THE EFFECTIVENESS OF PROBLEM BASED LEARNING IN IMPROVING STUDENTS UNDERSTANDING OF ISLAMIC CREED AND ETHICS

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Abstract. This study examines the effectiveness of the Problem-Based Learning (PBL) model in enhancing students' understanding of Islamic creed (ʿaqīdah) and ethics (akhlāq). The research was motivated by the need to improve higher-order thinking skills and meaningful learning in Islamic Religious Education, which often remains dominated by teacher-centered and memorization-based approaches. Using a quasi-experimental design, this study involved two groups of students—an experimental group taught using PBL and a control group taught using conventional methods. Data were collected through pre-tests, post-tests, classroom observations, and student learning response questionnaires. The findings show that the implementation of PBL significantly improves students' conceptual understanding, critical thinking, and ability to connect Islamic theological principles with ethical decision-making in daily life. Students in the PBL group demonstrated higher engagement, deeper inquiry, and better retention of concepts related to the unity of God (tawḥīd), prophetic traditions, moral reasoning, and ethical behavior. The results also indicate that PBL fosters collaborative learning and encourages students to explore real-life dilemmas through an Islamic worldview. Overall, the study concludes that Problem-Based Learning is an effective pedagogical approach for strengthening students' understanding of Islamic creed and ethics. The model not only enhances cognitive comprehension but also promotes reflective moral development, making it a relevant strategy for modern Islamic education. The study recommends wider implementation of PBL in Islamic Religious Education curricula to support the development of students' critical, spiritual, and ethical competencies.

Keywords: Problem-Based Learning; Islamic Creed; Islamic Ethics; Student Understanding; Religious Education

I. INTRODUCTION

A strong understanding of the Islamic creed (ʿaqīdah) is the primary foundation for developing students' Islamic identity, as it serves as an epistemological framework that guides their thinking, behavior, and interpretation of reality[1]; [2]. According to Al-Attas (1991), the creed encompasses not only theological beliefs but also forms an Islamic worldview that serves as the moral, intellectual, and spiritual foundation of a Muslim. Therefore, mastery of fundamental concepts such as tawḥīd, prophecy, and the unity of ethical values is the starting point for determining the quality of a student's faith. Al-Ghazali (2013) also emphasized that a person's moral integrity stems from clarity of the creed, as correct belief leads to correct behavior. Therefore, comprehensive education in the creed is crucial for developing a strong and consistent religious character in students [3], [4], [5], [6].

Furthermore, Islamic ethics (akhlāq) plays an integral role in instilling commendable behavior that reflects Muslim identity in social life. Islamic ethics is not merely a set of moral rules, but a system of values that governs human relationships with God, others, and the environment[7]. Halstead (2007) emphasizes that morality is the practical implementation of faith; without good morality, faith is imperfect. In an educational context, an adequate understanding of morality helps students develop moral intelligence[8], [9], empathy, and social responsibility, enabling them to face modern challenges with a strong Islamic character. Therefore, the integration of faith and morality in learning is crucial for developing a complete, balanced, and functional Islamic identity in real life [10].

Islamic Religious Education (PAI) teaching in many schools still tends to use a traditional approach of lectures and memorization, emphasizing a one-way delivery of material[11]. This approach focuses on the transfer of knowledge, rather than developing students' conceptual understanding or critical thinking skills. As a result, students simply memorize religious information without understanding the meaningful connections between the concepts of faith, worship, and morals and the realities of everyday life. According to Tafsir (2012), a learning model that is too teacher-centered often leaves students passive, uninvolved in the knowledge construction process, and makes it difficult to deeply internalize Islamic values. This indicates that lectures and memorization methods are no longer adequate to meet the needs of 21st-century education, which demands active, critical, and contextual learning [12], [13], [14], [15].

The limitations of lectures and memorization methods also impact students' weak internalization of values. When students are only asked to memorize definitions of morals or the pillars of faith without being given space to explore the context of real-life moral issues, learning becomes purely cognitive and under-engages the affective and psychomotor domains[16]. According to Abuddin Nata (2014), Islamic education that does not involve experience, dialogue, and problem-solving tends to fail to develop a consistent moral character because religious values are not functionally integrated into students' behavior. Therefore, alternative, more participatory and problem-based learning models are needed, such as Problem-Based Learning (PBL), which allows students to understand Islamic values through inquiry, discussion, and application in real-life situations [8], [17].

The development of modern education demands a learning model that focuses not only on mastering material but also on developing students' critical thinking, problem-solving, and reflective abilities. In the context of Islamic Religious Education, this need is increasingly pressing because students must be able to understand faith and morals not merely as normative concepts, but as a framework of values that can be applied in real life[18]. According to Zubaedi (2011), Islamic education must be directed towards producing students who are able to integrate knowledge, faith, and good deeds through an active and dialogical learning process. Innovative learning models are needed so that students not only absorb information but also are able to evaluate, analyze, and connect Islamic values to contemporary issues such as digital interaction, social ethics, and moral decision-making [19].

Furthermore, innovative learning models are needed to provide meaningful learning experiences that can strengthen the internalization of faith and moral values. Traditional, textual approaches tend to fail to connect Islamic teachings with the dynamics of students' modern lives, resulting in these values not being realized in their daily behavior[20]. According to Suparno (2012), constructivist learning, in which students are actively involved in discovering meaning through exploration and problem-solving, is more effective in fostering deep understanding and moral awareness. Therefore, learning about faith and morals requires innovative strategies such as Problem-Based Learning, Project-Based Learning, or Inquiry Learning, which can present real-life problematic situations as a vehicle for developing critical thinking skills and strengthening Islamic character [13]; [21], [22].

Problem-Based Learning (PBL) holds strong relevance in Islamic education because this model provides a space for students to develop theological reasoning through critical thinking and analysis of various religious issues. In PBL, students do not simply passively accept concepts of faith but are invited to explore theological meaning through case studies, group discussions, and independent investigations oriented toward problem-solving. This aligns with the principle of tafaqquh fī al-dīn, namely the deepening of religious knowledge through a process of deep understanding, not simply memorization. According to Al-Attas (1991), Islamic education must guide students to develop adab al-fikr (ethical thinking) and thus understand the relationship between the concepts of divinity, humanity, and morality. With the PBL approach, students learn to connect concepts of faith with social reality, thus developing contextual and applicable theological reasoning [23], [24], [25].

Furthermore, PBL is highly relevant for fostering students' applied ethics and moral reflection because this model confronts students with problematic situations that require value judgment, empathy, and moral decisions. When students analyze ethical dilemmas for example, those related to honesty, responsibility, social etiquette, or the use of digital technology they learn to apply Islamic moral principles in real-life situations. Halstead (2007) asserts that students' moral development is strongly influenced by their engagement in dialogic processes and real-life experiences that require self-evaluation. PBL facilitates these experiences through collaborative discussions, group reflection, and drawing moral conclusions based on both rational and rational evidence. Thus, PBL not only enhances academic skills but also helps students develop a deeper ethical awareness and Islamic character [26].

Research by Aminuddin and Suryadi (2019) found that the application of PBL to Islamic Religious Education significantly improved students' analytical skills in understanding the principles of faith and theological argumentation. Meanwhile, research by Nasution (2020) revealed that PBL can reduce the dominance of memorization in Islamic Religious Education learning by encouraging students to examine Islamic concepts through the context of real-life problems. These findings reinforce the view that PBL can be a more effective alternative to conventional lecture methods in fostering conceptual understanding in religious aspects [27].

Other research also shows that PBL contributes significantly to the development of students' moral awareness and ethical behavior. According to a study by Riyadi and Sukarno (2021), the use of PBL on Islamic morals improved students' ability to identify ethical dilemmas, conduct moral reasoning, and apply moral values in everyday life. This research confirms that problem-based learning experiences enable students to connect Islamic ethical theory with the social practices they encounter. Furthermore, research by Fadhilah (2022) shows that PBL not only improves understanding of values but also strengthens students' collaboration, empathy, and self-reflection. Thus, empirical literature consistently supports the strong relevance of PBL in improving understanding of faith and internalizing moral values in Islamic education.

II. RESEARCH METHODS

This study used a quantitative approach with a quasi-experimental design to measure the effectiveness of Problem-Based Learning (PBL) in improving students' understanding of Islamic creed and Islamic ethics. The design used was a nonequivalent control group design, where one class was designated as the experimental group receiving PBL treatment, while the other class served as the control group with conventional learning. The primary instrument used was a pre-test and post-test test of understanding of Islamic creed and ethics to determine improvements in learning outcomes. Additionally, an observation sheet was used to assess student engagement during the learning process, and a student

response questionnaire was used to obtain an overview of their perceptions of problem-based learning.

Data analysis was conducted through inferential statistical tests using paired sample t-tests to examine differences in learning outcomes before and after the treatment, and independent sample t-tests to identify significant differences between the experimental and control groups. Instrument validity and reliability were first tested using construct validity and Cronbach's alpha reliability coefficients. Qualitative data from the observations and questionnaires were analyzed descriptively to strengthen the interpretation of the quantitative results. This combination of analyses provides a comprehensive picture of the effectiveness of PBL in improving conceptual understanding, learning engagement, and internalization of religious and moral values in students.

III. RESULT AND DISCUSSION

The research findings showed a significant difference between pre-test and post-test scores in the experimental group using the Problem-Based Learning (PBL) model. The consistent improvement in scores indicates that PBL facilitates a deeper understanding of faith concepts such as tawḥīd, prophecy, and qada-qadar. When students are presented with case studies and trigger questions, they are encouraged to explore the theological foundations through reasoning and discussion, so that their understanding is not only declarative but also conceptual and applicable. This is evident in students' improved ability to explain the relationship between the concept of divinity and its implications in life, as well as their ability to identify theological principles relevant to the situations they face.

In addition to cognitive improvement, PBL also positively impacts students' reasoning skills in utilizing naqli and aqli evidence to support theological arguments they construct. Classroom observations show that students are more active in asking questions, providing opinions, and analyzing faith issues in the context of group discussions. This activity demonstrated a significant increase in learning engagement, with students not only memorizing propositions but also constructing meaning through dialogue and problem-solving. Overall, the increased participation and analytical skills demonstrate that PBL is an effective strategy for strengthening a comprehensive understanding of faith, both cognitively and through critical and reflective thinking processes can be seen in Table 1.

Table 1. The analysis presented in the table demonstrates that Problem Based Learning (PBL) effectively enhances students' understanding of Islamic creed across multiple dimensions of learning. The significant difference between pre-test and post-test scores in the experimental group, along with the greater improvement compared to the control group, indicates that PBL meaningfully strengthens cognitive comprehension of key theological concepts such as tawḥīd, prophethood, and qada–qadar. Moreover, students in the PBL group exhibit a stronger ability to employ both naqli and aqli reasoning, suggesting deeper theological reflection and improved argumentation skills. Classroom observations further confirm active participation and heightened

engagement, demonstrating that PBL not only improves academic outcomes but also fosters critical thinking and meaningful involvement in discussions on Islamic creed.

Table 1. Improvement in Understanding Islamic Creed

Aspect of Findings	Analytical Description
Significant difference between pre-test and post-test scores in the experimental group	Students in the PBL group demonstrated a statistically significant increase in their scores, indicating the effectiveness of the problem-based learning intervention.
Higher improvement in the PBL group compared to the control group	The experimental group showed greater learning gains than the control group, confirming that PBL is more effective than traditional lecture-based instruction.
Consistent improvement in understanding *tawḥīd*, prophethood, and qada–qadar	Students exhibited better mastery of core creed concepts, demonstrated through clearer explanations, relevant examples, and the ability to connect these principles to real-life contexts.
Increased ability to reason using naqli and aqli evidence	Students showed improved ability to present Qur'anic verses, hadith, and logical arguments to support theological reasoning during class activities and discussions.
Active student engagement during discussions on creed topics	Classroom observations revealed higher participation, enthusiasm, and questioning among students in the PBL group, indicating stronger cognitive and emotional engagement with the material.

Furthermore, the results of the study showed that students' understanding of morality in the experimental group who participated in Problem Based Learning (PBL) experienced a significant increase compared to the control group. Students' post-test scores in the PBL group were higher, indicating that the problem-based approach not only strengthened conceptual understanding but also students' ability to identify and analyze ethical dilemmas more critically. When students were faced with problematic situations such as issues of honesty, technology use, or simple social conflicts, they were able to map the problem, assess differing views, and draw conclusions based on Islamic values. This process demonstrates that PBL is able to activate the higher-order thinking mechanisms necessary to understand and interpret Islamic morality in the contemporary context.

In addition to improvements in analytical aspects, students in the experimental group also showed progress in the application of moral values such as honesty, trustworthiness, responsibility, and empathy. This was evident from observations and group discussion activities where students related these values to everyday experiences, both in the school and family environment. PBL makes moral learning more meaningful because students learn through real-life situations, rather than simply receiving moral rules textually. Questionnaire data showed that students found PBL learning more relevant, interesting, and easier to

understand because they were able to connect moral theory with the realities they faced. Thus, PBL not only improves cognitive understanding but also supports the internalization of moral values in students' actual behavior, as seen in Tables 2 and 3.

Table 2. Descriptive Statistics of Experimental and Control Groups (Ethical Understanding)

Group	N	Mean Pre-test	Mean Post-test	Selisih (Gain)	SD Pre-test	SD Post-test
Eksperimen t	30	62.40	84.20	21.80	8.12	6.45
Control	30	61.90	74.10	12.20	7.85	7.10

Table 2. The statistical analysis presented in the tables demonstrates that Problem Based Learning (PBL) has a substantial and measurable impact on improving students' understanding of Islamic ethics. The descriptive statistics show that the experimental group experienced a much higher mean gain score compared to the control group, indicating a stronger improvement in ethical comprehension after the intervention. This finding is reinforced by the paired t-test, which reveals a highly significant increase in post-test scores within both groups, although the magnitude of improvement is considerably greater in the PBL group. The independent t-test further confirms that the difference in gain scores between the two groups is statistically significant, establishing PBL as more effective than traditional teaching methods. Moreover, the effect size analysis (Cohen's d) indicates a very large effect in the experimental group, suggesting that PBL not only enhances cognitive understanding but also produces meaningful, practical, and educationally significant changes in students' ethical reasoning and application of Islamic moral values. Furthermore, the results of the Paired t-test can be seen in Table 3.

Table 3. Paired t-test results (within groups)

Group	t-value	df	Sig. (p-value)	Interpretation
Experimental	12.45	29	0.000	Significant improvement
Control	6.33	29	0.000	Improvement observed, but smaller in magnitude

The results presented in Table 3 indicate a significant improvement in students' understanding of Islamic ethics within both the experimental and control groups, as evidenced by the very low p-values (0.000) obtained from the paired t-test analysis. However, the magnitude of improvement differs substantially between the groups. The experimental group, which received instruction through Problem Based Learning (PBL), achieved a much higher t-value (12.45), demonstrating a stronger and more meaningful

increase in post-test scores compared to the control group. In contrast, the control group also showed improvement, but with a smaller t-value (6.33), suggesting that traditional teaching methods were less effective in enhancing ethical understanding. Overall, these findings confirm that PBL offers a more impactful learning experience, leading to greater gains in students' ethical reasoning and comprehension.

Research findings indicate that Problem-Based Learning (PBL) significantly improves students' understanding of Islamic creed concepts. Improved pre- and post-test scores in the experimental group demonstrate that the problem-based approach is more effective than the linear, one-way lecture method. This aligns with Tan's (2003) view that PBL enables students to build conceptual understanding through investigative and contextual activities. In the context of creed, students more easily grasp the concepts of tawḥīd, prophecy, and qada-qadar when they are analyzed through case studies and guided discussions, rather than simply accepted as theoretical doctrines. Therefore, PBL strengthens the construction of theological understanding through active interaction and meaningful learning experiences [28].

A significant improvement in students' ability to reason based on naqli evidence (the Qur'an and hadith) and aqli evidence (logical argumentation) was observed after participating in problem-based learning. Students were able to connect religious texts with rational arguments in analyzing issues of faith. This finding supports the view of Al-Attas (1991), who asserted that Islamic education should foster the development of adab al-fikr, or ethical thinking that integrates revelation and reason. Through PBL, students are encouraged to ask questions, evaluate evidence, and systematically construct arguments. Thus, learning about faith is no longer limited to memorizing concepts but develops into an intellectual process that fosters students' analytical and critical thinking[29]. In terms of morals, PBL has been shown to improve students' ability to identify, analyze, and resolve ethical dilemmas based on Islamic moral principles. Students in the experimental group were able to relate values such as honesty, trustworthiness, responsibility, and empathy to the context of everyday life. This model aligns with Halstead's (2007) statement, which asserts that learning Islamic ethics will be more effective if students engage in a dialogical and reflective process. When students are confronted with authentic moral issues, they are encouraged to think more deeply about the implications of their behavior and relate them to Islamic moral teachings. Therefore, PBL plays a crucial role in developing moral reasoning skills and internalizing moral values [30].

The implementation of PBL also increases students' active participation and motivation in the learning process. Students in the experimental group demonstrated greater courage in asking questions, discussing, and expressing opinions, an indicator of higher engagement compared to the control group. According to Savery (2015), PBL creates a learning environment that demands collaboration, exploration, and individual responsibility, thereby increasing students' emotional and cognitive engagement. This is evident in the learning of faith and morals, where students

are more enthusiastic about exploring religious issues because they feel involved in the process of solving problems relevant to their lives. Therefore, increased learning motivation is a key factor supporting the effectiveness of PBL [2]; [7].

PBL is an effective learning model for holistically enhancing understanding of faith and morals. This approach not only strengthens cognitive aspects but also develops students' critical thinking skills, moral literacy, and spiritual awareness. This aligns with the goals of Islamic education according to Al-Ghazali (2013), namely to develop civilized, knowledgeable, and morally upright individuals. PBL provides a space for students to practice Islamic values through real-life experiences, so that their knowledge is not merely theoretical. Thus, these findings emphasize the importance of pedagogical innovation in Islamic Religious Education to address the needs of 21st-century learning and shape a generation that is religious, reflective, and has character [1].

IV. CONCLUSIONS

The results of this study indicate that Problem-Based Learning (PBL) has proven effective in improving students' understanding of the concepts of Islamic creed and ethics. A significant increase in the post-test scores of the experimental group compared to the control group indicates that PBL is able to facilitate deeper and more meaningful learning. Through problem-solving, group discussions, and investigative processes, students not only understand theological concepts such as tawḥīd, prophecy, and qada-qadar, but are also able to connect these teachings to the realities of life. This approach produces conceptual, analytical, and applicable understanding, far beyond the memorization process common in traditional lecture-based learning.

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