



IMPLEMENTATION OF PROBLEM-BASED LEARNING METHODS IN ISLAMIC EDUCATION TO STRENGTHEN STUDENTS' CRITICAL THINKING SKILLS AT THE SIMALUNGUN STATE ISLAMIC SCHOOL

IMPLEMENTASI METODE PEMBELAJARAN BERBASIS MASALAH DALAM PENDIDIKAN ISLAM UNTUK MEMPERKUAT KEMAMPUAN BERPIKIR KRITIS SISWA DI MADRASAH ALIYAH NEGERI SIMALUNGUN

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Abstract

This study aims to analyze the implementation of the Problem-Based Learning (PBL) method in Islamic Religious Education and its contribution to strengthening students' critical thinking skills at MA Negeri Simalungun. This study uses a qualitative approach with a descriptive design. Data were obtained through classroom observation, interviews with teachers and students, and documentation of learning tools and evaluation results. Data analysis was conducted interactively through the stages of data reduction, data presentation, and conclusion drawing, with data validity maintained through source and technique triangulation. The results showed that the application of PBL in Islamic Religious Education learning can be carried out systematically through the stages of problem orientation, group discussion, investigation, presentation of results, and reflection. The implementation of PBL encourages active student involvement in the learning process and has a positive impact on strengthening critical thinking skills, as evidenced by an increase in students' ability to identify problems, analyze information, evaluate arguments, and draw logical and contextual conclusions based on Islamic values. This study concludes that the Problem-Based Learning method is an effective learning approach to improve the quality of Islamic Religious Education learning and develop students' critical thinking skills in Madrasah Aliyah. Therefore, PBL is recommended as an alternative PAI learning strategy that is relevant to the demands of 21st-century education.

Keywords : Problem Based Learning; Islamic Education; Critical Thinking Skills; Active Learning; Islamic Senior High School.



Abstrak

Penelitian ini bertujuan untuk menganalisis implementasi metode pembelajaran Pendidikan Agama Islam berbasis Problem Based Learning (PBL) serta kontribusinya terhadap penguatan kemampuan berpikir kritis siswa di MA Negeri Simalungun. Penelitian ini menggunakan pendekatan kualitatif dengan desain deskriptif. Data diperoleh melalui observasi pembelajaran, wawancara dengan guru dan siswa, serta studi dokumentasi terhadap perangkat pembelajaran dan hasil evaluasi. Analisis data dilakukan secara interaktif melalui tahapan reduksi data, penyajian data, dan penarikan kesimpulan, dengan keabsahan data dijaga melalui triangulasi sumber dan teknik. Hasil penelitian menunjukkan bahwa penerapan PBL dalam pembelajaran Pendidikan Agama Islam dapat dilaksanakan secara sistematis melalui tahapan orientasi masalah, diskusi kelompok, penyelidikan, presentasi hasil, dan refleksi. Implementasi PBL mendorong keterlibatan aktif siswa dalam proses pembelajaran dan memberikan dampak positif terhadap penguatan kemampuan berpikir kritis, yang ditandai dengan meningkatnya kemampuan siswa dalam mengidentifikasi masalah, menganalisis informasi, mengevaluasi argumen, serta menarik kesimpulan secara logis dan kontekstual berdasarkan nilai-nilai Islam. Penelitian ini menyimpulkan bahwa metode Problem Based Learning merupakan pendekatan pembelajaran yang efektif untuk meningkatkan kualitas pembelajaran Pendidikan Agama Islam dan mengembangkan kemampuan berpikir kritis siswa di Madrasah Aliyah. Oleh karena itu, PBL direkomendasikan sebagai alternatif strategi pembelajaran PAI yang relevan dengan tuntutan pendidikan abad ke-21.

Kata Kunci : Pembelajaran Berbasis Masalah; Pendidikan Agama Islam; Berpikir Kritis; Pembelajaran Aktif; Madrasah Aliyah

1. INTRODUCTION

Twenty-first century education requires students to not only master academic content, but also possess critical thinking skills as part of Higher Order Thinking Skills (HOTS). Critical thinking skills are important in helping students analyse information, evaluate arguments, and make decisions based on sound reasoning; this is relevant for solving real-world problems and understanding Islamic values in a meaningful way. In the context of Islamic Religious Education (PAI) learning, critical thinking skills also support students in understanding religious teachings reflectively, rather than merely memorising religious texts. However, in practice, PAI learning in many educational units, including at MA Negeri Simalungun, is still predominantly teacher-centred and tends to rely on lectures, thus providing less space for students to think analytically and reflectively about the learning material (Hasrat A Aimang, Muhammad Wahyudi, 2024). This has implications for the low critical thinking skills of students in the context of PAI learning.

This problem is in line with empirical studies that show that the application of conventional methods in religious education tends to be ineffective in developing students' higher-order thinking skills. This condition limits students' ability to identify, analyse, and solve contextual problems, including understanding concepts and values in Islamic Education.

In response to this problem, the Problem-Based Learning (PBL) model has emerged as an innovative learning approach designed to place students in an active position through solving authentic problems related to real life. PBL is believed to be capable of developing critical thinking skills because students are actively involved in formulating problems, searching for



and evaluating information, and formulating logical solutions. Various studies at various levels of education have shown that PBL has a positive effect on students' critical thinking skills, including in Islamic Religious Education at the primary to secondary levels. This provides a strong basis for implementing PBL in efforts to strengthen critical thinking among students at the State Islamic High School (MAN) in Simalungun Regency (Maisarah, 2025).

Based on the above background, the problems identified in this study are 1) How is the critical thinking ability of students at Simalungun State Islamic High School in Islamic Education learning before the implementation of PBL? 2) How can the implementation of PBL strengthen students' critical thinking abilities in the context of Islamic Education learning? 3) What factors are obstacles and supporters in the implementation of PBL at the school?

Problem-Based Learning is a learning model based on constructivist learning theory, in which students construct knowledge through active experiences of solving problems that are authentic and relevant to real-life contexts. Constructivism theory emphasises that knowledge is produced by students themselves through a process of elaboration, reflection, and collaboration in learning groups. John Dewey asserts that effective learning must be rooted in concrete experiences and problems so that students are able to develop meaningful thinking skills and understanding (Syamsidah, 2018).

Pedagogically, PBL guides students to identify problems, formulate research questions, collect and evaluate information, and develop logical solutions. These stages of the PBL process reflect the dimensions of critical thinking, namely the ability to analyse problems, evaluate evidence, and draw valid conclusions. Thus, PBL not only provides a more meaningful learning experience, but also directly trains students to think critically and reflectively in the context of PAI teaching materials (Syamsidah, 2018).

Critical thinking in the framework of Islamic Education can be understood as the ability of students to understand religious values analytically, reflectively, and contextually so that they are able to apply these values in real life. This concept of critical thinking is also supported by various contemporary Islamic education studies that emphasise the importance of developing reflective and evaluative reasoning skills in the PAI curriculum to prepare students to face global challenges (Lukluk Sofiatil Jannah, Sri Hartati, Dian Febri Ovianti, Ismawanto, 2024).

Although many empirical studies show that PBL has a positive impact on students' critical thinking skills at various levels of education, there is still a significant gap in the context of PAI learning at the general secondary level, such as MA, especially in the Simalungun region. Previous studies have mostly examined PBL in science or other general subjects, or at the primary education level, but few have focused on the implementation of PBL in Islamic Religious Education at Madrasah Aliyah with its specific socio-cultural context. In addition, previous studies have generally been quantitative in nature with a focus on results, while in-depth studies on how the PBL implementation process affects the development of critical thinking in the context of Islamic values have not been comprehensively studied. In other words, there is a need to broaden the understanding of the dynamics of PBL implementation in Islamic Religious Education learning and how this model contributes to critical thinking



aspects holistically (Intan Solihat Fazrin, Aulia Rahma Azizah, Jesinca Aliyyah, Isna Nurul Aini, 2025).

2. RESEARCH METHOD

This study uses a descriptive qualitative approach with field research. This approach was chosen to gain an in-depth understanding of the implementation process of the Problem-Based Learning (PBL) method in Islamic Religious Education and its contribution to strengthening students' critical thinking skills. Qualitative research allows researchers to examine learning phenomena in a naturalistic manner in accordance with the social and cultural context of madrasahs (John W. Creswell, 2017).

The research was conducted at MAN Simalungun Regency in the odd semester of the current academic year. The research subjects were grade XI students who participated in Islamic Religious Education learning with the application of PBL, while the research informants included PAI teachers and related school parties. The selection of informants was done using purposive sampling, taking into account their direct involvement in the learning process (Sugiyono, 2017).

The research data sources consisted of primary and secondary data. Primary data were obtained through observation, semi-structured interviews, and direct interaction with the research subjects. Secondary data were obtained from learning documents such as lesson plans, teaching modules, syllabi, and learning evaluation results relevant to the application of PBL.

Data collection techniques included participatory observation to observe the PBL-based PAI learning process, interviews to explore teachers' and students' perceptions of critical thinking reinforcement, and documentation to support and strengthen field data. The use of these various techniques aimed to obtain comprehensive and complementary data.

Data analysis was conducted interactively through the stages of data reduction, data presentation, and conclusion drawing, as stated by Miles, Huberman, and Saldaña (2014). This analysis was carried out continuously from data collection to the final stage of research to find patterns, meanings, and relationships between data.

Data validity is maintained through triangulation of sources and techniques, as well as member checks with informants to ensure that the researcher's interpretation is consistent with the field conditions. With these procedures, the research results are expected to have an adequate level of credibility and validity.

3. RESULT AND DISCUSSION

a. Results

1) Implementation of Problem-Based Learning in Islamic Religious Education

Based on classroom observations and learning documentation, the implementation of Problem-Based Learning (PBL) in Islamic Religious Education at MA Negeri Simalungun was carried out through relatively consistent stages, including: (1) problem orientation, (2)



organizing students into groups, (3) independent and collaborative investigation, (4) presentation of problem-solving results, and (5) reflection and evaluation of learning.

To clarify these findings, the results of PBL implementation observations can be seen in Table 1 below.

Table 1. Implementation of Problem-Based Learning Stages in PAI Learning

PBL stages	Forms of Implementation in the Classroom	Key Findings
Problem orientation	Teachers present contextual problems based on Islamic values	Students are interested and engaged from the very beginning of the learning process.
Student organization	Small group learning (4–5 students)	There was active discussion and division of roles
Investigation	Students look for arguments, concepts, and solutions	Students begin to analyze and compare arguments
Presentation of results	Class presentations and discussions	The emergence of courage to express opinions and think reflectively
Reflection and evaluation	Joint conclusion	Students are able to relate the material to real life

The findings in Table 1 show that PBL can be systematically implemented in PAI learning. Learning activities are no longer centered on the teacher, but on the students' thinking process. This reinforces the view that PBL is effective in creating active, collaborative, and meaningful learning (Cindy E. Hmelo, 2004).

During the learning process, students appeared to be more active in expressing their opinions, asking critical questions, and discussing solutions to the problems presented. The role of the teacher shifted from being the center of information to being a facilitator who guided the students' thinking process. These findings show that PBL can be effectively implemented in PAI learning and encourages students' active involvement in the learning process.

2) Strengthening Students' Critical Thinking Skills

The strengthening of students' critical thinking skills was analyzed based on critical thinking indicators, which included the ability to identify problems, analyze information, evaluate arguments, and draw conclusions. The results of the analysis of observations, interviews, and learning reflections are summarized in Table 2 below.

Table 2. Indicators of Strengthening Students' Critical Thinking through PBL

Critical Thinking Indicators	Initial Conditions	After the Implementation of PBL
Problem identification	Passive students, waiting for the teacher's explanation	Students are able to formulate problems independently
Information analysis	Limited to one source	Using arguments, examples, and experiences
Evaluating arguments	Normative answer	Able to compare and give logical reasons
Drawing conclusions	Reviewing the material	Reflective and contextual summarizing



The data in Table 2 shows a change in students' thinking patterns from merely reproducing knowledge to analytical and reflective thinking processes. Students not only mention religious concepts or principles, but are also able to explain their relevance to the social issues discussed. This confirms that PBL plays an effective role in training critical thinking in Islamic Religious Education learning.

The results of documentation and learning reflection show that students have become more confident in expressing their opinions and are able to provide rational reasons for their answers. This indicates that PBL-based Islamic Religious Education learning contributes positively to strengthening students' critical thinking.

b. Discussions

The findings of this study confirm that the application of Problem Based Learning in Islamic Religious Education is capable of creating a more meaningful learning process that is oriented towards the development of critical thinking. PBL encourages students to learn through authentic problems so that they are cognitively and affectively involved in the learning process. This condition is in line with constructivism theory, which emphasizes that knowledge is constructed through experience and active interaction with the learning environment (John W. Creswell, 2017).

The results of this study reinforce constructivist theory, which places students as active subjects in constructing knowledge through problem-solving experiences. In the context of Islamic Religious Education, PBL helps students understand Islamic values contextually, rather than dogmatically. These findings are in line with the opinion (Cindy E. Hmelo, 2004) that PBL encourages the development of higher-order thinking through analysis and reflection activities.

The strengthening of critical thinking found in this study is also in line with previous research findings which state that PBL is effective in improving students' higher-order thinking skills, including analysis, evaluation, and reflection (Cindy E. Hmelo, 2004). This confirms that PBL provides space for students to develop critical thinking skills through a systematic problem-solving process. In the context of Islamic Education, this approach allows students to understand religious values contextually and reflectively, rather than merely normatively and dogmatically (Ulfa YantiZahara, Silvy Wirnanda Rambe, 2021).

In addition, the results of this study also expand on previous research findings that state that PBL is effective in improving critical thinking, but most of it is done in general subjects. This study shows that PBL is also relevant and effective when applied to Islamic Religious Education in Madrasah Aliyah, particularly in the local context of MA Negeri Simalungun. Thus, this study fills a research gap related to the implementation of PBL in Islamic Religious Education at the madrasah-based secondary education level (Wahyudi, 2025).

However, this study found obstacles in the form of limited learning time and differences in students' initial abilities. This shows that the success of PBL is highly dependent on the readiness of teachers in designing proportional problems and effective classroom management strategies.



4. CONCLUSION

Based on the results of the research and discussion, it can be concluded that the implementation of the Problem-Based Learning (PBL) method in Islamic Religious Education at MA Negeri Simalungun can be applied effectively and contribute positively to strengthening students' critical thinking skills. The application of PBL encourages students to actively participate in the learning process through problem analysis, group discussions, argument evaluation, and reflection on Islamic values in the context of real life.

PBL-based Islamic Religious Education not only improves students' conceptual understanding of the subject matter, but also trains their higher-order thinking skills, particularly in identifying problems, analyzing information, and drawing logical and religiously valuable conclusions. These findings show that PBL is in line with the objectives of Islamic education, which emphasizes the integration of knowledge, attitude, and reflective thinking skills.

Thus, Problem-Based Learning can be used as a strategic alternative in Islamic Religious Education to improve the quality of the learning process and outcomes, particularly in terms of critical thinking.

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