

The Effect of Applying the Problem Based Learning Model on Critical Thinking and Problem Solving Skills in Islamic Learning for Students in Pondok pesantren

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ABSTRACT

The active participation process of students in Islamic boarding schools can support the learning process of Islamic religious education to be more effective and meaningful. This active learning uses the PBL method which is able to improve critical thinking and student learning outcomes. Therefore, teachers need to facilitate students with appropriate learning methods such as learning using the problem based learning method so that students will be actively involved in the learning process, the method used in this research using a pre test post test design, a sample of 30 Islamic boarding school students in Jember, the results of the research show that the problem based learning method is able to improve critical thinking skills and learning outcomes of Pesantren Islamic boarding school students.

Key word : **Problem Based Learning Model ,Critical Thinking , Problem Solving Skills**



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INTRODUCTION

Islamic Religious Education is one of the subjects that can construct students' way of thinking in solving general problems related to the Qur'an and Al Hadith which are related to everyday life. Islamic religious education has an important role in social life in general. (La Fua

et al., 2017)

Learning Islamic Religious Education in Islamic boarding schools is generally often carried out using traditional steps where the teacher presents the learning material, then asks several questions, and asks passive students to be active by starting to do exercises from the textbook, the lesson ends with good organization and this method applied again in subsequent learning. (Dewi, 2022)

Such learning activities are not always bad. Sometimes there are students who find it easier to understand the concept of material taught by the teacher through memorization techniques. From this memorization, students will understand how to use techniques and apply the material in realistic life and then students will understand the basic concepts of the material. Apart from that, an uncondusive classroom environment will give students the opportunity to discuss topics other than the subject matter being studied, noisy classroom conditions make learning ineffective and inefficient so that the Islamic Religious Education learning process in the classroom becomes hampered.. (Pramusinta et al., 2019)

The process of active participation from students can support the learning process, especially Islamic religious learning, to be more effective and meaningful. Therefore, teachers at Islamic boarding schools need to facilitate students with appropriate learning methods so that students are actively involved in learning. Learning that prioritizes competency mastery must be student-centered, provide learning and learning experiences that are relevant and appropriate to everyday life and develop a strong and rich mentality in students. (Nur Kholis, 2018)

In Islamic Religious Education lessons, teachers can apply problem-based learning (Problem Based Learning) to improve understanding and critical thinking skills. According to (Prayogi et al., 2018) states that Problem Based Learning is a learning approach that is characterized by using real problems as a context for students to learn critical thinking, problem solving skills, and gain knowledge about the essence of learning material.

Teaching using the Problem Based Learning model is a process that requires trust in students, namely the belief that all students can create meaningful ideas about events in the general environment based on the Islamic religion so that later students will be more

enthusiastic about studying the material in Islamic Religious Education (PAI) lessons. Even though students learn more on their own, the role of the teacher is also very important to monitor activities and facilitate the learning process and stimulate students to think critically in solving existing problems. (Chiang & Lee, 2016; Corral-Lage et al., 2021; Facione & Facione, 2008)

The teacher's job is to direct students to ask questions, prove assumptions, and listen to different perspectives among them. To address Islamic religious issues in society, critical thinking skills are needed which are part of the ability to think logically and which every student needs to have in dealing with various problems. (Priawasana & Waris, 2019), By thinking critically, a person can organize, adjust, change or improve his thoughts, so that he can make decisions to act more appropriately. (Kusumaningtias et al., 2013)

Furthermore (Leou et al., 2006) defines critical thinking as an attitude of wanting to think deeply about problems and things that are within the range of one's experience, knowledge of methods of logical examination and reasoning and a kind of skill to apply these methods. The ability to think clearly and imaginatively, assessing evidence, playing with logic, and looking for imaginative alternatives to conventional ideas, gives children/students a clear route amidst the chaos of thinking in today's technological age.

Understanding critical thinking is expected to improve optimal learning outcomes in Islamic Religious Education lessons in Islamic boarding school education. Learning activities must be able to explore student competencies, both in the cognitive, affective and psychomotor domains. Student-centered learning strategies and creating a pleasant atmosphere are very necessary to improve student learning outcomes.

According to the Islamic Religious Education learning process, teachers can apply problem-based learning (Problem Based Learning) in improving students' ability to understand Islamic Religious Education, according to (Jensen & Lassen, 2020) states that Problem Based Learning is a learning approach that is characterized by using real problems as a context for students to learn critical thinking, problem solving skills, and gain knowledge about the essence of learning material. As per opinion (Fitriah et al., 2018) which states that the most positive outcome of a successful problem-solving experience for students of all ages is the sense of

satisfaction that occurs when the problem is finally resolved, which provides a boost in students' self-confidence and contributes to a positive attitude(Quigley et al., 2017)

The influence of Problem Based Learning on critical thinking skills and learning outcomes lies in the technical characteristics of implementing Problem Based Learning which emphasizes problem orientation in the environment around students to train them to think and then solve problems.(Corral-Lage et al., 2021) By thinking critically, a student can organize, adjust, change or improve his thoughts, so that he can make decisions to act more appropriately. Learning activities carried out at school trigger a lack of developing the ability to think critically, in understanding and applying Islamic Religious Education learning material.

This problem is thought to cause low Islamic Religious Education learning outcomes for Islamic boarding school students. Critical thinking requires hard efforts to examine every belief or assumptive knowledge based on supporting evidence and subsequent conclusions that result.

The process of knowing students' critical thinking abilities can easily create critical thinking references ideally has several criteria which are abbreviated as FRISCO, namely Focus is the students' ability to understand the problems presented by the teacher; Reason (Reason) is the ability of students to give reasons based on relevant facts in making conclusions; Concluding (inference) students' ability to choose the right reasons to make conclusions; Situation (situation) students' abilities when using information according to the problem. Efforts that can be made to develop students' critical thinking skills include carrying out various trials on learning models so that teachers can find the right learning model.(Priawasana et al., 2020)

METHODS

This research was also carried out by comparing one independent variable regarding the Problem Based Learning Model with the material "Memorization of Short Letters in the Al Qur'an Juz 30", as well as two dependent variables, namely Student Critical Thinking and Student Cognitive Learning Outcomes.

This research uses a quantitative causal relationship research method (causalistic) in looking at the relationship of variables to the object under study, so that in this research there

are independent/free (X) and dependent/bound (Y) variables. The population in this research is boarding school children/students Wahid Hasyim Puger Islamic boarding school, Jember with 60 students

Data collection techniques in this study used tests given to all students at the beginning of learning and after treatment, 60 students received the test.

The data analysis method used in this research is as follows: Data analysis in this research uses the SPSS for Windows program, data analysis in this research uses normality and homogeneity tests before continuing with hypothesis testing

RESULTS AND DISCUSSION

normality test results of research questionnaire data "The Effect of Applying the Problem Based Learning Model on Critical Thinking and Student Learning Outcomes in Islamic Religious Education Subjects". The level of normality of a research variable can be seen from the results of the One-Sample Kolmogorov-Smirnov Test statistical test. A variable or construct is said to be normal if the Kolmogorov-Smirnov Test value is 0.05

Table 1. Data Normality Test Results with the Kolmogorov-Smirnov Test

| No. | Variabel | Nilai <i>Kolmogorov-Smirnov Test</i> | Keterangan |
|-----|--------------------|---|------------|
| . | Critical thingking | 0.233 | Normal |
| 3. | Learning ourcame | 0.762 | Normal |

Homogeneity test of the questionnaire "The Effect of Applying the Problem Based Learning Model on Critical Thinking and Student Learning Outcomes in Islamic Religious Education Subjects". The level of homogeneity of a research variable can be seen from the results of statistical tests. A variable or construct is said to be homogeneous if the Homogeneity value is > 0.05 . The closer the Homogeneity value is to one, the better the data value (well distributed). The results of the Homogeneity test can be seen below:

Table 2. Results of Homogeneity Test of Research Data

| No. | Variabel | Nilai <i>Signifikansi</i> | Keterangan |
|-----|--------------------|---------------------------|------------|
| 2. | critical thingking | 0.202 | valid |
| 3. | Learning outcame | 0.283 | Valid |

The results show homogeneity of the data with a gain of $0.200 > 0.05$, so it can be said that the data has a high level of homogeneity

Table 3. PBL (Problem Based Learning) Model Data on Critical Thinking and Student Learning Outcomes

| ANOVA ^a | | | | | | |
|--------------------|------------|----------------|----|-------------|------|--------------|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 229.302 | 2 | 114.651 | 5.71 | .074 |
| | Residual | 1140.164 | 27 | 42.228 | 5 | ^b |
| | Total | 1369.467 | 29 | | | |

- a. Independent Variable: Model PBL
- b. Predictors: (Constant), Hasil Belajar, Berfikir Kritis

By obtaining the result requirement of $0.074 < 0.08$ (satisfied significance), calculate f $f_{table} = 5.715 > 4.18$ (indicating that there is an influence of related variables), it is concluded that H_0 is rejected and H_1 is accepted with a percentage value of success in implementing variables of 81.7%.

Discussion

The learning process by implementing the Problem Based Learning model in Islamic Religious Education subjects will certainly have a positive impact on schools and students. Positive impacts such as increased enthusiasm for student learning and reduced student inactivity in the learning process have been proven in this research. Under these conditions, schools must continue to pay attention to improving critical thinking and student learning outcomes because if students' intelligence and learning outcomes are high.

Based on the results of observations in the field, it can be seen that Islamic Religious Education teachers often give advice to students who do not have high levels of critical

thinking, by calling the room and asking the students why that happened. It is also seen that other teachers are never angry with students who are not orderly, they just ask why do you do that, and provide input suggestions not to do that, after that don't forget to also ask the teacher about the usefulness of implementing

Problem Based Learning Model during the learning process. On the other hand, Islamic Religious Education teachers always provide motivation to be serious about studying and seeking knowledge, increasing the provisions at a young age will later be useful for serving one's parents. In simple terms, it can be said that to increase the role of students' critical thinking at the Wahid Hasyim Puger-Jember Islamic boarding school, mutual cooperation with the student's parents is needed, and commitment between students in learning.

Efforts to improve the learning outcomes of Islamic Religious Education teachers play a quite important role in improving students' cognitive learning outcomes, students who have low skills in reciting the Qur'an, because Islamic Religious Education guidance teachers play a fairly high role in resolving problems. One of the ways for students at school is to carry out socialization and directly call students who have problems. The implementation of guidance services in improving the recitation of the Qur'an is essentially providing guidance to individuals or groups of individuals so that they can develop into independent and intelligent individuals. To improve skills in reciting the Qur'an, it helps individuals to become useful people in their lives who have various insights, views and interpretations, choices, adjustments and appropriate skills regarding themselves and their environment.

The study of the Qur'an from Islamic Religious Education teachers is very problematic in the implementation of learning, but as an Islamic Religious Education teacher at the Wahid Hasyim Puger-Jember Islamic boarding school, he never complains about all the work he does, this is the role of the Islamic Religious Education teacher, happy to do it. Even though it feels more difficult for other teachers, there is no giving up for the Islamic Religious Education teacher, all the learning challenges that must be faced by every teacher and student, and every teacher and student contribute to each other as well as possible. other. And there are no words of complaint or quitting the job of an Islamic Religious Education teacher,

because the work of an Islamic Religious Education teacher is indeed difficult but must be carried out sincerely, especially improving critical thinking and cognitive learning outcomes in PAI subjects. The guidance provided by Islamic Religious Education teachers aims to help students have the ability to internalize the values of the holy verses in the Qur'an contained in the developmental tasks that they must master.

Conclusion

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