



Contents lists available at ojs.aeducia.org

Jurnal Indonesia Pendidikan Profesi Guru

Volume 3, Issue 2 (2026), 10.64420/jippg.v3i2

Journal homepage: <https://ojs.aeducia.org/index.php/jippg>

JIPPG

E- ISSN 3063-0797

P- ISSN 3063-0827

Research Article

Read Online:  <https://doi.org/10.64420/jippg.v3i2.532>

Open Access

Improving Students' Ability to Read and Write Surah At-Tiin through the Implementation of the Problem-Based Learning Model among Elementary School Students

Aristianah^{1*}, Ediansyah²

¹ Sekolah Dasar Islam Terpadu Al-Ihsan Bengkulu Tengah, Indonesia

² Universitas Islam Negeri Fatmawati Sukarno Bengkulu, Indonesia

ARTICLE HISTORY

Submitted: March 21, 2026

Revised: May 27, 2026

Accepted: May 31, 2026

Published: June 4, 2026

CONTENT

[Introduction](#)

[Method](#)

[Result and Discussion](#)

[Implication and Contribution](#)

[Limitations & Recommendations](#)

[Conclusion](#)

[Acknowledgments](#)

[Author Contribution Statement](#)

[Declaration of Generative GenAI Usage](#)

[Conflict of Interest Statement](#)

[References](#)

[Article Information](#)

ABSTRACT

Background: The low ability of elementary school students to read and write Surah At-Tiin remains a significant challenge in Islamic Religious Education, as students tend to be less engaged and experience difficulties understanding the material in its context. **Objective:** This study aimed to improve students' ability to read and write Surah At-Tiin through the implementation of the Problem-Based Learning (PBL) model among fourth-grade students at SDIT Al-Ihsan Bengkulu Tengah. **Method:** The study employed a Classroom Action Research (CAR) design conducted in two cycles involving 15 students. Data were collected through observation, tests, and documentation. **Results:** The findings revealed that implementing the PBL model successfully improved students' learning outcomes, as indicated by a rise in learning mastery from 13% in the initial condition to 85% in the second cycle. In addition, students became more active, motivated, and collaborative during the learning process. **Conclusion:** The study concludes that the PBL model is effective in improving students' ability to read and write Surah At-Tiin. **Contribution:** This research contributes to the development of more active, contextual, and student-centred instructional strategies in Islamic Religious Education.

KEYWORDS

Reading and Writing Skills; Surah At-Tiin; Islamic Religious Education; Problem-Based Learning; Elementary School Students

1. INTRODUCTION

Elementary education plays a crucial role in establishing students' foundational knowledge, skills, and character development. In the educational process, instruction is the primary factor in determining students' success in achieving the expected competencies. Various instructional approaches continue to be developed to create learning experiences that are more effective, engaging, and meaningful for students (Uno & Mohamad, 2022). One instructional model considered effective in enhancing conceptual understanding, critical thinking skills, and social skills is

* **Corresponding Author:** Aristianah, [✉ aristianah17@gmail.com](mailto:aristianah17@gmail.com)

Sekolah Dasar Islam Terpadu Al-Ihsan Bengkulu Tengah

Address: 76HR+2PH, Pasar Pedati, Pondok Kelapa, Central Bengkulu Regency, Bengkulu

How to Cite this Article:

Aristianah, A., & Ediansyah, E. (2026). Improving Students' Ability to Read and Write Surah At-Tiin through the Implementation of the Problem-Based Learning Model among Elementary School Students. *Jurnal Indonesia Pendidikan Profesi Guru*, 3(2), 101-108. <https://doi.org/10.64420/jippg.v3i2.532>



Copyright © 2026 by the author(s). This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International (CC BY-SA 4.0) License (<https://creativecommons.org/licenses/by-sa/4.0/>)

Problem-Based Learning (PBL) (Fristadi & Bharata, 2015). The PBL model emphasises students' creativity, innovation, and motivation in solving problems through active learning processes (Muhsam & Muh, 2022).

In its implementation, the PBL model positions students at the centre of the learning process, while teachers act as facilitators, motivators, and instructional designers (Darwan, 2022). Through this approach, students are encouraged to develop problem-solving skills that can be applied in their daily lives (Marni & Pasaribu, 2021). Therefore, implementing the PBL model is considered relevant for improving instructional quality, including in Islamic Religious Education at the elementary school level.

However, various challenges remain in the practice of Islamic Religious Education, particularly regarding students' ability to read and write the Qur'an. Based on preliminary observations conducted in the fourth-grade classroom at SDIT Al-Ihsan Bengkulu Tengah, several students still had difficulty reading and writing Surah At-Tiin accurately. This low level of proficiency was attributed to teacher-centred instructional practices, which limited students' active participation in learning. Furthermore, students encountered difficulties in connecting instructional content with real-life applications. These conditions contributed to learning outcomes that remained below the Minimum Mastery Criterion (KKM).

To address these challenges, an instructional model that increases students' active engagement in the learning process is required. In this context, Problem-Based Learning represents an alternative instructional model because it encourages students to think critically, engage in discussion, collaborate with peers, and solve problems independently and in groups (Susanto, 2020). Moreover, the PBL model helps students develop collaborative and investigative skills that support a deeper understanding of learning materials (Sunardi & Nelfiyanti, 2015).

Previous studies have demonstrated that the PBL model is effective in improving students' learning outcomes (Azura & Selaras, 2023; Hamidah & Citra, 2021). Other research has shown that the use of Polya's method in instruction can enhance students' mathematics achievement by creating more challenging learning experiences and encouraging active problem-solving (Pramesti & Rini, 2019; Wahyuningtyas, 2013). Additional studies have reported that implementing the PBL model can improve students' critical thinking skills and academic achievement at the elementary school level (Afrianingrum & Rahayu, 2021; Burhana et al., 2021). These findings indicate that the PBL model can create an active, creative, and engaging learning environment that increases students' motivation to participate in classroom activities. Nevertheless, studies examining the implementation of Problem-Based Learning to improve students' ability to read and write Surah At-Tiin within Islamic Religious Education at the elementary school level remain limited. Most previous studies have focused on general subjects such as mathematics and science. Therefore, the novelty of this study lies in applying the PBL model to the teaching of Surah At-Tiin reading and writing to elementary school students through a contextual, activity-based learning approach.

This study aims to analyse improvements in students' reading and writing skills in Surah At-Tiin through the implementation of the Problem-Based Learning model among fourth-grade students at SDIT Al-Ihsan Bengkulu Tengah. The findings are expected to contribute to the development of more active, contextually grounded, and student-centred instructional strategies in Islamic Religious Education.

2. METHOD

2.1 Research Design

This study employed a Classroom Action Research (CAR) design. Classroom Action Research is a reflective form of inquiry conducted by practitioners to improve the rationality of their actions, deepen their understanding of instructional practices, and enhance the conditions under which teaching and learning occur (Afandi, 2014). In accordance with the CAR approach, the study was conducted in two cycles, with each cycle consisting of two instructional meetings. The procedures implemented in each cycle included four stages: planning, action, observation/evaluation, and reflection. The planning stage involved four main steps: problem identification, problem analysis and formulation, action research planning, and implementation of the classroom action research.

2.2 Research Object

The study was conducted at SDIT Al-Ihsan Bengkulu Tengah in 2024. The participants were 25 fourth-grade students, including 14 males and 11 females, with varying levels of ability. Participants were selected using purposive sampling.

2.3 Instruments and Data Collection

Data collection refers to systematic, standardised procedures used to gather research data and evidence (Utomo et al., 2024). The study was conducted through several action cycles involving planning, implementation, observation, evaluation, and reflection to examine students' learning outcomes in learning Surah At-Tiin using the Problem-Based Learning (PBL) model. Data were collected through observation, tests, and documentation. Observation was used to monitor students' participation and engagement during the learning process, while achievement tests were administered to assess students' ability to understand, memorise, read, and write Surah At-Tiin. Documentation provided supporting data related to school conditions, including students, teachers, facilities, syllabi, and lesson plans, to support the implementation and evaluation of the study.

2.4 Data Analysis

Data analysis was conducted by comparing students' pre-action and post-action test scores. Learning mastery was used as the primary indicator of success. Classical mastery was achieved when at least 85% of students met the minimum mastery standard.

3. RESULT AND DISCUSSION

3.1 Result

Based on initial observations during the first stage of the study, students' learning outcomes in Islamic Religious Education remained relatively low. The first-semester achievement data for fourth-grade students at SDIT Al-Ihsan Bengkulu Tengah showed that several students scored below the Minimum Mastery Criterion (KKM) of 70. The following table presents students' learning outcomes prior to the implementation of the Problem-Based Learning (PBL) model.

3.1.1 Results of Cycle I

A detailed description of students' learning outcomes in Cycle I is presented in the following table.

Table 1. Students' Learning Outcomes Before the Implementation of the Problem-Based Learning (PBL) Model

No.	Student	Score	Status
1	ARS	40	Not Mastered
2	AKW	60	Not Mastered
3	AFS	60	Not Mastered
4	DPK	60	Not Mastered
5	FTS	60	Not Mastered
6	FNA	70	Mastered
7	HA	50	Not Mastered
8	KAM	50	Not Mastered
9	MGT	80	Mastered
10	MA	50	Not Mastered
11	MAP	60	Not Mastered
12	MGC	50	Not Mastered
13	MNR	50	Not Mastered
14	NSA	50	Not Mastered
15	NQE	50	Not Mastered
	Total Score	800	
	Mean Score	53,3	
	Mastery Percentage	13 %	
	Non-Mastery Percentage	87 %	

Based on Table 1, the students' initial ability to read and write Surah At-Tiin was relatively low. Of the 15 students, only 2 met the minimum mastery criterion, while the remaining 13 failed to meet it (KKM). The class mean score was only 53.3, with a mastery rate of 13% and a non-mastery rate of 87%. These findings indicate that most students experienced difficulties in understanding the learning material, particularly in reading and writing Surah At-Tiin. The low learning outcomes suggest that the previous instructional approach had not effectively encouraged active

student engagement. Therefore, a more innovative, student-centred instructional model, such as Problem-Based Learning (PBL), was deemed necessary.

3.1.2 Results of Cycle II

A detailed description of students' learning outcomes in Cycle II is presented in the following table.

Table 2. Students' Learning Outcomes After the Implementation of the Problem-Based Learning (PBL) Model

No.	Student	Score	Status
1	ARS	40	Not Mastered
2	AKW	80	Mastered
3	AFS	83	Mastered
4	DPK	70	Mastered
5	FTS	81	Mastered
6	FNA	80	Mastered
7	HA	85	Mastered
8	KAM	60	Not Mastered
9	MGT	80	Mastered
10	MA	80	Mastered
11	MAP	80	Mastered
12	MGC	78	Mastered
13	MNR	74	Mastered
14	NSA	80	Mastered
15	NQE	50	Not Mastered
	Total Score		969
	Mean Score		64,6
	Mastery Percentage		85 %
	Non-Mastery Percentage		15 %

As shown in Table 2, students' learning outcomes improved following the implementation of the Problem-Based Learning (PBL) model. Of the 15 students, 12 achieved masteries, while only 3 students remained below the minimum mastery criterion. The class mean score increased to 64.6, with the mastery rate rising to 85% and the non-mastery rate decreasing to 15%. This improvement indicates that the PBL model helped students gain a better understanding of the learning material through discussion, collaborative group work, and problem-solving activities.

In addition to improving learning outcomes, the PBL model increased students' participation, motivation, and engagement throughout the learning process. These findings demonstrate that implementing Problem-Based Learning effectively enhanced fourth-grade students at SDIT Al-Ihsan Bengkulu Tengah's ability to read and write Surah At-Tiin.

3.2. Discussion

The findings of this study indicate that implementing the Problem-Based Learning (PBL) model effectively improved fourth-grade students at SDIT Al-Ihsan Bengkulu Tengah's ability to read and write Surah At-Tiin. This improvement was evident from the changes in students' learning outcomes before and after the instructional intervention. Initially, most students failed to meet the Minimum Mastery Criterion (KKM). However, after implementing the PBL model across Cycle I and Cycle II, the percentage of students achieving mastery increased substantially. These findings suggest that the PBL model is effective in helping students better understand Islamic Religious Education materials, particularly those related to reading and writing the Qur'an.

The improvement in students' abilities can be attributed to the opportunities the PBL model provides for active engagement in the learning process (Keiler, 2018). Rather than passively receiving information, students participated in discussions, problem-solving activities, collaborative group work, and independent information-seeking tasks. These learning experiences increased students' participation, motivation, and meaningful engagement. The Learning-Based Learning model emphasises creativity, innovation, and student motivation throughout the instructional process (Abri et al., 2024). Furthermore, PBL encourages students to develop problem-solving skills that can be applied in real-life situations (Marni & Pasaribu, 2021).

The findings are consistent with constructivist learning theory, which emphasises that knowledge is constructed through active learning experiences and social interaction (Zulkarnaen et al., 2023). In problem-based

learning environments, students are given opportunities to construct their own understanding through collaborative learning activities (Sugrah, 2020). Within the PBL framework, teachers serve as facilitators and learning guides, while students assume a central role in the learning process (Wijnia et al., 2024). Consequently, implementing PBL creates a more active, communicative, and student-centred learning environment than conventional instructional approaches.

The improvement in students' ability to read and write Surah At-Tiin was also reflected in their enhanced accuracy in reciting verses, improved comprehension of Qur'anic texts, and more organised writing of the verses compared with their performance prior to the intervention. Through group discussions and problem-solving activities, students better understood the learning material, thanks to increased interaction and cooperation among group members (Sari et al., 2016). Problem-Based Learning encourages students to actively learn, explore ideas, and collaborate to understand instructional content (Ali, 2019). In addition, the model helps students develop collaborative and investigative skills that support deeper learning (Abri et al., 2024).

The findings of this study also support previous research demonstrating the effectiveness of PBL in improving student learning outcomes. (Zhang, 2023) reported that the Problem-Based Learning model enhances elementary school students' critical thinking skills and academic achievement. Similarly, Wijnia et al. (2024) found that problem-solving-based instruction increases student engagement and learning outcomes by challenging students to solve authentic learning problems. Therefore, the results of the present study reinforce previous evidence that implementing PBL can improve both the learning process and learning outcomes.

During Cycle I, several students had not yet achieved mastery because they were still adapting to the newly implemented instructional model. Some students remained passive during group discussions and were not accustomed to expressing their opinions or collaborating with peers to complete learning tasks. In Cycle II, however, the teacher introduced several improvements, including more intensive guidance, a greater variety of learning activities, and stronger encouragement for students to seek information and participate actively in discussions. These improvements increased student participation and reduced the number of students who failed to achieve mastery.

The success of the PBL model in this study highlights the importance of selecting appropriate instructional models to improve the quality of Islamic Religious Education. Active and contextual learning approaches can help students develop a deeper understanding of instructional content while enhancing their learning skills (Parhan et al., 2024). The selection of appropriate teaching methods, strategies, and instructional models is a crucial component of educational innovation aimed at achieving learning objectives (Adnan, 2017). In this study, implementing PBL not only improved students' academic achievement but also enhanced their motivation, collaboration, self-confidence, and overall engagement in the learning process.

The findings demonstrate that implementing Problem-Based Learning positively contributes to the teaching and learning of reading and writing skills in Tiin at the elementary school level. The model promotes a more active, contextual, and student-centred learning environment and may therefore serve as an effective alternative instructional strategy in Islamic Religious Education for improving elementary students' Qur'anic literacy skills.

4. IMPLICATIONS AND CONTRIBUTIONS

4.1 Research Implications

This study suggests that implementing the Problem-Based Learning (PBL) model can be an effective instructional strategy for improving students' ability to read and write the Qur'an in Islamic Religious Education at the elementary school level. Through problem-based learning activities, students become more active, motivated, and directly engaged in the learning process, resulting in a deeper understanding of the instructional material. In addition, the study offers practical implications for teachers seeking to develop more contextually rich, collaborative, and student-centred learning environments. Implementing the PBL model can help teachers create more interactive classroom experiences, thereby enhancing both the quality of instruction and student learning outcomes in Islamic Religious Education.

4.1 Research Contributions

The contribution of this study lies in expanding the body of knowledge on Islamic Religious Education, particularly in applying the Problem-Based Learning model to improve elementary school students' ability to read and write Surah At-Tiin. The findings reinforce prior evidence on PBL's effectiveness in improving learning outcomes while extending its application to Qur'anic literacy instruction at the elementary school level. In addition to making a theoretical contribution to the development of student-centred learning approaches, this study offers practical

recommendations for using PBL as an innovative, engaging, and meaningful instructional strategy in Islamic Religious Education.

5. LIMITATIONS AND FUTURE RESEARCH DIRECTION

5.1 Research Limitations

This study has several limitations. First, the research was conducted in a single classroom with a limited number of participants; therefore, the findings cannot be generalised to all elementary school students. Second, the study focused exclusively on students' ability to read and write Surah At-Tiin and did not encompass broader Qur'anic reading and writing competencies. Third, the relatively short study duration limited the opportunity to observe students' development over an extended period. Furthermore, differences in students' initial abilities posed challenges during the implementation of the Problem-Based Learning model, as students demonstrated varying levels of understanding and participation.

5.1 Recommendation for Future Research Directions

Based on these limitations, future studies are recommended to involve larger sample sizes and be conducted across different educational levels and institutions to enhance the generalizability of the findings. Future research may also explore the implementation of Problem-Based Learning in teaching other Qur'anic chapters and the integration of the model with innovative technology-based learning media. In addition, further studies are encouraged to examine the impact of PBL on other educational outcomes, such as learning motivation, critical thinking, collaborative skills, and Qur'anic literacy, in a more comprehensive manner.

6. CONCLUSION

Based on the findings of this study, the implementation of the Problem-Based Learning (PBL) model effectively improved fourth-grade students at SDIT Al-Ihsan Bengkulu Tengah's ability to read and write Surah At-Tiin. The improvement was evidenced by the increasing number of students who achieved mastery of learning throughout the action research cycles. The PBL model provided students with opportunities to actively participate in the learning process through discussions, collaborative group work, and problem-solving activities, making learning more meaningful and student-centred.

The implementation of Problem-Based Learning also had a positive impact on students' learning activities and motivation. Students became more actively engaged in classroom instruction, more confident in expressing their opinions, and more capable of collaborating with peers to understand the learning material. In addition to improving students' ability to read and write Surah At-Tiin, the PBL model also contributed to the development of critical thinking, communication, and collaboration skills within the context of Islamic Religious Education.

The findings demonstrate that Problem-Based Learning can serve as an effective instructional strategy for enhancing the quality of Islamic Religious Education at the elementary school level. Active, contextual, and problem-based learning approaches can create a more interactive and enjoyable learning environment for students. Therefore, the implementation of PBL should continue to be developed in Qur'anic instruction and other areas of Islamic Religious Education to improve students' learning outcomes and skills further.

Acknowledgments

The author would like to express sincere gratitude to SDIT Al-Ihsan Bengkulu Tengah for granting permission, support, and opportunities to conduct this research. Appreciation is also extended to the teachers, students, and all individuals who contributed to and supported the research process, enabling the successful completion of this study.

Author Contribution Statement

The author declares that all stages of the research process, including research design, data collection, data analysis, and manuscript preparation, were conducted solely by the author. All data presented in this article are derived from the author's original field research, and the author takes full responsibility for the content and originality of the manuscript.

Declaration of Generative AI (GenAI) Usage in Scientific Writing

The author declares that Artificial Intelligence (AI) technologies were used solely as supportive tools for language refinement, grammatical editing, and academic writing improvement. All research data, analyses, interpretations, and scholarly content presented in this article are entirely the result of the author's own research and intellectual work. The author assumes full responsibility for the validity and integrity of the manuscript. All instances of Generative AI usage in this article were conducted by the authors in accordance with the [JIPPG GenAI Tool Usage Policy](#), with the authors assuming full responsibility for the originality, accuracy, and integrity of the work.

Conflict of Interest Statement

The author declares that there are no conflicts of interest related to this research, authorship, or publication of this article, whether personal, professional, or financial in nature.

REFERENCES

- Abri, M. H. A., Amri, A. Y. A., & Elhaj, A. (2024). Enhancing Student Learning Experiences Through Integrated Constructivist Pedagogical Models. *European Journal of Contemporary Education and E-Learning*, 2(1), 130–149. [https://doi.org/10.59324/ejceel.2024.2\(1\).11](https://doi.org/10.59324/ejceel.2024.2(1).11)
- Adnan, M. (2017). Urgensi penerapan metode paikem bagi guru dalam meningkatkan mutu pembelajaran pendidikan agama islam. *CENDEKIA: Jurnal Studi Keislaman*, 3(1), 133-150. <https://doi.org/10.37348/cendekia.v3i1.39>
- Afandi, M. (2014). Pentingnya penelitian tindakan kelas bagi guru dalam pembelajaran di sekolah dasar. *Jurnal ilmiah pendidikan dasar*, 1(1), 1-19. <http://dx.doi.org/10.30659/pendas.1.1.1-19>
- Afrianingrum, S. D., & Rahayu, T. S. (2021). Meta Analisis Efektivitas Model Pembelajaran Problem Based Learning dan Problem Posing Terhadap Kemampuan Pemecahan Masalah dalam Pembelajaran Matematika SD. *Thinking Skills and Creativity Journal*, 4(1), 1–9. <https://doi.org/10.23887/tscj.v4i1.33503>
- Ali, S. S. (2019). Problem Based Learning: A Student-Centered Approach. *English Language Teaching*, 12(5), 73–73. <https://doi.org/10.5539/elt.v12n5p73>
- Azura, R. M., & Selaras, G. H. (2023). Penerapan Problem Based Learning dalam Meningkatkan Hasil Belajar dan Cara Berpikir Kritis Siswa SMA pada Pelajaran Biologi. *ANWARUL*, 3(4), 697–709. <https://doi.org/10.58578/anwarul.v3i4.1305>
- Burhana, A., Octavianti, D., Anggraheni, L. M. R., Ashariyanti, N. D., & Mardani, P. A. A. (2021). Model Problem Based Learning (PBL) Untuk Meningkatkan Cara Berpikir Kritis Siswa di Sekolah Dasar. *SNHRP*, 302-307. <https://snhrp.unipasby.ac.id/prosiding/index.php/snhrp/article/view/207>
- Cahyanti, A. E. (2015). Pengembangan Perangkat Pembelajaran Matematika dengan Pendekatan Problem Based Learning untuk Meningkatkan Kemampuan Higher Order Thinking. In *Seminar Nasional Matematika Dan Pendidikan Matematika Uny* (pp. 83-92). <http://seminar.uny.ac.id/semnasmatematika/>
- Darwan, D. (2022). Upaya Meningkatkan Hasil Belajar Siswa Kelas X Ipa 4 Sman 1 Liwa Melalui Model Problem Based Learning Materi Menjauhi Pergaulan Bebas Dan Perbuatan Zina. *Prosiding Pendidikan Profesi Guru Agama Islam (PPGAI)*, 2(2). <https://e-proceedings.iain-palangkaraya.ac.id/index.php/PPGAI/issue/view/16>
- Fristadi, R., & Bharata, H. (2015). Meningkatkan kemampuan berpikir kritis siswa dengan problem based learning. *Seminar Nasional Matematika Dan Pendidikan Matematika UNY* (pp. 597-602). <http://seminar.uny.ac.id/semnasmatematika/>
- Hamidah, I., & Citra, S. Y. (2021). Efektivitas Model Pembelajaran Project Based Learning (PjBL) terhadap Minat dan Hasil Belajar Siswa. *BIOEDUSAINS Jurnal Pendidikan Biologi Dan Sains*, 4(2), 307–314. <https://doi.org/10.31539/bioedusains.v4i2.2870>
- Hotimah, H. (2020). Penerapan Metode Pembelajaran Problem Based Learning Dalam Meningkatkan Kemampuan Bercerita Pada Siswa Sekolah Dasar. *Jurnal Edukasi*, 7(2), 5-11. <https://doi.org/10.19184/jukasi.v7i2.21599>
- Keiler, L. S. (2018). Teachers' roles and identities in student-centered classrooms. *International Journal of STEM Education*, 5(1). <https://doi.org/10.1186/s40594-018-0131-6>
- Marni, M., & Pasaribu, L. H. (2021). Peningkatan Kemampuan Berpikir Kreatif dan Kemandirian Siswa Melalui Pembelajaran Matematika Realistik. *Jurnal Cendekia: Jurnal Pendidikan Matematika*, 5(2), 1902-1910. <https://doi.org/10.31004/cendekia.v5i2.621>

- Muhsam, J., & Muh, A. S. (2022). Penerapan model pembelajaran problem based learning (PBL) dalam meningkatkan hasil belajar IPA siswa kelas IV Sekolah Dasar. *Jurnal Inovasi Pendidikan dan Teknologi Informasi (JIPTI)*, 3(1), 11-17. <https://doi.org/10.52060/pti.v3i01.713>
- Parhan, M., Syahidin, S., Somad, M. A., Abdulah, M., & Nugraha, R. H. (2024). Developing a Contextual Learning Model in Islamic Education to Improve Applicable Knowledge and Foster Knowledge-Based Virtues. *Jurnal Pendidikan Islam*, 10(1), 75–86. <https://doi.org/10.15575/jpi.v10i1.35205>
- Pramesti, S. L. D., & Rini, J. (2019). Analisis Kemampuan Pemecahan Masalah Peserta didik Berdasarkan Strategi Polya pada Model Pembelajaran Problem Based Learning Berbasis Hands On Activity. *Journal of Medives Journal of Mathematics Education IKIP Veteran Semarang*, 3(2), 223–223. <https://doi.org/10.31331/medivesveteran.v3i2.768>
- Sanjani, M. A. (2020). Tugas dan peranan guru dalam proses peningkatan belajar mengajar. *Serunai: Jurnal Ilmiah Ilmu Pendidikan*, 6(1), 35-42. <https://doi.org/10.37755/sjip.v6i1.287>
- Sari, D. P., Nurochmah, N., Haryadi, H., & Syaiturjim, S. (2016). Meningkatkan kemampuan pemahaman matematis melalui pendekatan pembelajaran student teams achivement division. *Jurnal Riset Pendidikan Matematika*, 3(1), 16–22. <https://doi.org/10.21831/jrpm.v3i1.7547>
- Sugrah, N. (2020). Implementasi teori belajar konstruktivisme dalam pembelajaran sains. *HUMANIKA*, 19(2), 121–138. <https://doi.org/10.21831/hum.v19i2.29274>
- Sunardi, D., & Nelfiyanti, N. (2015). Penerapan Metode Problem Based Learning Dalam Matakuliah Al-Islam Ii Di Fakultas Teknik Universitas Muhammadiyah Jakarta. *JISI: Jurnal Integrasi Sistem Industri*, 2(2), 1-8. <https://doi.org/10.24853/jisi.2.2.1-8>
- Susanto, S. (2020). Efektifitas small group discussion dengan model problem based learning dalam pembelajaran di masa pandemi Covid-19. *Jurnal Pendidikan Modern*, 6(1), 55-60. <https://doi.org/10.37471/jpm.v6i1.125>
- Uno, H. B., & Mohamad, N. (2022). *Belajar dengan pendekatan PAILKEM: pembelajaran aktif, inovatif, lingkungan, kreatif, efektif, menarik*. Bumi Aksara.
- Utomo, P., Asvio, N., & Prayogi, F. (2024). Metode Penelitian Tindakan Kelas (PTK): Panduan Praktis untuk Guru dan Mahasiswa di Institusi Pendidikan. *Pubmedia Jurnal Penelitian Tindakan Kelas Indonesia*, 1(4), 19. <https://doi.org/10.47134/ptk.v1i4.821>
- Wahyuningtyas, D. (2013). *Meningkatkan Prestasi Belajar Matematika Pada Siswa Kelas Iii Sdn 01 Alastuwo Pokok Bahasan Penjumlahan Dan Pengurangan Bentul Soal Cerita Melalui Metode Polya Tahun Pelajaran 2012 201* (Doctoral dissertation, Universitas Muhammadiyah Surakarta). <http://eprints.ums.ac.id/id/eprint/26709>
- Wijaya, E. Y., Sudjimat, D. A., & Nyoto, A. (2016). Transformasi pendidikan abad 21 sebagai tuntutan pengembangan sumber daya manusia di era global. In *Prosiding Seminar Nasional Pendidikan Matematika* (Vol. 1, No. 26, pp. 263-278). <https://core.ac.uk/download/pdf/297841821.pdf>
- Wijnia, L., Noordzij, G., Arends, L. R., Rikers, R. M. J. P., & Loyens, S. M. M. (2024). The Effects of Problem-Based, Project-Based, and Case-Based Learning on Students' Motivation: a Meta-Analysis. *Educational Psychology Review*, 36(1). <https://doi.org/10.1007/s10648-024-09864-3>
- Zhang, C. (2023). Influences of Problem-Based Online Learning on the Learning Outcomes of Learners. *International Journal of Emerging Technologies in Learning (IJET)*, 18(1), 152–163. <https://doi.org/10.3991/ijet.v18i01.36705>
- Zulkarnaen, Z., Wardhani, J. D., Katoningsih, S., & Asmawulan, T. (2023). Manfaat model Pembelajaran Project Based Learning untuk Pendidikan Anak Usia Dini dan Implementasinya dalam Kurikulum Merdeka. *JURNAL BUNGA RAMPAI USIA EMAS*, 9(2), 394–394. <https://doi.org/10.24114/jbrue.v9i2.52951>

Article Information

Copyright holder:

© Aristianah, A., & Ediansyah, E. (2026)

First Publication Right:

Jurnal Indonesia Pendidikan Profesi Guru

Article info:

DOI: <https://doi.org/10.64420/jippg.v3i2.532>

Word Count: 4305

Disclaimer/Publisher's Note:

The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of AEDUCIA and/or the editor(s). AEDUCIA and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.

This Article is licensed under: **CC-BY-SA 4.0**