

Enhancing Contextual Understanding and Critical Thinking in Fiqh Learning through Problem-Based Learning

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Abstract: *This study examines the impact of Problem-Based Learning (PBL) on students' participation, critical thinking skills, and understanding of fiqh concepts. Using a qualitative case study approach, data were collected through in-depth interviews, classroom observations, and document analysis. The findings indicate that PBL fosters a dynamic and inclusive learning environment, encouraging previously passive students to actively engage in discussions, share ideas, and connect fiqh theory to real-life contexts. Teachers observed increased student confidence in questioning, arguing, and problem-solving. These results highlight PBL as an effective alternative for enhancing fiqh education in madrasahs and other Islamic institutions. By integrating PBL, students not only improve their conceptual understanding but also develop essential critical and collaborative thinking skills for their future.*

Abstrak: Penelitian ini mengkaji dampak Problem-Based Learning (PBL) terhadap partisipasi siswa, keterampilan berpikir kritis, dan pemahaman konsep fikih. Dengan menggunakan pendekatan studi kasus kualitatif, data dikumpulkan melalui wawancara mendalam, observasi kelas, dan analisis dokumen pembelajaran. Hasil penelitian menunjukkan bahwa PBL menciptakan lingkungan belajar yang dinamis dan inklusif, mendorong siswa yang awalnya pasif menjadi lebih aktif dalam diskusi, berbagi ide, serta menghubungkan teori fikih dengan konteks kehidupan nyata. Guru juga mengamati peningkatan kepercayaan diri siswa dalam bertanya, berargumentasi, dan menyelesaikan masalah. Temuan ini menegaskan bahwa PBL merupakan alternatif efektif untuk meningkatkan pembelajaran fikih di madrasah dan lembaga pendidikan Islam lainnya. Melalui penerapan PBL, siswa tidak hanya meningkatkan pemahaman konseptual mereka, tetapi juga mengembangkan keterampilan berpikir kritis dan kolaboratif yang penting bagi masa depan mereka.

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INTRODUCTION

Recently, attention to religious education has been increasing. Especially at the madrasah level, many parties are beginning to realize the importance of equipping students with more than just memorization (Bulut Ates & Aktamis, 2024; Du & Chaaban, 2020; Jiang et al., 2023). It is hoped that students will be able to understand and apply Islamic religious values in their daily lives (Agyapong et al., 2022; Kim, 2024; Wang et al., 2022). However, in reality, conventional learning methods often make students passive. Fiqh learning at MTs Nurul Jadid, for example, tends to be teacher-centered, with students primarily listening and taking notes. As a result, students' understanding does not develop as it should. They memorize the postulates of fiqh, but it isn't easy to see their relevance in real life. Therefore, there is an urgent need to change this approach to something more interactive and relevant. The problem-based learning (PBL) method offers a promising solution, as it challenges students to solve real problems, discuss with friends, and understand Islamic law in depth (Deep et al., 2020; Kopackova et al., 2024; Maftuh, 2023; Yang et al., 2023).

Various studies have shown that Problem-Based Learning (PBL) can significantly transform the teaching and learning process. Research by Chiu (2023) reveals that this approach not only helps students understand theoretical concepts but also creates a more meaningful learning experience. Other related studies indicate that PBL can enhance students' interest in Islamic religious studies (Aslan, 2021; Boelt et al., 2022; Trullàs et al., 2022). By incorporating real-life scenarios, students become more engaged and find it easier to understand the material. Additionally, research suggests that PBL improves critical thinking and collaboration skills, as students learn to discuss, express opinions, and formulate solutions.

Other studies also highlight that implementing PBL in Aqidah Akhlak subjects can enhance students' learning outcomes. Hidajat (2023), Li et al (2022), and Al Ayyubi et al. (2024) found that students who learned through the PBL model demonstrated improved understanding and application of moral values compared to those taught using conventional methods. Additionally, Goshu & Ridwan (2024), Alkandari & Alabdulhadi (2023), and Rahman et al. (2024) found that PBL fosters students' critical thinking and collaborative skills in general subjects integrated with Islamic values.

However, despite these positive findings, research on the application of PBL in Islamic education, particularly in the context of fiqh learning, remains limited. Most existing studies focus on general subjects such as science, mathematics, or secular education, with few exploring how PBL influences students' understanding of fiqh. Furthermore, while studies acknowledge the benefits of PBL in fostering engagement and critical thinking, there is still a lack of in-depth analysis on how it shapes students' ability to apply fiqh principles in real-life decision-making. This study aims to address this gap by investigating how PBL specifically enhances contextual understanding and critical thinking in fiqh learning, providing insights that contribute to more effective pedagogical strategies in Islamic education.

However, the application of PBL in fiqh lessons is still rarely researched. Therefore, this study tries to bridge this gap by investigating the effectiveness of PBL in MTs Nurul Jadid. The main objective of this study is to understand how PBL is applied in fiqh learning at MTs Nurul Jadid and the extent to which this approach can affect student participation and understanding. There are several questions to answer: How do teachers implement PBL in the classroom? What are the challenges they face? And how do students respond to these methods in terms of engagement, critical thinking, and mastery of the material? By answering these questions, this study hopes to provide a clear picture of the implementation of PBL as well as practical recommendations for teachers who want to try this method.

This study assumes that the PBL method not only helps students understand the theory but also trains them to think critically and find the relationship between Islamic law and everyday reality. The hypothesis is that the implementation of PBL in MTs Nurul Jadid will encourage students to be more active in group discussions and more confident in answering given problems. The argument of this research lies in its ability to change the role of teachers into facilitators and students into active participants. That way, the learning process becomes more inclusive and collaborative. The provisional answer from this study is that PBL if applied correctly, can significantly improve students' understanding of fiqh. This also opens up opportunities for students to think critically and find independent solutions to the problems they face, both in the classroom and in daily life.

METHOD

This research was conducted at MTs Nurul Jadid with a focus on grade VII which uses the problem-based learning method (PBL) in fiqh lessons. The unit of analysis includes the dynamics of learning in the classroom, the relationship between teachers and students, and students' responses to the PBL approach. This study uses a qualitative design with a case study approach. This approach was chosen because it allows researchers to dig into first-hand experiences of students and teachers while identifying patterns that emerge during the learning process. In this case, researchers not only look at how PBL is applied but also delve into how this method affects students' engagement and understanding of Islamic law in daily life.

Data for this study were collected from various sources, including fiqh teachers responsible for planning and implementing PBL methods. These grade VII students are learning participants, as well as supporting documents such as Learning Implementation Plans and teaching modules. Teachers provide valuable insights into the strategies they use, the challenges that arise, and the results obtained. Students shared their experiences during group discussions, the process of finding solutions, and the impact of the PBL approach on the way they understood fiqh. In addition, the learning documents provide a more structured picture of how this method is carried out, what materials are used, and the steps taken to achieve the learning objectives. Combining these various sources of information allows researchers to obtain a more complete view of the implementation of PBL in MTs Nurul Jadid.

Data were collected through three main methods: in-depth interviews, classroom observations, and document analysis. Interviews were conducted with teachers and several students to explore their views on the effectiveness of the PBL method, the challenges faced, and the results that have been achieved. Observation in the classroom allows researchers to directly record the interaction between students and teachers, the dynamics of group discussions, and student engagement patterns. Document analysis, such as lesson plans and teaching modules, helps to understand the context, structure, and content of problem-based learning. The tabulation of the informants selected and used in this study is shown in Table 1.

Tabel 1. Coding od Informants

Resource Person Code	Description of Resource Person
I_TG_2023	Class VII fiqh teacher at MTs Nurul Jadid
I_ST_2023	Grade VII students who are active in group discussions
I_FS_2023	A passive but engaged Grade VII student
I_AD_2023	Fiqh assistant teacher in grade VII
I_SD_2023	Grade VII students who asked questions about the postulates.

The data analysis process is carried out in stages. First, the collected data is reduced to filter the most relevant information. Furthermore, the summarized data is presented in the form of a matrix or narrative to facilitate the identification of key patterns. Finally, the data is verified by comparing findings from various sources to ensure the validity and consistency of the research results. With this approach, data analysis becomes more systematic and can provide an in-depth picture of the implementation of PBL in MTs Nurul Jadid.

RESULT AND DISCUSSION

Student Participation in Group Discussions

The application of the problem-based learning (PBL) method at MTs Nurul Jadid brought a new atmosphere in the way students participated during group discussions. Observations show that students became more involved in the learning process, especially when they are faced with real problems that are directly related to fiqh material. Classrooms become more lively, filled with active interactions between students and teachers. Group discussions provide a space for students to exchange ideas, share ideas, and find solutions together. Teachers note that this method makes students more comfortable to speak and contribute, although some of them previously tended to be passive.

During learning activities, group discussions prove to be an effective means of exploring new ideas. For example, when students are given a case about ablution procedures in areas with limited water, they immediately divide the task. Some focus on finding evidence from the book of fiqh, while others lead discussions to formulate solutions based on the information they find. Teachers, who act as facilitators, provide open-ended questions that encourage students to think more critically. This activity shows the high enthusiasm of the students. They not only express their opinions, but also actively seek answers to the problems given. The classroom atmosphere that previously felt monotonous has now changed to be

more dynamic and full of energy. From a series of observation activities carried out, it can be observed as shown in Figure 1.



Figure 1. Unpacking the PBL Approach's Impact

From these observations, it is clear that the PBL approach has succeeded in creating more meaningful student engagement. Students not only learn individually, but also work together in groups, share mutual understanding, and deepen their insights through discussions. Teachers observed that students who were normally silent began to show courage to speak up and contribute. By using a problem-based approach, students can learn from teachers as well as their peers, making the learning process more inclusive and collaborative.

In addition, PBL also develops critical and collaborative thinking skills, while strengthening the role of teachers as facilitators who support students in finding solutions independently. This approach further strengthens the view that active and collaborative learning can create a more inclusive classroom atmosphere and support student development in various aspects.

These findings indicate that PBL can create relevant and contextual learning experiences, especially in Islamic religious education. In fiqh learning, this method helps students connect theory to real-life situations they encounter daily. This aligns with related research emphasizing the importance of students building understanding through hands-on experience (Malik & Zhu, 2023; Spaan et al., 2024; von Hausswolff, 2022). For instance, a study demonstrated that integrating Islamic values into PBL not only enhances students' conceptual understanding but also their application of moral values and problem-solving skills (Damayanti, et al., 2024). Additionally, PBL has been shown to improve students' critical thinking and collaboration skills, while reinforcing the role of teachers as facilitators who support students in independently finding solutions (Aljalahma, 2023). This approach further supports the view that active and collaborative learning can create

a more inclusive classroom atmosphere and support student development in various aspects.

The theoretical foundation of PBL is rooted in constructivist learning theories, which posit that learners construct knowledge through active engagement and real-world problem-solving. This approach encourages students to take ownership of their learning, fostering deeper understanding and retention of knowledge. In the context of Islamic education, integrating PBL aligns with the objectives of developing critical thinking and practical application of religious principles.

The novelty of this study lies in its application of PBL within the specific context of fiqh education at MTs Nurul Jadid. While previous studies have explored PBL in various educational settings, this research provides empirical evidence of its effectiveness in enhancing student participation, critical thinking, and contextual understanding in Islamic jurisprudence. By demonstrating how PBL transforms passive learners into active contributors, this study offers valuable insights for educators seeking to implement innovative teaching strategies in religious education.

Development of Students' Critical Thinking Skills

Students' critical thinking skills have improved rapidly after the problem-based learning (PBL) method was applied in fiqh learning at MTs Nurul Jadid. Based on the interviews, teachers and students agreed that this approach emphasizes understanding the context more than just memorizing the evidence. One of the teachers explained that students began to show interest in asking questions about the application of Islamic law in certain situations, such as how to perform prayers when the direction of the qibla is difficult to find (I_TG_2023). The interviews also revealed that students looked more confident in discussing and asking critical questions. Teachers noted that students who previously tended to be passive began to show initiative to learn more, either through group discussions or looking for additional references independently (I_ST_2023).

Several statements from teachers and students provide a concrete picture of the positive impact of this method. One of the teachers said, "Students are now more often asked questions that show their understanding of the postulate and how to apply it" (I_TG_2023). A student also shared his experience, "I used to only memorize the postulates, but now I feel more understanding how the postulates are relevant to daily life" (I_ST_2023). Another statement from the students added that PBL makes learning feel more interesting and challenging (I_FS_2023). When discussing the case of water management for ablution, students independently look for solutions by connecting relevant sharia evidence and building logical arguments. Teachers who observe this process note that this method helps students not only understand the material but also think systematically to solve the problem at hand (I_TG_2023). From a series of interviews conducted with several informants, then a thematic analysis was carried out as shown in Table 2.

Table 2. Thematic Analysis

Main Theme	Sub-Theme	Description	Interview/Observation Quotes
Contextual Understanding	Focus on the application of Islamic law	Students begin to understand that Islamic law is not just a theory, but has real applications in everyday life.	"Students are now more often asked questions that show their understanding of the postulate and how to apply it" (I_TG_2023).
Self-Study Initiative	Higher interest in learning	Students who were previously passive began to show initiative to learn more through discussions and the search for additional references independently.	"In the past, I only memorized the postulates, but now I feel more understanding how the postulates are relevant to daily life" (I_ST_2023).
Analytical Capabilities	Real problem analysis	Students are able to analyze real problems, such as water management for ablution in emergency conditions, by connecting sharia postulates and building logical arguments.	Teachers note that students can think systematically to solve the problem at hand (I_TG_2023).
Confidence	More active discussions and debates	Students are more confident to discuss and propose opinions in class, demonstrating analytical and evaluative thinking skills.	"PBL makes learning feel more engaging and challenging" (I_FS_2023).
Troubleshooting	Solving challenges with applicative solutions	Students can seek solutions based on relevant postulates, such as tayamum in an emergency, and understand the relationship between theory and the context of life.	Students succeeded in relating the postulates from the Qur'an to the situation discussed, demonstrating contextual understanding.

Through the interviews and thematic analysis conducted, it is clear that the PBL approach has a positive impact on students' thinking skills. They not only understand fiqh theory but are also able to analyze real problems and formulate solutions based on relevant postulates. In the process, students are more confident to discuss and debate, demonstrating the development of analytical and evaluative thinking skills. A concrete example can be seen when they are asked to find solutions related to tayamum in an emergency. Students successfully relate the postulates from the Qur'an to the situation they are discussing, demonstrating a deep and contextual understanding. PBL also opens up space for them to explore various perspectives, learn new ideas, and practice problem-solving skills in an applied way.

These findings support the theory that PBL can develop higher-order thinking skills, including analysis and problem-solving. With this approach, students are encouraged to learn independently while still receiving guidance from teachers as

facilitators. This learning process creates a more meaningful experience, especially because students can relate theory to real situations. In fiqh learning, PBL helps students understand how Islamic law is applied in various contexts, making it more relevant and applicable. The findings of this study are also in line with other research, which emphasizes the importance of building understanding through direct experience and critical reflection (Labadze et al., 2023; Naeem et al., 2023; Roberson & Perry, 2022). This proves that PBL is an effective method in forming students who not only understand the material but are also able to think critically in facing challenges in real life.

Several studies have underscored the pivotal role of Problem-Based Learning (PBL) in fostering critical thinking skills and self-directed learning. According to Tursynkulova et al (2023) and Williamson (2023), PBL facilitates students' ability to apply theoretical knowledge in real-world scenarios by enhancing their analytical reasoning and problem-solving competencies. This approach shifts the learning paradigm from passive reception to active inquiry, where students engage in critical discussions and explore multifaceted perspectives on the subject matter. Furthermore, Yu (2024), Wu (2024), and Wijnia, et al (2024), assert that PBL nurtures intrinsic motivation and cultivates deeper cognitive engagement, both of which are evident in this study's findings, as students exhibit an increased interest in exploring the application of fiqh principles in practical contexts.

Additionally, research in general education, Wang, et al (2024), and Shekh-Abed (2025) highlights that PBL contributes significantly to cognitive development by fostering metacognitive strategies, thereby enabling students to regulate their own learning processes more effectively. This is particularly reflected in the way students in this study independently seek solutions, construct logical arguments, and relate theoretical concepts to real-life dilemmas. In the domain of Islamic education, recent studies Rohman (2022), and Aljalahma (2023) further affirm that integrating PBL into religious studies strengthens students' ability to engage in ethical reasoning and jurisprudential analysis, reinforcing their contextual comprehension of Islamic law. The findings of this research substantiate these claims by demonstrating how students become more proactive in problem-solving and more confident in debating fiqh-related issues.

The novelty of this study lies in its specific focus on the application of PBL within the context of fiqh learning in an Islamic boarding school, a domain that has been relatively underexplored in previous research. While existing literature predominantly examines the efficacy of PBL in secular subjects, this study provides empirical evidence that PBL can serve as an effective bridge between theoretical and practical dimensions of Islamic jurisprudence. Furthermore, it highlights how students' engagement in self-directed learning and contextual analysis not only enriches their academic comprehension but also enhances their ability to apply religious doctrines to real-world situations. By emphasizing the development of critical thinking within Islamic education, this research contributes to the broader discourse on innovative pedagogical strategies and underscores the transformative potential of PBL in nurturing independent, analytical, and reflective thinkers in religious studies.

Contextualization of Fiqh Learning in Real Life

The application of the problem-based learning (PBL) method in fiqh subjects at MTs Nurul Jadid is structured based on structured steps that allow students to understand Islamic law in real life. From planning to evaluation, teachers use a problem-based approach that is relevant to the daily experience of students. For example, cases such as determining the direction of the qibla in a remote area or performing ablution when water is limited are part of the learning scenario. These stages are designed to build students' curiosity, encourage them to discuss in groups, and motivate them to investigate and solve the problems they face.

The learning document shows that the PBL process begins with careful planning, including compiling lesson plans based on classical fiqh books, preparing teaching materials, and observation sheets. The implementation of learning is carried out by opening classes, providing motivation, and grouping students. Students are given a discussion sheet to analyze real problems, such as how to carry out tayamum in an emergency. They then searched for the postulates, identified various possible solutions, and discussed them in groups. Each group presented the results of their discussion, which was then evaluated by teachers and peers. With this approach, students not only learn to understand Islamic law but also practice critical and collaborative thinking skills. Where the steps to implement PBL at Mts Nurul Jadid are as explained in table 3.

Table 3. Stages and Implementation Steps

Planning	<ol style="list-style-type: none"> a. Preparing a Learning Implementation Plan (RPP) according to the book being studied b. Preparing teaching materials/materials c. Setting up an observation sheet
Implementation	<ol style="list-style-type: none"> a. Opening lessons, managing classes, checking attendance, praying b. Provides encouragement and motivation c. Interpreting the book, explaining, and asking questions about the material d. Grouping classes into four groups e. Providing a discussion sheet in the form of problems f. Students investigate or analyze problems critically and are guided by the book g. Students determine various considerations of possible Solutions h. Group representatives presented the results of the discussion and held a question and answer session
Cover	<ol style="list-style-type: none"> a. Guiding students to draw conclusions about the material b. Providing a close book quiz related to the material that has been studied c. Ending with hamdalah and prayer
Evaluation	<ol style="list-style-type: none"> d. Check quiz results e. Conducting a recapitulation of grades

Based on the table of implementation steps, PBL at MTs Nurul Jadid starts from planning, implementation, closing, to evaluation. Each stage is designed to support students to be actively involved in learning. Teachers guide them from problem orientation, encouraging group discussions, to the presentation and evaluation process. The learning document shows that this method has succeeded

in improving students' understanding of the concept of fiqh through relevant and applicable activities. Students are invited to connect theory with practice, which helps them understand Islamic law in a more in-depth and contextual.

The findings of this study align with research conducted by Lau et al. (2020), which emphasizes that problem-based learning enhances students' ability to analyze and apply knowledge in real-life scenarios. Similarly, Usmeldi & Amini (2022) highlight that hands-on experience significantly improves students' comprehension and retention of learning materials. According to Malaikosa et al. (2022), PBL encourages students to engage in meaningful discussions, develop problem-solving skills, and enhance their critical thinking abilities. Furthermore, Aseery (2024), state that contextual learning, particularly in religious education, fosters a deeper connection between students and the subject matter, making the learning process more effective and applicable.

This study contributes to the body of knowledge by offering a structured and detailed implementation of PBL in fiqh education, specifically tailored to Islamic boarding school settings. Unlike previous studies that focus on general applications of PBL, this research highlights the contextual adaptation of Islamic jurisprudence to students' daily challenges. Additionally, it provides a systematic approach that integrates classical fiqh texts with modern pedagogical strategies, making it a pioneering effort in the integration of Islamic education with contemporary learning methodologies. The structured implementation stages documented in this study can serve as a model for other institutions seeking to enhance religious education through active and problem-based learning approaches.

CONCLUSION

This study confirms that the implementation of Problem-Based Learning (PBL) in fiqh education at MTs Nurul Jadid significantly enhances students' engagement, critical thinking skills, and contextual understanding of Islamic law. The research findings indicate that PBL encourages students to move beyond passive memorization by actively engaging in discussions, analyzing real-life scenarios, and developing logical arguments based on Islamic jurisprudence. Through structured problem-solving activities, students demonstrate improved ability to connect theoretical knowledge with practical applications, making fiqh more relevant to their daily lives.

Additionally, PBL fosters a more dynamic and inclusive classroom environment. Students who were previously hesitant to participate in discussions have become more confident in expressing their thoughts and engaging in collaborative learning. The role of teachers has also shifted from being sole knowledge providers to facilitators who guide students in their exploration of Islamic legal principles. This transformation aligns with the principles of constructivist learning, emphasizing active participation and self-directed inquiry.

Despite these positive outcomes, this study acknowledges certain limitations, including its focus on a single institution and specific fiqh topics. Future research should expand the scope by incorporating diverse educational settings, broader curricular content, and varied student demographics. Exploring the long-term

impact of PBL on students' ability to apply fiqh principles in different contexts would further strengthen the validity of these findings.

Overall, this study underscores the effectiveness of PBL as a pedagogical approach that not only enhances students' comprehension of Islamic jurisprudence but also equips them with critical and collaborative thinking skills. The findings provide valuable insights for educators seeking to implement innovative teaching strategies in Islamic education, highlighting the potential of PBL in fostering a more interactive and meaningful learning experience.

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REFERENCES

- Agyapong, B., Obuobi-Donkor, G., Burbach, L., & Wei, Y. (2022). Stress, Burnout, Anxiety and Depression among Teachers: A Scoping Review. *International Journal of Environmental Research and Public Health*, 19(17), 10706. <https://doi.org/10.3390/ijerph191710706>
- Al Ayyubi, I. I., Murharyana, M., Martini, S., Hayati, A., Apriyanti, N. S., & Kamaliya, S. (2024). Meningkatkan Hasil Belajar Siswa pada Mata Pelajaran Aqidah Akhlak Melalui Model Pembelajaran Problem Based Learning. *At-Tadris: Journal of Islamic Education*, 3(1), 1-14. <https://doi.org/10.56672/attadris.v3i1.197>
- Aljalahma, A. (2023) Cooperative and Problem-Based Learning Practice in Islamic Education in Bahrain: Strengths and Challenges. *Advances in Anthropology*, 13, 279-294. <https://doi.org/10.4236/aa.2023.134018>
- Aljalahma, A. Z. A. (2023). Cooperative and Problem-Based Learning Practice in Islamic Education in Bahrain: Strengths and Challenges. *Advances in Anthropology*, 13(4), 279-294. <https://doi.org/10.4236/aa.2023.134018>
- Alkandari, K., & Alabdulhadi, M. (2023). Promoting Self-Regulation Skills Among Pre-Service Islamic Studies Teachers Through Project-Based Learning Utilizing a Flipped Learning Strategy. *International Journal of Learning, Teaching and Educational Research*, 22(5), 74-100. <https://doi.org/10.26803/ijlter.22.5.4>
- Aseery, A. (2024). Enhancing learners' motivation and engagement in religious education classes at elementary levels. *British Journal of Religious Education*, 46(1), 43-58. <https://doi.org/10.1080/01416200.2023.2256487>
- Aslan, A. (2021). Problem-based learning in live online classes: Learning achievement, problem-solving skill, communication skill, and interaction.

- Computers & Education*, 171, 104237.
<https://doi.org/10.1016/j.compedu.2021.104237>
- Boelt, A. M., Kolmos, A., & Holgaard, J. E. (2022). Literature review of students' perceptions of generic competence development in problem-based learning in engineering education. *European Journal of Engineering Education*, 47(6), 1399–1420. <https://doi.org/10.1080/03043797.2022.2074819>
- Bulut Ates, C., & Aktamis, H. (2024). Investigating the effects of creative educational modules blended with Cognitive Research Trust (CoRT) techniques and Problem Based Learning (PBL) on students' scientific creativity skills and perceptions in science education. *Thinking Skills and Creativity*, 51, 101471. <https://doi.org/10.1016/j.tsc.2024.101471>
- Chiu, T. K. F. (2023). Student engagement in K-12 online learning amid COVID-19: A qualitative approach from a self-determination theory perspective. *Interactive Learning Environments*, 31(6), 3326–3339. <https://doi.org/10.1080/10494820.2021.1926289>
- Damayanti, K., Effendi, M., & Daryono, R. W. (2024). The Effectiveness of The Problem-Based Learning Model on Student Learning Achievement in Islamic Education Learning. *IJORER: International Journal of Recent Educational Research*, 5(5), 1097-1108. <https://doi.org/10.46245/ijorer.v5i5.653>
- Deep, S., Ahmed, A., Suleman, N., Abbas, M. Z., Nazar, U., & Razzaq, H. S. A. (2020). The problem-based learning approach towards developing soft skills: A systematic review. *Qualitative Report*, 25(11), 4029–4054. <https://doi.org/10.46743/2160-3715/2020.4114>
- Du, X., & Chaaban, Y. (2020). Teachers' Readiness for a Statewide Change to PjBL in Primary Education in Qatar. *Interdisciplinary Journal of Problem-Based Learning*, 14(1), n1. <https://eric.ed.gov/?id=EJ1257960>
- Goshu, B. S., & Ridwan, M. (2024). Exploring the Role of Project-Based Learning in Fostering Critical Thinking Skills. *Britain International of Linguistics Arts and Education (BioLAE) Journal*, 6(3), 149-166. <https://doi.org/10.33258/biolae.v6i3.1201>
- Hidajat, F. A. (2023). A comparison between problem-based conventional learning and creative problem-based learning on self-regulation skills: Experimental study. *Heliyon*, 9(9). [https://www.cell.com/heliyon/fulltext/S2405-8440\(23\)06720-8](https://www.cell.com/heliyon/fulltext/S2405-8440(23)06720-8)
- Jiang, D., Dahl, B., Chen, J., & Du, X. (2023). Engineering Students' Perception of Learner Agency Development in an Intercultural PBL (Problem- and Project-Based) Team Setting. *IEEE Transactions on Education*, 66(6), 591–601. <https://doi.org/10.1109/TE.2023.3273177>
- Kim, J. (2024). Leading teachers' perspective on teacher-AI collaboration in education. *Education and Information Technologies*, 29(7), 8693–8724. <https://doi.org/10.1007/s10639-023-12109-5>
- Kopackova, H., Simonova, S., & Reimannova, I. (2024). Digital transformation leaders wanted: How to prepare students for the ever-changing demands of the

- labor market. *International Journal of Management Education*, 22(1), 100943. <https://doi.org/10.1016/j.ijme.2024.100943>
- Labadze, L., Grigolia, M., & Machaidze, L. (2023). Role of AI chatbots in education: systematic literature review. *International Journal of Educational Technology in Higher Education*, 20(1), 56. <https://doi.org/10.1186/s41239-023-00426-1>
- Lau, J. L., Rahim, N. A. A., Abdullah, S. I. S. S., & Me, R. C. (2020). Factors Affecting Informal Learning Activities of the Millennial Generation. *Ilkogretim Online*, 19(3), 127–139. <https://ilkogretim-online.org/index.php/pub/article/view/7461>
- Li, T., Wang, W., Li, Z., Wang, H., & Liu, X. (2022). Problem-based or lecture-based learning, old topic in the new field: a meta-analysis on the effects of PBL teaching method in Chinese standardized residency training. *BMC Medical Education*, 22(1), 221. <https://doi.org/10.1186/s12909-022-03254-5>
- Maftuh, M. S. J. (2023). Understanding Learning Strategies: A Comparison Between Contextual Learning and Problem-Based Learning. *Educazione: Journal of Education and Learning*, 01(01), 54–65. <https://doi.org/10.61987/educazione.v1i1.496>
- Malaikosa, Y. M. L., Widyadharna, A. P., & Pangestu, W. T. (2022). Curriculum and Learning Management: Integration of Creative Economy Value to Improve Students' Life Skill. *Jurnal Pendidikan Vokasi*, 12(1), 76–85. <https://doi.org/10.21831/jpv.v12i1.44253>
- Malik, K. M., & Zhu, M. (2023). Do project-based learning, hands-on activities, and flipped teaching enhance student's learning of introductory theoretical computing classes? *Education and Information Technologies*, 28(3), 3581–3604. <https://doi.org/10.1007/s10639-022-11350-8>
- Naeem, M., Ozuem, W., Howell, K., & Ranfagni, S. (2023). A step-by-step process of thematic analysis to develop a conceptual model in qualitative research. *International Journal of Qualitative Methods*, 22, 1-18. <https://doi.org/10.1177/16094069231205789>
- Nova Fauziah Rahman, Listyono, & Mirtaati Na'ima. (2024). The Influence of Problem Based Learning (PBL) on Critical and Collaborative Thinking Skills in Integrated Biology Learning with Islamic Values. *Al-Alam: Islamic Natural Science Education Journal*, 3(2), 52–68. <https://doi.org/10.33477/al-alam.v3i2.7397>
- Roberson, Q., & Perry, J. L. (2022). Inclusive Leadership in Thought and Action: A Thematic Analysis. *Group and Organization Management*, 47(4), 755–778. <https://doi.org/10.1177/10596011211013161>
- Rohman, F. (2022). Problem Based Learning in Islamic Religious Education: The Case of the Indonesian Pesantren. *Global Journal Al-Thaqafah*, 12(1), 82-97. <https://doi.org/10.7187/GJAT072022-5>
- Shekh-Abed, A. (2025). Metacognitive self-knowledge and cognitive skills in project-based learning of high school electronics students. *European Journal of Engineering Education*, 50(1), 214-229.

<https://doi.org/10.1080/03043797.2024.2374479>

- Spaan, W., Oostdam, R., Schuitema, J., & Pijls, M. (2024). Analysing teacher behaviour in synthesizing hands-on and minds-on during practical work. *Research in Science & Technological Education*, 42(2), 219–236. <https://doi.org/10.1080/02635143.2022.2098265>
- Trullàs, J. C., Blay, C., Sarri, E., & Pujol, R. (2022). Effectiveness of problem-based learning methodology in undergraduate medical education: a scoping review. *BMC Medical Education*, 22(1), 104. <https://doi.org/10.1186/s12909-022-03154-8>
- Tursynkulova, E., Madiyarov, N., Sultanbek, T., & Duysebayeva, P. (2023). The effect of problem-based learning on cognitive skills in solving geometric construction problems: a case study in Kazakhstan. *Frontiers in Education*, 8(1284305). <https://doi.org/10.3389/feduc.2023.1284305>
- Usmaldi, U., & Amini, R. (2022). Creative Project-based Learning Model to Increase Creativity of Vocational High School Students. *International Journal of Evaluation and Research in Education*, 11(4), 2155–2164. <https://doi.org/10.11591/ijere.v11i4.21214>
- Von Hauswolff, K. (2022). Practical thinking while learning to program—novices' experiences and hands-on encounters. *Computer Science Education*, 32(1), 128–152. <https://doi.org/10.1080/08993408.2021.1953295>
- Wang, G., Ren, H., Zhao, G., Gong, S., Du, Y., Xue, Z., Pang, Y., & Zhang, X. (2022). Digital model and giant system coupling technology system of smart coal mine. *Meitan Xuebao/Journal of the China Coal Society*, 47(1), 61–74. <https://doi.org/10.13225/j.cnki.jccs.YG21.1860>
- Wijnia, L., Noordzij, G., Arends, L. R., Rikers, R. M., & Loyens, S. M. (2024). The effects of problem-based, project-based, and case-based learning on students' motivation: A meta-analysis. *Educational Psychology Review*, 36(1), 29. <https://doi.org/10.1007/s10648-024-09864-3>
- Williamson, E. (2023). The Effectiveness of Project-Based Learning in Developing Critical Thinking Skills among High School Students. *European Journal of Education*, 1(1), 1-11. <https://forthworthjournals.org/journals/index.php/EJE/article/view/26>
- Wu, X. Y. (2024). Unveiling the dynamics of self-regulated learning in project-based learning environments. *Heliyon*, 10(5). [https://www.cell.com/heliyon/fulltext/S2405-8440\(24\)03366-8](https://www.cell.com/heliyon/fulltext/S2405-8440(24)03366-8)
- Yang, W., Li, H., Su, A., & Ding, L. (2023). Application of problem based learning (PBL) and case based learning (CBL) in the teaching of international classification of diseases encoding. *Scientific Reports*, 13(1), 15220. <https://doi.org/10.1038/s41598-023-42175-1>
- Yu, H. (2024). Enhancing creative cognition through project-based learning: An in-depth scholarly exploration. *Heliyon*, 10 (6). [https://www.cell.com/heliyon/fulltext/S2405-8440\(24\)03737-X](https://www.cell.com/heliyon/fulltext/S2405-8440(24)03737-X)