thinking skills of fifth grade students at SDN 5 Kabila Bone. Indonesia		

Keywords: Problem Based Learning, Critical thinking skills, arts, culture, crafts subjects

INTRODUCTION

The main activity in the education process in schools is teaching and learning activities. The existing teaching and learning process is a determinant of success in achieving educational goals. Human thinking skills must of course receive training and teaching, one of which is through educational institutions to develop basic human thinking skills. Humans with trained thinking skills will analyze, conclude, and solve the problems they face. Thinking is one of the things that distinguishes one human from another. According to Irdayanti (2018) thinking is a process of producing new mental representations through information transformation that involves complex interactions including reasoning, imagination, and problem solving activities. According Adinda (2018) People who are able to think critically are people who are able to conclude what they know, know how to use information to solve problems, and are able to find relevant sources of information to support problem solving.

Strong thinking power is very important in this life. Thinking skills are very important for humans because with thinking skills, humans can make changes that are of course good for their survival. Thinking is determined by logical logic and accuracy in making a decision, according to Rahmat (2019) "explains that logic discusses one of the spiritual potentials of humans called creativity. So logic is one of the materials for discussion of philosophy. In other words, logic is only a small part of the field of philosophy. The implementation of a learning process should ideally use a learning model adapted to the characteristics of the existing material. Learning according to the instructor team of PLPG UNG 2014 In the material of learning models are learning approaches, learning strategies, learning methods, learning techniques, and learning models. Which of all materials requires a variety of approaches and models as the authors have mentioned. In addition, by using the model, the learning process will be more structured.

States that every child has their own way of learning by interpreting and adapting to their environment (cognitive development theory), according to him, every child has a cognitive structure called schemata, namely a system of concepts that exist in the mind as a result of understanding the objects in their environment. Critical thinking skills possessed by students can help solve problems with the best solutions, including SBDP learning. With growing

Students' critical thinking skills are expected to optimize their ability to make decisions in everyday life, and students can not only solve problems. Learning arts, culture and crafts is closely related to finding out information and developing that information, so that it is expected to be able to overcome the problems that occur. Based on observations and the results of interviews with fifth grade teachers, it shows that the KKM score has not reached the average field of study. The KKM value set in class V is 75. However, based on student learning outcomes, it is still found that the value of cultural and craft lessons has not reached the KKM. This may be due to the lack of mastery of concepts during art and culture lessons. Based on the results of data analysis that has been carried out, it shows that learning Arts, Culture and Crafts using the PBL model applied

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in the experimental class can significantly improve students' critical thinking skills. This can be seen from the test results of students' critical thinking skills after being given learning using the PBL model. The results of the analysis show that there are differences in critical thinking skills in arts and crafts between experimental class students facilitated by the PBL model and conventional classes that are not facilitated by the PBL model. The average score of critical thinking skills in arts, culture and crafts of experimental class students facilitated by the PBL model = 78.645 and the average score of conventional class students = 52.884. So overall, students' critical thinking skills in arts, culture and crafts facilitated by the PBL model are better.

The results of the analysis show that the PBL model is superior in improving students' critical thinking skills, which is also evidenced by the results of Susanti, Prayitno and Sudarisman (2015) research showing that the influence of the PBL model with Key relation chart media on critical thinking skills has increased. Similarly, the results of Reta's research (2012) which found that the problem-based learning model with field dependent cognitive style obtained a high average score of critical thinking skills compared to students who followed the conventional learning model. The same thing was also expressed by Mayasari and Adawiyah (2015) explaining that the Problem-Based Learning model was able to improve students' higherorder thinking skills.

METHODOLOGY

This type of research is a guasi-experimental guasi-experiment with a design model known as "noneguivalent pretestpost-test control group design", using random sampling as a sample. The population in this study were students of SDN 5 Kabila Bone class V. Determination of the sample using random sampling. Furthermore, the sample will be published based on data from the Mid-semester Assessment for class V, semester 1, arts, culture and crafts. The total number of samples in this study was 17 students. Consists of male students and female students. In this study, the control class was the pretest score, and the post test score facilitated by PBL learning strategies. The data collection instrument referred to in this study consisted of an instrument to measure independent variables with an observation sheet on the implementation of the learning model and data collection instruments to measure variables such as students' biological critical thinking skills with an essay test. The assessment rubric for critically assessing arts, culture and crafts refers to the rubric developed by Hart (1994) with a score range for each question ranging from 0 to 4. The test is submitted using the one-way analysis of variance (ANAVA) technique assisted by the SPSS version 17 program for windows. Prior to the analysis of variance (one-way ANOVA) the assumptions were tested which included (1) data normality test and (2) variance homogeneity test.

RESULT

Table 1. Summary of Anaova Test Results The Effect of Critical Thinking

Sumber	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8282.232	1	8282.232	196.718	.000
Within Groups	2020.893	18	42.102		
Total	10303.125	19			

Source: Primary data processed

The Effect of Compensation on Employee Performance

Based on data analysis and hypothesis testing, it can be concluded that there is an effect of the application of the PBL model on students' critical thinking skills in class V SDN Kabila Bone. This can be seen that there is a difference in the average critical thinking skills in the experimental class of 78.645 with the conventional class of 52.884 with a level of 0.05.

R Square Determination Coefficient (R²)

Based on the results of the One Path ANOVA test, it shows that the calculated F value is 1.967 with a value of 0.000 or less than 0.05, this means that there is a difference in critical thinking skills between students facilitated by the PBL model and the conventional learning model. The average score of critical thinking also shows that the class facilitated by PBL is higher than the conventional class 78.645. Thus, it shows that there is a significant effect of using the PBL model on students' critical thinking skills.

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Based on the results of data analysis that has been carried out, it shows that learning cultural arts and crafts using the problem based learning model applied in the experimental class can significantly improve critical thinking skills. This can be seen from the test results of students' critical thinking skills after being given learning using the problem based learning model. The results of the analysis show that there are differences in critical thinking skills in arts and crafts between experimental class students facilitated by the problem based learning model and conventional classes that are not facilitated by the problem based learning model = 78,645 and the average score of conventional class students = 52,884. Overall, students' critical thinking skills in arts and crafts facilitated by the PBL model were better.

The results of the analysis show that the problem based learning model is superior in improving students' critical thinking skills, which is also evidenced by the results of Susanti, Prayitno and Sudarisman (2015) research showing that the influence of the PROBLEM BASED LEARNING model with Key Relation Chart media on critical thinking skills has increased. Similarly, the results of Reta's research (2012) which found that the problem-based learning model with field dependent cognitive style obtained a high average score of critical thinking skills compared to students who followed the conventional learning model. The same thing was also expressed by Mayasari and Adawiyah (2015) explaining that the Problem-Based Learning model was able to improve students' higher-order thinking skills.

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CONCLUSION

Based on data analysis and hypothesis testing, it can be said that there is an effect of the application of the PROBLEM BASED LEARNING model on critical thinking skills in class V SDN Kabila Bone. This can be seen that there is a difference in the average critical thinking skills in the experimental class of 78,645 with the conventional class of 52,884 with a level of range of 0.05.

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