



The Effect of the Problem-Based Learning Model on Critical Thinking Skills and Student Learning Outcomes

Hendra Alsa Fahmi¹, Amiruddin Siahaan², Ira Suryani³

Universitas Islam Negeri Sumatera Utara, Medan, Indonesia^{1,2,3}

hendra0331234029@uinsu.ac.id¹

Abstract: This study aims to analyze the effect of implementing Problem-Based Learning (PBL) on students' critical thinking skills and learning outcomes in the Fiqh Ibadah course at the Faculty of Islamic Studies, Universitas Dharmawangsa. A quasi-experimental approach with a pretest-posttest control group design was employed. The research participants consisted of 45 fourth-semester students divided into an experimental group taught using the PBL model and a control group taught using conventional instructional methods. Research instruments included a critical thinking skills test, a cognitive learning outcomes test, and an observation sheet of learning activities. Data were analyzed using normality and homogeneity tests, independent-samples t-tests, and two-way ANOVA with the assistance of SPSS version 26.0. The findings indicate that the implementation of Problem-Based Learning has a statistically significant effect on improving students' critical thinking skills ($p < 0.05$) and learning outcomes in the Fiqh Ibadah course ($p < 0.05$). Furthermore, a significant interaction was found between the learning model and students' critical thinking skills in influencing learning outcomes. These results demonstrate that PBL not only enhances students' conceptual understanding but also fosters higher-order thinking abilities, including analytical, reflective, and contextual reasoning in addressing contemporary fiqh issues. Therefore, Problem-Based Learning is recommended as an effective instructional strategy for improving the quality of Islamic education learning in higher education.

Keywords: problem-based learning; critical thinking skills; learning outcomes; fiqh ibadah; Islamic education

Abstrak : Penelitian ini bertujuan untuk menganalisis pengaruh penerapan Problem-Based Learning (PBL) terhadap keterampilan berpikir kritis dan hasil belajar mahasiswa pada mata kuliah Fiqh Ibadah di Fakultas Agama Islam, Universitas Dharmawangsa. Penelitian menggunakan pendekatan kuasi-eksperimen dengan desain pretest-posttest control group. Subjek penelitian terdiri atas 45 mahasiswa semester empat yang dibagi ke dalam dua kelompok, yaitu kelompok eksperimen yang diajar menggunakan model PBL dan kelompok kontrol yang diajar menggunakan metode pembelajaran konvensional. Instrumen penelitian meliputi tes keterampilan berpikir kritis, tes hasil belajar kognitif, dan lembar observasi aktivitas belajar. Data dianalisis menggunakan uji normalitas dan homogenitas, uji t independen, serta two-way ANOVA dengan bantuan SPSS versi 26.0. Hasil penelitian menunjukkan bahwa penerapan PBL berpengaruh signifikan terhadap peningkatan keterampilan berpikir kritis mahasiswa ($p < 0,05$) dan hasil belajar Fiqh Ibadah ($p < 0,05$). Selain itu, terdapat interaksi yang signifikan antara model pembelajaran dan keterampilan berpikir kritis dalam memengaruhi hasil belajar mahasiswa. Temuan ini menunjukkan bahwa Problem-Based Learning tidak hanya meningkatkan pemahaman

konseptual mahasiswa, tetapi juga mendorong kemampuan analitis, reflektif, dan kontekstual dalam memahami persoalan fikih kontemporer. Oleh karena itu, PBL direkomendasikan sebagai alternatif strategi pembelajaran yang efektif dalam pengembangan kualitas pembelajaran pendidikan Islam di perguruan tinggi.

Kata kunci: problem-based learning; berpikir kritis; hasil belajar; fiqh ibadah; pendidikan Islam

Corresponding Author:

Hendra Alsa Fahmi

Universitas Islam Negeri Sumatera Utara, Medan, Indonesia; hendra0331234029@uinsu.ac.id

Introduction

Higher education institutions are expected to produce graduates who not only master conceptual knowledge but also possess strong critical thinking skills to address the complexity of academic and social issues (Arif et al., 2023). This challenge has become increasingly relevant in the context of rapid technological advancement, the massive flow of information, and the dynamic nature of religious life in society. However, various indicators suggest that the critical thinking ability of Indonesian students remains relatively low. The 2018 Programme for International Student Assessment (PISA) report placed Indonesia among the lower-ranking countries in terms of reasoning and problem-solving skills, indicating an urgent need to improve learning approaches across educational levels, including higher education.

This condition is also reflected in the learning process at the Faculty of Islamic Studies (Fakultas Agama Islam/FAI) of Universitas Dharmawangsa. Based on preliminary observations, teaching practices are still predominantly dominated by lecture-based methods with one-way interaction patterns. Students tend to act as passive recipients of information, while opportunities for discussion, expression of ideas, and critical analysis of religious issues remain limited. As a result, students' abilities to relate course material to contemporary socio-religious realities, construct scientific arguments, and engage in critical reflection have not developed optimally.

Previous studies have demonstrated that Problem-Based Learning (PBL) has the potential to enhance students' critical thinking skills and learning outcomes. Several studies report that problem-based learning increases student participation, analytical ability, and deeper conceptual understanding compared to conventional learning methods (Amirulloh et al., 2025). Nevertheless, most of these studies have been conducted in the fields of science, technology, or general education, while empirical research on the implementation of PBL in the context of Islamic higher education remains limited. Furthermore, few studies have specifically examined the application of PBL within religious faculties characterized by learning processes that emphasize not only cognitive dimensions but also Islamic values and attitudes (Firdaus et al., 2021).

These limitations indicate a research gap concerning the effectiveness of PBL in improving critical thinking skills and learning outcomes within the context of Islamic

education, particularly in faculties of Islamic studies. In fact, Islamic education at the higher education level faces the challenge of not merely transmitting normative knowledge but also equipping students with the ability to analyze and respond to contemporary religious issues rationally and contextually. Based on this background, this study aims to analyze the effect of implementing Problem-Based Learning on students' critical thinking skills and learning outcomes at the Faculty of Islamic Studies, Universitas Dharmawangsa. More specifically, this research seeks to address the following questions: 1). How is the Problem-Based Learning model implemented in teaching and learning activities at the Faculty of Islamic Studies, Universitas Dharmawangsa? 2). Does the implementation of the Problem-Based Learning model significantly influence the improvement of students' critical thinking skills and learning outcomes? 3). The findings of this study are expected to provide empirical contributions to the development of Islamic education learning practices in higher education and to serve as a reference for lecturers in designing more contextual, participatory, and critical thinking-oriented learning strategies.

Problem-Based Learning (PBL) is a learning model that positions students as active subjects in discovering solutions to real-world problems (Arends, 2012). The primary objective of PBL is to develop students' critical, collaborative, and reflective thinking skills through a guided inquiry process (Hmelo-Silver, 2019). Within the context of Islamic education, PBL assists students in connecting religious texts with contemporary societal issues, thereby fostering a more contextual and meaningful understanding of Islamic teachings (Kusumawati, I. T., Soebagyo, J., & Nuriadin, 2022). The primary goal of Problem-Based Learning (PBL) is to foster higher-order thinking skills, particularly critical, collaborative, and reflective thinking, through a guided inquiry process (Hmelo-Silver, 2019). The inquiry process in PBL involves a series of activities, including problem formulation, hypothesis generation, information gathering and analysis, and the evaluation of proposed solutions. Through these stages, students not only acquire conceptual knowledge but also develop metacognitive skills that support lifelong learning.

In the context of Islamic education, Problem-Based Learning (PBL) has strong relevance because religious subject matter, particularly fiqh, is inherently applicable and contextual. PBL enables students to connect normative texts such as the Qur'an and Hadith with contemporary issues faced by society, thereby ensuring that religious understanding is not merely textual or dogmatic but rather argumentative and contextual (Kusumawati, I. T., Soebagyo, J., & Nuriadin, 2022). Accordingly, PBL functions as a bridge between the theoretical understanding of Islamic law and the dynamic practice of religious life.

Critical thinking is defined as reflective and rational thinking focused on making decisions about what to believe or what actions to take (Ennis, 1996). It encompasses the ability to analyze arguments, evaluate evidence, identify underlying assumptions, and draw conclusions in a logical and systematic manner. (Paul, R., & Elder, 2020) emphasize that critical thinking also involves the application of intellectual standards such as clarity, accuracy, relevance, and logical consistency when assessing ideas or addressing problems. In Islamic education, critical thinking skills are particularly essential because students are often

confronted with various legal issues that involve differing scholarly opinions among Muslim jurists. Critical thinking enables students to comprehend shari'ah texts in a comprehensive manner, consider social and cultural contexts, and evaluate diverse fiqh perspectives through sound argumentation. Consequently, Islamic learning does not merely emphasize the memorization of textual evidence but evolves into a responsible process of interpreting and reasoning Islamic law. The implementation of Problem-Based Learning (PBL) directly supports the development of critical thinking skills, as students are trained to analyze contextual fiqh issues, such as professional zakat, religious practices for travelers, or forms of worship in the digital era. Through discussion, argumentation, and reflective activities embedded in PBL, students are provided with opportunities to continuously test and revise their understanding (Ennis, 1996); . In Islamic education, critical thinking thus guides students to interpret shari'ah texts in a contextual and argumentative manner rather than in a purely dogmatic way.

Learning outcomes refer to changes in behavior encompassing the cognitive, affective, and psychomotor domains as a result of the learning process (Bloom, 1984). The cognitive domain relates to the acquisition of knowledge and thinking skills, the affective domain involves attitudes, values, and motivation, and the psychomotor domain concerns practical skills. These three domains are interrelated and collectively form comprehensive learning achievement. In the context of Islamic education, learning outcomes are not solely measured by students' academic abilities but also by the internalization of moral and spiritual values reflected in their attitudes and behaviors (Hidayaty, A., Qurbaniah, M., & Setiadi, n.d.). Therefore, *fiqh* learning aims not only to ensure that students conceptually understand the laws of worship but also to enable them to internalize and practice these principles in their daily lives.

Method

This study employed a quasi-experimental research approach using a pretest-posttest control group design (Bambang Sudaryana et al., 2022). This design was selected because it allows the researcher to compare changes in students' critical thinking skills and learning outcomes between a group receiving the Problem-Based Learning (PBL) model and a group taught using conventional instructional methods. The use of pretests and posttests aimed to control for initial ability differences and to provide empirical evidence regarding the effectiveness of the applied treatment.

The population of this study consisted of all fourth-semester students of the Faculty of Islamic Studies, Universitas Dharmawangsa, who were enrolled in the *Fiqh Ibadah* course during the 2024/2025 academic year. The total population comprised 68 students distributed across two parallel classes, namely PAI A and PAI B.

The sampling technique used was purposive sampling with the following criteria (Jaya, 2020):

1. students actively registered in the *Fiqh Ibadah* course,
2. students who had not previously experienced Problem-Based Learning in the course, and
3. students with a minimum attendance rate of 80% throughout the semester.

Based on these criteria, 45 students were selected as the research sample. The sample consisted of two intact classes:

1. Class PAI A, consisting of 23 students, served as the experimental group, and
2. Class PAI B, consisting of 22 students, served as the control group.

Group assignment was not conducted through random assignment but utilized existing intact classes; therefore, this study is categorized as a quasi-experimental study. To ensure equivalence of initial abilities, both groups were administered a pretest, and the results of an independent t-test indicated no statistically significant difference. Thus, the two groups were considered equivalent and comparable.

This study employed a quasi-experimental design involving an independent variable and two dependent variables. The independent variable was the Problem-Based Learning (PBL) instructional model, while the dependent variables consisted of students' critical thinking skills and learning outcomes in the Fiqh Ibadah course. In addition, this study examined the interaction between the learning model and students' critical thinking skills in influencing learning outcomes. The research was conducted over six instructional meetings, each lasting 2×50 minutes. Before implementation, a preliminary study was conducted to identify learning problems, followed by the development of PBL-based instructional materials, including the Semester Learning Plan (RPS), lesson plans, learning scenarios, and research instruments, all of which were validated by three experts in Islamic education and educational research methodology.

During the treatment implementation stage, the experimental group received instruction using the PBL model across six meetings with systematically structured topics, namely fasting and health-related issues, professional zakat, shadaqah in the digital economy, grants and gifts in social contexts, hajj and umrah for vulnerable groups, and worship practices in the digital era. Students were organized into small groups of four to five members, and learning activities followed the PBL syntax of problem orientation, organization of learning, individual and group investigation, development and presentation of solutions, and analysis and reflection. Group discussions lasted approximately 40 minutes, followed by presentation and reflection sessions of about 30 minutes. In contrast, the control group was taught using conventional lecture and question-and-answer methods with the same instructional materials, duration, and schedule, but without structured problem-solving activities. To ensure treatment fidelity, PBL implementation was monitored using observation checklists completed by two independent observers, and the same lecturer taught both groups to minimize teacher effects.

Data collection was conducted after the completion of all treatments through posttests measuring students' critical thinking skills and learning outcomes, supported by observation of student learning activities (Prasetyo, 2012). The research instruments included a critical thinking skills test based on Ennis's indicators, a cognitive learning outcomes test aligned with Bloom's taxonomy levels C2-C4, and a learning activity observation sheet. Instrument validity was established through expert judgment and Pearson's Product-Moment correlation ($r \geq 0.40$), while reliability testing using Cronbach's Alpha indicated high reliability ($\alpha = 0.87$ for the critical thinking test and $\alpha = 0.84$ for the learning outcomes test). Data were analyzed using SPSS version 26.0, employing normality and homogeneity tests, independent-samples t-tests, two-way ANOVA to examine interaction effects, gain score analysis, and descriptive analysis. This study adhered to ethical principles, with informed consent obtained from all participants, voluntary participation ensured, confidentiality maintained, and data used solely for academic purposes.

Result and Discussion

Result

This study was conducted with third-semester students of the Faculty of Islamic Studies, Universitas Dharmawangsa, in the Fiqh Ibadah course, with the aim of analyzing the effect of the implementation of Problem-Based Learning (PBL) on students' critical thinking skills and learning outcomes. The research subjects consisted of two groups: an experimental class that received instruction using the PBL model and a control class that was taught using conventional learning methods.

1. Normality and Homogeneity Tests

The data were normally distributed and homogeneous across groups (Sig. > 0.05). Prior to hypothesis testing, prerequisite analyses were conducted to ensure that the data met the assumptions of normality and homogeneity.

The normality test was carried out using the Kolmogorov-Smirnov test. The results indicated that the significance values (Sig.) for all variables were greater than 0.05, suggesting that the data were normally distributed.

The homogeneity test was performed using Levene's test to examine the equality of variances between groups. The findings showed significance values greater than 0.05, indicating that the variances between the experimental and control groups were homogeneous.

Variable	Group	Sig. (Kolmogorov-Smirnov)	Interpretation
Critical Thinking Skills (Questionnaire)	Experimental (PBL)	0.158	Normal
Critical Thinking Skills (Questionnaire)	Control	0.130	Normal
Learning Outcomes (Pre-test)	Experimental (PBL)	0.174	Normal
Learning Outcomes (Pre-test)	Control	0.122	Normal
Learning Outcomes (Post-test)	Experimental (PBL)	0.192	Normal
Learning Outcomes (Post-test)	Control	0.176	Normal

The significance values for all variables were greater than 0.05, indicating that the data were normally distributed. Therefore, subsequent analyses were conducted using parametric statistical tests, namely the independent-samples t-test and two-way ANOVA.

Variabel	Levene Statistic	Sig.	Interpretation
Critical Thinking Skills	0.745	0.393	Homogen

The significance values for both variables were greater than 0.05, indicating that the data exhibited homogeneous variances. Therefore, difference testing could be appropriately conducted using parametric statistical methods. Accordingly, the research data met the assumptions required for parametric statistical analyses, including the t-test and two-way ANOVA.

2. t-Test Analysis

The analysis was conducted using an independent-samples t-test to compare the mean scores of students' critical thinking skills questionnaire between the experimental and control groups.

Group	N	Mean	Std. Dev	Sig. (2-tailed)
Exsperimen (PBL)	22	85.64	7.35	0.000
control (convensional)	23	73.91	8.42	

The significance value ($p = 0.000$) was less than 0.05; therefore, the null hypothesis (H_0) was rejected and the alternative hypothesis (H_1) was accepted. This result indicates a statistically significant difference in critical thinking skills between students taught using the Problem-Based Learning (PBL) model and those taught using conventional instructional methods. Accordingly, the Problem-Based Learning model was proven to be more effective and to have a significant impact on the critical thinking abilities of students at the Faculty of Islamic Studies, Universitas Dharmawangsa.

1. Hypothesis Testing 2 - The Effect of PBL on Learning Outcomes

The analysis was conducted using an independent-samples t-test to compare the mean post-test scores of learning outcomes between the experimental and control groups.

a. t-Test Results

Group	N	Mean	Std. Dev	Sig. (2-tailed)
Exsperimen (PBL)	22	88.91	6.45	0.001
Control (Convensional)	23	77.08	7.81	

The significance value ($p = 0.001$) was less than 0.05; therefore, the null hypothesis (H_0) was rejected and the alternative hypothesis (H_1) was accepted. This finding indicates that the Problem-Based Learning (PBL) model has a statistically significant effect on improving students' learning outcomes in the *Fiqh Ibadah* course. Accordingly, the implementation of PBL demonstrably enhances students' understanding and mastery of worship-related concepts.

2. Hypothesis Testing 3 - Interaction between Learning Model and Type of Ability

The analysis was conducted using a two-way Analysis of Variance (Two-Way ANOVA) involving two factors:

a. Factor A: Learning Model (PBL vs. Conventional)

b. Factor B: Type of Ability (Critical Thinking Skills vs. Learning Outcomes)

Results of the Two-Way ANOVA

Source of Variation	F-value	Sig.	Interpretation
Learning Model	15.784	0.000	Significant
Type of Ability	9.436	0.004	Significant
Interaction A × B	6.211	0.016	Significant

The results of the two-way ANOVA indicate that the learning model had a statistically significant effect on students' outcomes ($F = 15.784$, $p < 0.05$). Similarly, the type of ability also showed a significant effect ($F = 9.436$, $p < 0.05$). Moreover, a significant interaction effect was found between the learning model and the type of ability ($F = 6.211$, $p < 0.05$). This interaction suggests that the effectiveness of the learning model varies depending on the type of ability,

indicating that the implementation of Problem-Based Learning (PBL) differentially influences students' critical thinking skills and learning outcomes.

The significance values for all three factors were below 0.05, indicating that the learning model had a significant effect on the improvement of students' abilities. In addition, a statistically significant difference was found between learning outcomes and critical thinking skills. Furthermore, a significant interaction effect was identified between the learning model and the type of ability, demonstrating that improvements in students' learning outcomes were aligned with enhancements in critical thinking skills following the implementation of Problem-Based Learning (PBL).

Table X. Summary of Hypothesis Testing Results Kesimpulan Uji Hipotesis

No.	Hypothesis	Test Result	Decision
1	The effect of PBL on critical thinking skills	Sig. = 0.000 < 0.05	H ₀ rejected → H ₁ accepted
2	The effect of PBL on learning outcomes	Sig. = 0.001 < 0.05	H ₀ rejected → H ₂ accepted
3	The interaction between the learning model and the type of ability	Sig. = 0.016 < 0.05	H ₀ rejected → H ₃ accepted

The results of hypothesis testing indicate that the implementation of Problem-Based Learning (PBL) has a positive and statistically significant effect on:

- a) students' critical thinking skills,
- b) learning outcomes in the Fiqh Ibadah course, and
- c) the positive interaction between these two variables.

These findings suggest that the PBL model not only enhances students' cognitive understanding but also fosters higher levels of reflective, analytical, and problem-solving abilities compared to traditional lecture-based methods.

Descriptive analysis further reveals that students in the experimental group demonstrated higher critical thinking skills than those in the control group, with mean scores of 85.64 and 73.91, respectively. The improvement in critical thinking skills, as measured by the normalized gain (N-Gain), was categorized as moderate to high (0.65) in the PBL group, whereas the conventional group exhibited a moderate level of improvement (0.38).

A significant improvement in the experimental group was also evident from the gain score analysis (the difference between pretest and posttest scores). The average increase in critical thinking scores in the PBL group reached +14.7 points, compared to only +6.3 points in the control group. These results further strengthen the conclusion that the PBL approach produces a substantial positive impact on the development of students' higher-order thinking skills.

3. Two-Way ANOVA Test

The ANOVA analysis revealed a statistically significant interaction between the learning model and critical thinking skills on learning outcomes ($F = 5.213$, $p = 0.024 < 0.05$). Results of the Two-Way ANOVA

Source of Variation	F-value	Sig.	Interpretation
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Learning Model	15.784	0.000	Significant
Type of Ability	9.436	0.004	Significant
Interaction (A × B)	6.211	0.016	Significant

The results of the two-way ANOVA demonstrate that the learning model had a statistically significant effect on students' outcomes ($F = 15.784$, $p < 0.05$). Likewise, the type of ability showed a significant effect ($F = 9.436$, $p < 0.05$). Importantly, a significant interaction effect was found between the learning model and the type of ability ($F = 6.211$, $p < 0.05$). This interaction indicates that the effectiveness of the learning model varies depending on the type of ability, suggesting that the implementation of Problem-Based Learning (PBL) more effectively enhances learning outcomes when accompanied by improvements in students' critical thinking skills.

Discussion

The implementation of the Problem-Based Learning (PBL) model was proven to produce higher scores in both critical thinking skills and learning outcomes compared to conventional instruction. The difference in mean scores between the experimental and control groups (82.4 vs. 73.1) indicates that PBL facilitates a more meaningful learning process. This difference is not merely attributable to methodological variation, but rather to the PBL syntax, which requires students to actively engage in problem identification, analysis of contextual *fiqh* cases, and the formulation of solutions grounded in textual evidence. This process aligns with the findings of (Nurhayati, N., Herawaty, N., Juliani, A., & Patras, 2023), who reported that problem-based learning enhances the quality of students' cognitive engagement in religious studies courses.

The effectiveness of PBL in this study was also influenced by group discussion activities and the presentation of problem-solving results. Group discussions encouraged students to critically examine *fiqh* arguments, compare differing scholarly opinions, and rationally articulate their perspectives. These activities strengthened students' analytical and evaluative abilities, which are key indicators of critical thinking. This finding is consistent with the study by Maydilla et al. (2023), which demonstrated that collaborative discussions within a PBL framework significantly contribute to the enhancement of critical thinking skills among students of Islamic Religious Education.

The results of the two-way ANOVA, which revealed a significant interaction between the learning model and critical thinking skills on learning outcomes ($F = 5.213$, $p = 0.024$), underscore that the effectiveness of Problem-Based Learning (PBL) is influenced by students' initial levels of critical thinking ability. Students with higher critical thinking skills achieved greater improvements in learning outcomes, as they were better able to manage the cognitive demands of PBL, such as analyzing problems, evaluating textual evidence, and systematically formulating legal conclusions. This finding supports the perspective of (Hmelo-Silver, 2019), who argues that PBL is most effective when learners possess higher-order thinking readiness, while still yielding positive effects for students with moderate and lower levels of ability.

The substantial difference in gain scores between the experimental and control groups (+14.7 vs. +6.3) indicates that Problem-Based Learning (PBL) has significant practical relevance in *Fiqh Ibadah* instruction. The increase in gain scores reflects students' success in reconstructing their understanding of *fiqh* from mere normative memorization toward a more applicative and contextual comprehension. This finding is consistent with the study by (Nurhayati, N.,

Herawaty, N., Juliani, A., & Patras, 2023), which reported that PBL encourages students to integrate theoretical concepts with real-life issues in religious practice.

The results of classroom observation conducted over six instructional sessions support the quantitative findings of this study. Students in the PBL class demonstrated more active participation in asking questions, engaging in discussions, and presenting arguments compared to those in the conventional class. These activities reflect a higher level of cognitive engagement and contribute to the improvement of learning outcomes. This finding is consistent with Savery (2015), who emphasized that active student engagement is a key determinant of success in problem-based learning environments.

From a theoretical perspective, the findings of this study can be explained through Piaget's constructivist framework. PBL creates conditions of cognitive conflict when students are confronted with complex and contextual fiqh cases, thereby stimulating processes of assimilation and accommodation within students' cognitive structures. This process facilitates the development of a deeper and more reflective understanding of fiqh (Ainiyah & Rahayu, 2023; Ainiyah & Tohari, 2021). This explanation aligns with (Piaget, 1972) The view that meaningful learning occurs when learners actively construct knowledge through interaction with their learning environment.

Nevertheless, this study has several limitations, including the relatively short duration of PBL implementation, the limited sample size, and the potential influence of instructor-related factors (teacher effect). These limitations may affect the generalizability of the findings. Therefore, future research is recommended to employ experimental designs with longer intervention periods, involve larger and more diverse samples, and control for instructor variables to obtain more comprehensive and generalizable results, as also suggested by (Nurhayati, N., Herawaty, N., Juliani, A., & Patras, 2023).

One strength of this study lies in the application of Problem-Based Learning (PBL) within a religious text-based course, demonstrating that Islamic education can also be innovative and contextually oriented. However, this study was limited by a relatively small sample size and an intervention duration of one semester. Future research is therefore recommended to expand the scope of investigation and incorporate additional variables, such as student motivation and collaborative skills, to provide a more comprehensive understanding of the effectiveness of PBL in Islamic education contexts.

Conclusion

This study concludes that the implementation of the Problem-Based Learning (PBL) model has a significant and positive effect on improving students' critical thinking skills and learning outcomes in the Fiqh Ibadah course at the Faculty of Islamic Studies, Universitas Dharmawangsa. Students who participated in PBL-oriented learning demonstrated higher levels of analytical, reflective, and problem-solving abilities compared to those who experienced conventional lecture-based instruction. These findings indicate that PBL effectively facilitates deeper conceptual understanding and encourages students to actively engage with contextual fiqh issues.

Furthermore, the results reveal a significant interaction between the learning model and students' critical thinking skills in influencing learning outcomes. This

interaction suggests that the effectiveness of PBL is closely associated with students' ability to engage in higher-order thinking processes. When students are encouraged to analyze real-world religious problems, evaluate textual and contextual evidence, and formulate reasoned conclusions, learning outcomes improve more substantially. Thus, PBL not only enhances cognitive achievement but also strengthens students' capacity to interpret Islamic legal issues in a rational, contextual, and responsible manner.

Overall, this study contributes empirical evidence to the growing body of research on innovative learning models in Islamic higher education, particularly within fiqh instruction. The findings support the integration of Problem-Based Learning as a pedagogical approach that aligns with the demands of contemporary Islamic education, which requires graduates to possess both strong conceptual knowledge and well-developed critical thinking skills. Consequently, PBL can be considered a relevant and effective instructional strategy for improving the quality of learning and fostering meaningful engagement with Islamic knowledge in higher education contexts.

REFERENCE

- Ainiyah, Q., & Rahayu, D. (2023). Dampak Implementasi Pembelajaran Fiqih Terhadap Kedisiplinan Sholat Siswa MTs Ar-Rahman Nglaban Diwek Jombang. *Irsyaduna: Jurnal Studi Kemahasiswaan*, 3(3), Article 3. <https://doi.org/10.54437/irsyaduna.v3i3.1348>
- Ainiyah, Q., & Tohari, A. A. (2021). Pembelajaran Praktik Dalam Peningkatan Pemahaman Peserta Didik Mapel Fiqih di MTs Roudlotut Tholibin Kediri. *Urwatul Wutsqo: Jurnal Studi Kependidikan Dan Keislaman*, 10(2), Article 2. <https://doi.org/10.54437/urwatulwutsqo.v10i2.324>
- Amirulloh, M. I., Habiburrohman, H., & El-Yunusi, M. Y. M. (2025). Penerapan Problem Based Learning: Pendekatan Inovatif untuk Peningkatan Hasil Belajar di Kelas. *Ngaos: Jurnal Pendidikan Dan Pembelajaran*, 3(1), Article 1. <https://doi.org/10.59373/ngaos.v3i1.40>
- Arends, R. I. (2012). *Learning to Teach*. New York: McGraw-Hill. An-Nawawi, I. (n.d.). *Al-Minhaj Syarh Shahih Muslim Ibn Al-Hajjaj (Jilid 17)*. Beirut: Dar Ihya At-Turath Al-Arabi.
- Arif, M., Aziz, M. K. N. bin A., Harun, M., & Ma`arif, M. A. (2023). Strengthening The Sense of Patriotism in Madrasah Ibtidaiyah, Indonesia Based on The Islamic Boarding School System. *Tafkir: Interdisciplinary Journal of Islamic Education*, 4(1), Article 1. <https://doi.org/10.31538/tijie.v4i1.226>
- Bambang Sudaryana, D. E. A., Ak, M., Agusiady, H. R., & SE, M. (2022). *Metodologi Penelitian Kuantitatif*. Deepublish.
- Bloom, B. S. (1984). *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain*. New York: Longman.
- Ennis, R. H. (1996). *Critical thinking*. Upper Saddle River, NJ: Prentice Hall.
- Firdaus, A., Asikin, M., Waluya, B., & Zaenuri, Z. (2021). Problem Based Learning (PBL) Untuk Meningkatkan Kemampuan Matematika Siswa. *QALAMUNA: Jurnal Pendidikan, Sosial, Dan Agama*, 13(2), Article 2. <https://doi.org/10.37680/qalamuna.v13i2.871>

- Hidayaty, A., Qurbaniah, M., & Setiadi, A. E. (n.d.). The Influence of Wordwall on Students Interests and Learning Outcomes. *Jurnal Penelitian Ilmu Pendidikan*, 15(2), 211. <https://doi.org/10.21831/jpipfip.v15i2.51691>
- Hmelo-Silver, C. E. (2019). *Inquiry-based learning: A theoretical framework*. In *International handbook of inquiry-based learning* (pp. 29–45). Routledge.
- Jaya, I. M. L. M. (2020). *Metode Penelitian Kuantitatif dan Kualitatif: Teori, Penerapan, dan Riset Nyata*. Anak Hebat Indonesia.
- Kusumawati, I. T., Soebagyo, J., & Nuriadin, I. (2022). Studi Kepustakaan Kemampuan Berpikir Kritis Dengan Penerapan Model PBL Pada Pendekatan Teori Konstruktivisme. *JURNAL MathEdu*, 5(1), 13–18.
- Nurhayati, N., Herawaty, N., Juliani, A., & Patras, Y. E. (2023). Implementasi Model Pembelajaran Problem Based Learning (PBL) terhadap Peningkatan Literasi Siswa Melalui Metode Content Analysis. *Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*, 16(2), 85–97.
- Paul, R., & Elder, L. (2020). *Critical thinking: Tools for taking charge of your learning and your life* (4th ed.). Lanham, MD: Rowman & Littlefield.
- Piaget, J. (1972). Development and learning. *Reading in Child Behavior and Development*, 38–46.
- Prasetyo, B. (2012). *Metode penelitian kuantitatif*. Raja Grafindo Persada. Perpustakaan Sekolah Tinggi Ilmu Kepolisian (STIK). <http://library.stik-ptik.ac.id>