Project-based learning Innovating Practical Skill Development for Madrasah Ibtidaiyah Students

Sofiyudin Arif

UIN K.H. Abdurrahman Wahid Pekalongan sofiudin55@gmail.com

Umi Mahmudah

UIN K.H. Abdurrahman Wahid Pekalongan umi.mahmudah@uingusdur.ac.id

Abstrak

Pembelajaran berbasis proyek telah muncul sebagai pendekatan inovatif dalam bidang pendidikan, dengan tujuan utama untuk membina keterampilan praktis di kalangan siswa. Penelitian ini bertujuan untuk menyelidiki metode pembelajaran berbasis proyek, menganalisis dampaknya pada pengembangan keterampilan praktis, dan mengidentifikasi faktor-faktor yang memengaruhi keberhasilan implementasinya. Metodologi penelitian yang digunakan dalam studi ini adalah tinjauan literatur, yang mencakup analisis literatur yang relevan tentang pembelajaran berbasis proyek, pendidikan praktis, dan pengembangan keterampilan. Sumber informasi diperoleh dari berbagai publikasi ilmiah. Hasil analisis data menunjukkan bahwa pembelajaran berbasis proyek secara signifikan meningkatkan pengembangan keterampilan praktis pada siswa. Pendekatan ini memberikan kesempatan berharga bagi siswa untuk berpartisipasi secara aktif dalam proyek nyata yang berkaitan langsung dengan dunia nyata. Keterlibatan ini membekali mereka dengan keterampilan praktis yang memiliki aplikabilitas langsung dalam kehidupan sehari-hari dan karier profesional di masa depan. Temuan penelitian ini memberikan wawasan berharga tentang efektivitas pembelajaran berbasis proyek sebagai pendekatan pedagogis inovatif untuk membina pengembangan keterampilan praktis di kalangan siswa Madrasah Ibtidaiyah.

Kata kunci: Pembelajaran berbasis proyek, Pengembangan Keterampilan Praktis, Pendidikan Inovatif, Peningkatan Keterampilan

Abstract

Project-based learning has emerged as an innovative approach in the field of education, with the primary objective of nurturing practical skills among students. This research aims to investigate the project-based learning method, analyze its impact on the development of practical skills, and identify the factors influencing its successful implementation. The research methodology employed for this study is a literature review, encompassing an analysis of relevant literature on project-based learning, practical education, and skill development. Information sources were drawn from various scholarly publications. The data analysis results indicate that project-based learning significantly enhances the development of practical skills in students. This approach provides students valuable opportunities to actively participate in hands-on projects that directly relate to the real world. This engagement equips them with practical skills that have immediate applicability in their daily lives and future professional endeavors. The findings of this research provide valuable insights into the effectiveness of project-based learning as an innovative pedagogical approach for fostering practical skill development among Madrasah Ibtidaivah students.

Keywords: Project-based learning, Practical Skill Development, Innovative Education, Skill Enhancement

INTRODUCTION

Education serves as the primary foundation for shaping the future of individuals and societies. In the midst of rapid changes and global interconnectivity, education must be capable of meeting the demands of the modern era. One innovative approach

that holds urgency in this context is Project-Based Learning (PBL) (Norhikmah et al., 2022).

Project-Based Learning, as described by Taufiqirrahman et al., is an active learning approach that emphasizes assigning complex tasks or projects to students. In PBL, students are encouraged to work independently or in small groups to complete projects or tasks that reflect real-world situations. This approach focuses on the application of knowledge and skills in real-life contexts, providing students with deep and meaningful learning experiences (Taufiqurrahman & Junaidi, 2021).

Numerous previous studies have highlighted the success of Project-Based Learning methods in developing students' practical skills. The results of these studies indicate that this approach is effective in enhancing students' understanding of the real world and developing skills with direct applicability. Research conducted by Karmila et al., utilizing Project-Based Learning with the Classroom Action Research (CAR) method, successfully enhanced students' psychomotor skills in Fiqih subjects at Madrasah Ibtidaiyah. The outcomes demonstrated a significant improvement of 30% in the first cycle, and a remarkable increase of 90% in the second cycle (Rianda & Sayekti, 2023)

Another study, conducted by Syafa'atul Khusna et al., investigated the "merdeka belajar" curriculum within the context of education in Indonesia, specifically focusing on Madrasah Ibtidaiyah. The research indicated that the "merdeka belajar" curriculum emerged as a response to comprehensive changes in education, particularly in addressing the demands of competitive and adaptive human resources in the 21st century. This curriculum aims to shape and enhance the 4C skills (critical thinking, communication, collaboration, and creativity) within Madrasah Ibtidaiyah students. Thus, this research emphasizes the importance of developing practical skills that align with the 21st-century context in Madrasah Ibtidaiyah education (Khusna et al., 2023). Based on the relevant research mentioned, it provides crucial insights into the development of students' practical skills through innovative learning approaches.

Practical skills, on the other hand, refer to an individual's ability to adapt to tasks or situations requiring the application of their abilities. Generally, skills can be categorized into three aspects: psychomotor skills, affective skills, and cognitive skills (Anwar et al., 2021). Furthermore, in a more detailed understanding, Kumar, as cited in Anwar et al., categorized skills into four categories: practical and manipulative skills, observational skills, drawing skills, and reporting and interpreting skills. Thus, this definition perceives practical skills as the ability to adapt one's abilities in various contexts, encompassing diverse dimensions including physical, cognitive, and emotional aspects (Anwar et al., 2021; Rianda & Sayekti, 2023).

Despite existing research supporting the use of Project-Based Learning, there is a need to further understand how this method can be implemented more effectively in the context of Madrasah Ibtidaiyah education. Gaps exist in understanding the factors influencing successful implementation and the deeper impact on students' practical

skill development. Previous studies have provided a strong foundation for understanding the benefits of Project-Based Learning. However, specific research on its implementation in the context of Madrasah Ibtidaiyah education remains limited. Therefore, this study aims to complement prior research by focusing on this specific context.

This research attempts to bring novelty by delving deeper into the utilization of Project-Based Learning in Madrasah Ibtidaiyah. The study will analyze the factors influencing the successful implementation of this method and provide deeper insights into its impact on students' practical skills. In this context, the primary objective of this research is to investigate the use of Project-Based Learning methods in Madrasah Ibtidaiyah, analyze its impact on the development of students' practical skills, identify factors influencing its implementation, and fill the existing knowledge gaps in Islamic education literature. This research is expected to make a positive contribution to the development of innovative learning approaches within the Madrasah Ibtidaiyah context.

METHODS

In this study, the researcher employed a literature review approach to delve into issues related to Project-Based Learning (PBL) in the context of Madrasah Ibtidaiyah education. The research design encompassed the search, selection, and analysis of relevant literature with the aim of gaining profound insights into the influence of PBL on the development of students' practical skills. The study began with a meticulous literature search through various sources, including scientific article databases available on Google Scholar. During the selection phase, the researcher chose literature sources that met the predetermined inclusion criteria, including relevance to the research topic, appropriate publication year, and research quality. The selected literature sources were then systematically analyzed. The key findings from each literature source were noted and categorized based on themes or topics relevant to this research, such as the impact of PBL on students' practical skills in Madrasah Ibtidaiyah. Subsequently, these literature findings were utilized to construct a conceptual framework that served as the theoretical foundation for the analysis and interpretation of the research outcomes.

RESULTS AND DISCUSSION Effectiveness of Project-Based Learning

Project-Based Learning (PBL) is an instructional approach that has been widely discussed in educational literature. These four articles serve as relevant literature sources discussing the effectiveness of PBL. The first article, titled "Digital Book Project: Efforts to Improve 21st Century Skills of Elementary School Teacher Candidates through Project-Based Learning Models," explores the use of PBL to enhance 21st-century skills of elementary school teacher candidates (Dewi, 2015). The second article, titled "Development of Project-Based Thematic Learning Models to

Improve Students' Creative Thinking Abilities," investigates the development of a PBL model to enhance students' creative thinking abilities (Aliyah, 2017). The third article, titled "Students' Cognitive Abilities and Creative Thinking through STEM-Approached Project-Based Learning," analyzes students' cognitive abilities and creative thinking through PBL with a STEM approach (Sumarni et al., 2019). Finally, the fourth article, titled "Environmental Education through Project-Based Learning in Biology Learning," reveals the effectiveness of PBL in improving high school students' cognitive skills and creative thinking (Anazifa & Hadi, 2016).

In the comparative analysis of these findings, in general, the results from the four articles indicate that PBL tends to be effective in enhancing students' practical skills. These studies observe improvements in various skill aspects, such as creative thinking, conceptual understanding, problem-solving abilities, and social skills. Despite differences in context and research methods, the outcomes consistently demonstrate the positive benefits of PBL. In the first article, PBL provides opportunities for teacher candidates to develop 21st-century skills through digital book projects. The second article highlights PBL in the context of thematic learning for elementary school students, while the third article employs a STEM approach. The last article focuses on the cognitive skills and creative thinking of high school students.

The comparative analysis of findings indicating that PBL tends to be effective in enhancing students' practical skills finds support in theories from the fields of education and cognitive psychology. One relevant theory is constructivism (Kusumawati et al., 2022), which emphasizes that learning occurs through the construction of knowledge by students through their active experiences. In the context of PBL, students engage in projects that allow them to apply their knowledge in real-life situations. This aligns with the constructivist principle where knowledge is better understood and internalized when students are actively involved in the learning process. When students work on PBL projects, they not only understand concepts theoretically but also develop a deeper understanding through practical experiences.

Additionally, the improvement in various skills such as creative thinking, conceptual understanding, problem-solving abilities, and social skills observed in these studies also aligns with the constructivist approach. Constructivism emphasizes that learning should focus not only on increasing knowledge but also on developing skills relevant to that knowledge.

Besides constructivism, the PBL approach also reflects the principles of contextual education (Mustofa et al., 2016), which emphasize the importance of learning relevant to students' real-life contexts. In PBL, students learn through projects that are relevant to their daily lives, which can enhance their motivation to learn and apply knowledge in practical situations. Thus, the research findings indicating the effectiveness of PBL in enhancing students' practical skills generally align with constructivist and contextual education theories, providing a strong

conceptual foundation for this project-based learning approach.

The findings from these four articles suggest that PBL has significant potential in enhancing students' practical skills. PBL encourages students to engage in real projects and relevant learning situations, allowing them to develop skills such as critical thinking, collaboration, communication, creative thinking, and problem-solving. Moreover, PBL also appears effective in enhancing conceptual understanding, both in language and science contexts. However, it is essential to remember that successful PBL implementation requires competent teacher support and careful planning. Additionally, the context and educational level can also influence the effectiveness of PBL

Implementation of Project-Based Learning in Madrasah Ibtidaiyah Context

A literature review on the Implementation of Project-Based Learning (PBL) in the context of Madrasah Ibtidaiyah has revealed several relevant perspectives. The first article, titled "Character Education Management in Nahdlatul Ulama Madrasah Ibtidaiyah during the Covid-19 Pandemic," highlights the importance of character education in Madrasah Ibtidaiyah, aligning with PBL's goal of developing students' character skills (Firdausi & Nanik Ulfa, 2021). The second article, titled "Implementation of Project-Based Learning to Improve Psychomotor Skills of Students in Figih Subjects," specifically discusses the implementation of PBL to enhance psychomotor skills in the Figih subject, depicting concrete efforts in the context of Islamic education (Rianda & Sayekti, 2023). The third article, titled "Critical Thinking Skills Analysis in Thematic Learning for Muhammadiyah Madrasah Ibtidaiyah Students," reviews critical thinking skills in thematic learning at Madrasah Ibtidaiyah, although not explicitly discussing PBL, it reflects its relevance to this teaching method (Ulfha et al., 2023). The fourth article, titled "Development of Learning Tools Utilizing Folklore through Role Playing-Based Project-Based Learning (RPBL) Models to Enhance Students' Social Skills," explains the development of learning tools using PBL and its benefits in enhancing students' social skills (Khanifah, 2021).

Furthermore, in the analysis of PBL implementation in Madrasah Ibtidaiyah, the findings from these articles indicate that PBL has been well adopted in various Islamic education contexts. Although each article has a different focus, the overall implementation of PBL has yielded positive outcomes, including improved conceptual understanding, psychomotor skills, and students' social skills. Factors such as technological readiness, teacher commitment, and strong collaboration between schools and parents have played crucial roles in the success of PBL implementation.

However, there are challenges that need to be addressed. The use of technology in PBL requires adequate access and technological competence from both teachers and students. Additionally, integrating religious values and character education within the PBL context might require a more careful approach to align with Islamic

principles. Nevertheless, these findings provide a robust foundation for continuing efforts to implement PBL in Madrasah Ibtidaiyah education, focusing on enhancing conceptual understanding, skill development, and fostering strong student character values.

Relevance of Findings with Madrasah Ibtidaiyah Curriculum

The research findings demonstrating the effectiveness of Project-Based Learning (PBL) in enhancing students' practical skills have significant relevance to the Madrasah Ibtidaiyah curriculum. Here is a further analysis of this relevance:

PBL Aligns with the Goals and Principles of the Madrasah Ibtidaiyah Curriculum: The Madrasah Ibtidaiyah curriculum, grounded in Islamic education, emphasizes the importance of character development, religious knowledge, and practical skills in student education (Qolbi & Hamami, 2021). PBL naturally supports these goals by integrating the development of practical skills, conceptual understanding, and character values within the context of problem-centered project-based learning. Research findings indicating improvements in these aspects, such as psychomotor skills and creative thinking, align with the objectives of the Madrasah Ibtidaiyah curriculum.

Relevance to Islamic Education: PBL can be well integrated into Islamic education because this approach allows students to understand and apply Islamic values in real-life contexts (Junita et al., 2023). Project-based learning can be designed to incorporate religious aspects, such as Quranic studies, Hadith, and Islamic ethics, into relevant projects. This enables students to develop religious understanding and apply it to their daily lives.

Implications for Curriculum Development: Findings demonstrating the success of PBL in enhancing students' practical skills can have significant implications for curriculum development in Madrasah Ibtidaiyah (Qolbi & Hamami, 2021). Curricula can be updated or adapted to better support the implementation of PBL as an effective teaching method. Curriculum development can include guidelines and resources for teachers on how to integrate PBL into their teaching methods. Additionally, curricula can emphasize project-based assessments to measure students' practical skills and conceptual understanding.

Thus, the consistently positive findings regarding the effectiveness of PBL in enhancing students' practical skills align with the Madrasah Ibtidaiyah curriculum's focus on character development, religious knowledge, and practical skills. Furthermore, PBL can be well integrated into Islamic education and the philosophy of the Madrasah Ibtidaiyah curriculum. The implication of these findings underscores the importance of supporting teachers in adopting PBL in their teaching and integrating it effectively into the Madrasah Ibtidaiyah curriculum to achieve more effective learning outcomes.

Implications and Recommendations

Enhancing PBL in Madrasah Ibtidaiyah: The findings of this research provide positive implications for the use of PBL in the context of Madrasah Ibtidaiyah. Therefore, it is suggested that Madrasah Ibtidaiyah educational institutions consider adopting PBL as one of the integrated teaching methods in their curriculum. This requires training and support for teachers in developing the necessary skills to effectively implement PBL.

Improving Technological Competence: Some studies indicate that access to and competence in technology are key factors in the success of PBL. Therefore, it is recommended that teachers in Madrasah Ibtidaiyah receive training on the use of educational technology and how to integrate it into project-based learning. Schools should also ensure adequate access to technology devices in the learning environment.

Integration of Islamic Values: In the context of Madrasah Ibtidaiyah, it is important to ensure that implemented PBL remains consistent with Islamic values and religious principles. Therefore, a careful approach is needed in designing PBL projects that incorporate Islamic values and ethics. Teachers can collaborate with religious scholars to ensure compliance with Islamic teachings.

Development of Integrated Curriculum: The results of this research provide momentum to develop a well-integrated curriculum in Madrasah Ibtidaiyah. The curriculum should provide detailed guidelines on how to integrate PBL into teaching and establish appropriate assessments. This can assist teachers in planning instruction aligned with the objectives and principles of the Madrasah Ibtidaiyah curriculum.

Further Research: Further research can be conducted to further understand the impact of PBL in the context of Madrasah Ibtidaiyah. Subsequent studies can involve more in-depth measurements of specific aspects such as character development, religious values, or the effectiveness of PBL in specific subjects. This research can provide additional contributions to the development of innovative Madrasah Ibtidaiyah education.

CONCLUSION

Education serves as the fundamental cornerstone in shaping the future of individuals and societies. In the face of rapid changes in today's world, Project-Based Learning (PBL) emerges as a relevant and innovative approach. PBL emphasizes assigning complex tasks or projects to students, requiring them to work independently or in groups to complete projects that reflect real-world situations. Previous research demonstrates the success of PBL in enhancing students' understanding of the real world and developing their practical skills. In the context of Madrasah Ibtidaiyah, PBL is effective in improving students' psychomotor skills and aligns with the goals of Islamic education. However, the implementation of PBL also encounters several challenges, such as technological readiness and the integration of religious values. The

findings of this research have positive implications for the development of the Madrasah Ibtidaiyah curriculum, suggesting the need for teacher training to effectively implement PBL.

REFERENCES

- Aliyah, H. (2017). Pengembangan Model Pembelajaran Tematik Berbasis Proyek Untuk Meningkatkan Kemampuan Berpikir Kreatif Siswa. *Jurnal Pendidikan Dasar*, 8(2), 36–50.
- Anazifa, R. D., & Hadi, R. F. (2016). Pendidikan Lingkungan Hidup Melalui Pembelajaran Berbasis Proyek (Project- Based Learning) Dalam Pembelajaran Biologi. *Prosiding Symbion (Symposium on Biology Education)*, 1(1), 453–462.
- Anwar, Y. A. S., Junaidi, E., & Al Idrus, S. W. (2021). Pengembangan Rubrik Keterampilan Praktik dan Sikap Ilmiah pada Praktikum Biokimia: Kajian Validitas dan Reliabilitas. *Jurnal Pijar Mipa*, 16(1), 121–128. https://doi.org/10.29303/jpm.v16i1.2347
- Dewi, F. (2015). Proyek Buku Digital: Upaya Peningkatan Keterampilan Abad 21 Callon Guru Sekolah Dasar melalui Model Pembelajaran Berbasis Proyek. *Metodik Didaktik*, 9(2), 1–15.
- Firdausi, R., & Nanik Ulfa. (2021). Pengelolaan Pendidikan Karakter di Madrasah Ibtidaiyah Nahdlatul Ulama pada Masa Pandemi Covid-19. *AKSELERASI: Jurnal Pendidikan Guru MI*, 2(2), 69–78. https://doi.org/10.35719/akselerasi.v2i2.107
- Junita, E. R., Karolina, A., & Idris, M. (2023). Implementasi Model Pembelajaran Project Based Learning (Pjbl) Dalam Membentuk Sikap Sosial Peserta Didik Pendidikan Agama Islam Di Sd Negeri 02 Rejang Lebong. *Literasiologi, Literasi Kita Indonesia*, 9(4), 43–58.
- Khanifah, L. N. (2021). Pengembangan perangkat pembelajaran dengan pemanfaatan cerita rakvat melalui model.
- Khusna, S., Khasanah, I., Musa, M. M., & Rini, J. (2023). Kurikulum Merdeka Belajar melalui Pembelajaran Abad 21 untuk Meningkatkan Kompetensi 4C Siswa Madrasah Ibtidaiyah. *Prosiding Semai 2: Seminar Nasional PGMI*, 22–34.
- 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.
- Mustofa, Z., Susilo, H., Heni, M., Al, I., Biologi, P., & Malang, P. N. (2016). Penerapan Model Pembelajaran Problem Based Learning Melalui Pendekatan Kontekstual Berbasis Lesson Study Untuk Siswa Sma. *Jurnal Pendidikan*, 1(5), 885–889.
- Norhikmah, N., Rizky, N. F., Puspita, D., & Saudah, S. (2022). Inovasi Pembelajaran dimasa Pendemi: Implementasi Pembelajaran berbasis Proyek Pendekatan Destinasi Imajinasi. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 6(5), 3901–3910. https://doi.org/10.31004/obsesi.v6i5.1886
- Qolbi, S. K., & Hamami, T. (2021). Impelementasi Asas-asas Pengembangan Kurikulum terhadap Pengembangan Kurikulum Pendidikan Agama Islam. *Edukatif: Jurnal Ilmu Pendidikan*, *3*(4), 1120–1132. https://doi.org/10.31004/edukatif.v3i4.511
- Rianda, K., & Sayekti, S. P. (2023). Penerapan Pembelajaran Berbasis Proyek Untuk Meningkatkan Keterampilan Psikomotorik Siswa Pada Mata Pelajaran Fiqih. *Attadrib: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, 6(2), 214–223.

- https://doi.org/10.54069/attadrib.v6i2.526
- Sumarni, W., Wijayati, N., & Supanti, S. (2019). Analysis Kemampuan Kognitif dan Berfikir Kreatif Siswa Melalui Pembelajaran Berbasis Proyek Berpendekatan STEM [The Analysis of Cognitive and Creative Thinking Skill Through The Use of STEM Project Based Learning Model]. *Jurnal Pembelajaran Kimia OJS*, 4(1), 18–30. http://dx.doi.org/10.17977/um026v4i12019p018
- Taufiqurrahman, T., & Junaidi, J. (2021). Pembelajaran Berbasis Proyek (Project-Based Learning) untuk Mengembangkan Keterampilan Abad 21. *INCARE, International Journal of Educational Resources*, 02(02), 225–241.
- Ulfha, N., Kusuma, Y. Y., Sumianto, & Sutiyan, O. S. J. (2023). Analisis Keterampilan Berpikir Kritis Dalam Pembelajaran Tematik Pada Siswa Madrasah Ibtidaiyah Muhammadiyah. *Autentik: Jurnal Pengembangan Pendidikan Dasar*, 7(2), 142–152. https://autentik.stkippgrisumenep.ac.id/index.php/autentik/article/view/288