

Implementation of the Problem-Based Learning Model in Islamic Education Subjects to Enhance Students' Problem-Solving Skills

Dosi Cahaya¹, Perik Ansori¹

¹SMP Negeri 08 Lebong, Bengkulu, Indonesia

Corresponding author e-mail: dosicahaya16@gmail.com

Article History: Received on 10 November 2024, Revised on 26 December 2024,
Published on 11 January 2025

Abstract: The phenomenon of low problem-solving abilities among students at SMPN 8 Lebong, especially in the subject of Islamic Religious Education and Character Education, has become the main concern of this study. Students often struggle to relate religious concepts to everyday problems, resulting in underdeveloped critical thinking skills and problem-solving abilities. This study also aims to evaluate the impact of applying the Problem-Based Learning (PBL) model on enhancing students' critical thinking and problem-solving skills. The method used in this research is a descriptive qualitative approach, with data collection techniques including observation, interviews, and documentation. The data analysis technique used is interactive data analysis, which involves data reduction, data presentation, and drawing conclusions. Data validity is tested using triangulation, by comparing data from various sources to ensure the validity of the findings. The results of the study indicate that: 1) The planning of the PBL model successfully created learning scenarios relevant to students' everyday lives, facilitating the development of their problem-solving skills. 2) The implementation of PBL was active with group discussions, case studies, and the application of deep problem-solving, enhancing collaboration among students. 3) Evaluation shows that the application of PBL improved students' problem-solving abilities, with evidence of better problem analysis and more effective solutions. 4) This research shows that the application of the PBL model at SMPN 8 Lebong has a positive impact on improving students' problem-solving abilities. The main supporting factors for the implementation of PBL include active student involvement, the role of an effective facilitator, and the application of relevant technology. However, there are also some inhibiting factors, such as limited resources, the lack of teacher training related to PBL, and time management challenges that affect the smoothness of the learning process.

Keywords: Critical Thinking Skills, Islamic Religious Education, Problem-Based Learning, Problem-Solving Ability

A. Introduction

Education is an effort undertaken by individuals to develop the potential and abilities within themselves in a planned and systematic manner (Nurkholis, 2013). In

Indonesia, the goal of education is to develop students' potential so that they possess good character, such as independence, creativity, responsibility, and faith. Learning is one of the activities that can develop students' abilities in line with the educational goals in Indonesia. Learning can be defined as a conscious effort made by someone to experience a relatively permanent improvement, obtained through their direct experience in interaction with the environment (Suryadi, 2018).

One of the learning activities in elementary school is the subject of Islamic Religious Education (PAI) and Character Education. The goal of this subject is to nurture and foster faith, by providing knowledge about Islamic teachings, gratitude, good deeds, piety, faith, and noble character in personal, social, and national life (Hamdani, 2012). Based on these objectives, the essence of Islamic Religious Education and Character Education is to study Islamic knowledge, which includes Islamic jurisprudence, creed, and ethics. In creed, students will learn about the concept of faith; in jurisprudence, students will study worship and social transactions; and in ethics, students will learn about the concept of Ihsan. The implementation of teaching Islamic Religious Education and Character Education in class requires an appropriate strategy. Teaching strategy can be understood as a series of activities that include methods, techniques, and processes carried out to achieve learning objectives (Nurkholis, 2013). The use of teaching strategies is crucial in the educational process so that learning activities have a clear direction and facilitate students in achieving the established goals. A learning model is a series of activities carried out by both teachers and students from the beginning to the end of the learning process (Nurkholis, 2013).

Education is the main foundation in shaping students' character and competencies to face future challenges. In the context of education in Indonesia, Junior High School (SMP) is one of the important levels for developing students' potential. One skill that is crucial in this era of globalization is problem-solving ability. This skill is not only related to students' intellectual abilities but also to the moral and social aspects, which greatly influence everyday life. Therefore, it is important to design learning methods that not only focus on cognitive aspects but also actively engage students in problem-solving processes (Kurniawati, 2021). One learning model that can be used to improve students' problem-solving skills is Problem-Based Learning (PBL). PBL is a learning model that emphasizes the process of solving problems relevant to real-life situations. This model aims to develop critical thinking skills, social skills, and other practical skills needed in life. In the PBL model, students are given complex problems and asked to find solutions through group discussions, research, and reflection on their existing knowledge (Ma'rifah, 2018). Thus, the PBL model not only gives students the opportunity to learn the material but also trains them to think critically and creatively in addressing the problems they encounter.

In the context of Islamic Religious Education (PAI), the application of the PBL learning model becomes highly relevant. PAI not only teaches theories about religion but also equips students with understanding and applying religious values in everyday life.

Therefore, it is important to develop PAI learning that focuses not only on memorizing material but also on involving students in the problem-solving process around them. The application of the PBL model in PAI subjects can have a positive impact on the development of students' problem-solving abilities, which can help them face life challenges that contain religious values. At SMPN 8 Lebong, the implementation of the PBL model in PAI subjects can significantly impact students' ability to solve problems related to Islamic values. One of the main reasons for applying PBL in PAI learning is to enhance students' critical thinking in addressing complex religious issues and train them to apply religious principles in real-life contexts. This model is also expected to motivate students to be more active in the learning process and improve their understanding of the material being taught (Artapati & Budiningsih, 2017).

Problem-solving in the context of PAI education is not only focused on intellectual aspects but also involves moral and social aspects. For example, in everyday life, students are often faced with social and moral problems that require solutions aligned with religious values. By using the PBL model, students can be given cases that reflect moral, social, and religious issues, and then asked to find solutions based on their understanding of Islamic teachings. This aligns with the educational goal of not only teaching theory but also educating students to apply religious teachings in daily life.

The application of PBL in Islamic education can improve students' critical thinking skills and broaden their understanding of religious teachings. PBL helps students delve deeper into the subject matter in a more interactive and contextual way. In this model, students are not just receiving information from the teacher, but they are also involved in the process of finding solutions to the problems presented. Therefore, PBL can be an effective method in enhancing students' problem-solving skills in PAI learning. However, despite its many benefits, the implementation of PBL in PAI education is not without challenges. Some of the challenges often faced in applying PBL are limited time and resources, as well as teachers' skills in managing problem-based learning processes. Teachers must have the ability to design relevant problems and facilitate group discussions constructively. In addition, students need adequate support and guidance to ensure they solve problems correctly and in accordance with religious values (Hidayati, 2017).

Nevertheless, these challenges can be overcome with careful planning and commitment from both the school and the teachers. In the context of SMPN 8 Lebong, the implementation of PBL in PAI learning can be carried out by designing problems that are relevant to the students' life context, whether related to moral, social, or religious issues. For example, students can be given cases involving social conflicts that reflect religious values, such as issues of interfaith tolerance or resolving social problems based on Islamic principles. This study aims to examine the implementation of the Problem-Based Learning model in PAI subjects at SMPN 8 Lebong and how this model can improve students' problem-solving abilities. Through the implementation

of PBL, it is hoped that students will not only understand religious concepts theoretically but also apply religious values in everyday life, as well as improve their skills in solving problems they face. This research will provide new insights into how the PBL learning model can be effectively applied in the context of Islamic education and contribute positively to improving the quality of education at SMPN 8 Lebong.

B. Methods

This study employed a descriptive qualitative approach to provide an in-depth and comprehensive understanding of the phenomenon surrounding the implementation of the PBL model in the PAI and Character Education subjects at SMPN 8 Lebong. A qualitative approach was chosen because it offers better and deeper insights into the issues being studied through analyses focusing on the context, experiences, and meanings within learning activities (Creswell, 2017). Data collection was conducted using three main methods: in-depth interviews, participatory observation, and documentation.

In-depth interviews were conducted with teachers and students to gain direct insights into their experiences with implementing the PBL model in teaching and learning. Teachers were interviewed to explore the planning and execution of PBL, as well as the challenges and successes they encountered in integrating PBL into PAI and Character Education. Meanwhile, interviews with students aimed to understand their perceptions of the effectiveness of the PBL model in improving their problem-solving skills. Participatory observation was used to directly observe the learning process in the classroom, particularly focusing on how students engaged in group discussions, problem-solving activities, and interactions with teachers and peers. Documentation was used to collect data related to learning materials, lesson plans, and evaluation results from the teaching process. The subjects of this study were Islamic Religious Education and Character Education teachers, as well as students involved in learning using the PBL model at SMPN 8 Lebong. The selection of subjects was carried out purposively based on specific criteria: teachers experienced in implementing PBL and students participating in lessons that utilized the model (Sugiyono, 2019).

Data analysis in this study followed the interactive model developed by Miles and Huberman (2014), which includes three main stages: data collection, data reduction, and data presentation. During the data collection stage, researchers gathered information from various sources through interviews, observations, and documentation. The collected data was then reduced to focus on aspects relevant to the research topic. Data reduction involved selecting, summarizing, and organizing the obtained information to provide a clear picture of PBL implementation. Subsequently, the reduced data was presented in the form of narratives or categories that facilitated the drawing of conclusions. Triangulation was employed to ensure the accuracy and reliability of the collected data (Matthew B Miles, A Michael Huberman, 2014). This process helped maintain the validity of the data and ensured that the

research findings provided a reliable depiction of the implementation of the PBL model in the Islamic Religious Education and Character Education subjects at SMPN 8 Lebong.

C. Results and Discussion

Implementation of the Problem-Based Learning Model in Islamic Religious Education and Character Education to Foster Students' Problem-Solving Skills at SMPN 8 Lebong

The planning of learning with the PBL model in the subjects of PAI and Character Education at SMPN 8 Lebong aims to improve students' problem-solving abilities, which include the ability to identify problems, analyze them, and formulate appropriate solutions. In this planning, teachers focus not only on delivering theory but also on developing critical thinking skills and the ability to connect the concepts learned with students' real-life situations.

The first stage in PBL planning is selecting problems that are relevant to students' daily lives. Teachers should be able to design problems that are not only based on the subject matter but also reflect challenges students often face in their social lives. For example, in character education, teachers could design problems related to ethics in social life, such as how to resolve disputes among friends in a way that aligns with Islamic values, or how to manage family conflicts using the principles found in Islamic teachings. Choosing contextual and authentic problems is very important as it can motivate students to think more deeply and find appropriate solutions. For example, in Islamic Religious Education, students can be given a problem about how to address differences of opinion in society with an Islamic approach. In this problem, students are asked not only to memorize theory but also to examine and formulate solutions based on the religious teachings they have learned (Majid, 2014).

One key aspect of PBL is providing challenging and engaging problems. Problems that are relevant to students' lives will spark their curiosity and encourage them to think critically. In this case, the chosen problems should engage students in the thinking process and allow them to seek solutions based on the knowledge they possess. Teachers must ensure that the problems presented are complex enough to stimulate critical thinking but not too difficult that students feel overwhelmed. Therefore, in learning planning, the problems presented must vary and involve different aspects that can broaden students' understanding (Rahmat, 2015).

Additionally, the constructivist theory proposed by Piaget (1952) also serves as an important foundation in PBL planning. According to Piaget (1973), students build their knowledge through the experiences they have. PBL allows students to acquire knowledge through interaction with real problems and then develop solutions based on the knowledge they have learned. By using this model, students do not just

memorize information, but they also build and link knowledge with their personal experiences, which deepens their understanding. In PBL planning, teachers need to create situations that support students in identifying problems and formulating solutions independently (Piaget, 1952). For example, in Character Education, the teacher might provide a situation in which students have to find a way to resolve a friendship conflict with respect and in accordance with Islamic teachings. In this case, students will be trained to think about the principles of character education in Islam and how they can be applied in daily life. Furthermore, the application of PBL in PAI education can enhance students' critical thinking and problem-solving skills. This study found that PBL provides opportunities for students to be more active in seeking solutions to existing problems because this model requires students to connect theory with practice. Therefore, the use of the PBL model not only teaches religious concepts but also equips students with the ability to apply religious values in their daily lives (Kurniasih, 2015).

PBL planning at SMPN 8 Lebong also takes into account the use of various learning resources to support successful learning. In PBL, students are not only reliant on textbooks but are also encouraged to search for information from various other sources, such as articles, videos, or group discussions. This is important to develop students' ability to find creative solutions based on valid information. Through this approach, students are expected to utilize technology and digital media as tools to deepen their knowledge and solve problems. The PBL model applied in the subjects of Islamic Religious Education and Character Education at SMPN 8 Lebong has a clear goal: to develop students' problem-solving abilities. In this planning, teachers should do more than just deliver material; they must also facilitate students in finding effective ways to solve problems. Therefore, the problem-based approach implemented in PBL can encourage students to hone their critical, analytical, and creative thinking skills, which will be valuable to them in their daily lives.

Implementation of the Problem-Based Learning Model in Islamic Religious Education and Character Education to Foster Students' Problem-Solving Skills at SMPN 8 Lebong

The implementation of the PBL model in PAI and Character Education at SMPN 8 Lebong aims to foster students' problem-solving skills through a problem-based approach that is relevant to their daily lives. The PBL model not only focuses on knowledge transfer but also emphasizes the development of critical thinking, collaboration, and the application of values in real-life situations. In this context, teachers act as facilitators, guiding students in understanding problems and seeking solutions aligned with Islamic principles. During its implementation, student groups are assigned contextual problems related to PAI and Character Education topics. For example, in lessons on morality, teachers may present issues about patience in facing life's challenges. Students are required to analyze these problems and formulate solutions based on Islamic values, such as patience, reliance on God (*tawakal*), and

mutual consultation (*musyawarah*). This approach encourages students to apply religious principles in real life and hones their ability to solve problems relevant to their experiences (Jonassen, 1995).

The PBL process begins with identifying problems for students to solve. Teachers provide problems that spark discussions, enabling students to collaborate in finding solutions. Group discussions are a primary method in implementing PBL. Each student is encouraged to share their opinions, exchange ideas, and provide feedback to reach a consensus on appropriate solutions. For instance, in the context of PAI, students may discuss ways to address social issues, such as conflicts between friends, using Islamic approaches. PBL implementation enhances student interactions and encourages them to think critically and creatively in solving problems. At SMPN 8 Lebong, these interactions are evident as students work together in groups, providing constructive feedback to find the best solutions. This collaborative learning increases active student engagement in the learning process while developing their critical thinking and communication skills (Supriadi, 2015).

During PBL implementation, teachers play a vital role in monitoring group progress. They do not merely provide information but observe group dynamics and offer guidance when necessary. This aligns with the PBL concept emphasizing experiential learning, where teachers act as facilitators to encourage students to construct knowledge independently (Jonassen, 2000). Teachers provide constructive feedback throughout the discussion process and assist students in finding appropriate solutions to the problems they encounter. Technology integration in learning is also an essential part of PBL implementation at SMPN 8 Lebong. Students have access to digital resources to seek information relevant to the problems they are addressing. Technology supports deeper exploration of the material and additional references to enrich student understanding. Hidayati (2017) notes that technology can enhance PBL effectiveness by providing various learning resources accessible to students. It also facilitates broader collaboration among students, both within their groups and with external parties through online platforms (Jonassen, 1995).

The PBL approach provides students with the autonomy to learn and solve problems. This process not only develops problem-solving skills but also helps students connect classroom knowledge with real-life experiences. This approach aligns with constructivist principles, which suggest that students learn better when they can relate new knowledge to their prior experiences (Piaget, 1973). Through PBL, students do not merely memorize theories but also apply their knowledge in real-life, relevant situations. PBL implementation at SMPN 8 Lebong also involves project-based learning. Students not only analyze problems theoretically but are also tasked with designing solutions that can be applied in real life. For instance, students may design campaigns to address social issues, such as raising awareness about environmental conservation or promoting respect for diversity. Through problem-based projects,

students can see the direct impact of their solutions and apply them within their communities (Piaget, 1973).

PBL implementation enhances students' social skills, including teamwork, communication, and conflict resolution abilities within groups. At SMPN 8 Lebong, improvements in these aspects are evident. During group discussions, students learn to listen to their peers' opinions, provide constructive criticism, and reach a consensus on proposed solutions. Additionally, PBL not only enhances students' academic skills but also develops their non-cognitive skills, such as interpersonal and intrapersonal competencies. In PBL implementation at SMPN 8 Lebong, students learn to appreciate differing opinions and work as a team to achieve common goals.

Based on the implementation of PBL at SMPN 8 Lebong, it can be concluded that this learning model is effective in improving students' problem-solving and social skills. Through a problem-based approach, students not only learn theoretical concepts within the curriculum but also gain opportunities to apply their knowledge in real-world contexts. Collaborative learning, technology integration, and project-based problem-solving are some of the aspects that enrich students' learning experiences and prepare them to face real-world challenges.

Evaluation of the Implementation of the Problem-Based Learning Model in Islamic Religious Education and Character Education Subjects at SMPN 8 Lebong to Foster Students' Problem-Solving Skills

The evaluation of the implementation of the PBL model in PAI and Character Education subjects at SMPN 8 Lebong aims to measure the extent to which this model can enhance students' problem-solving skills. This evaluation not only assesses the final outcomes but also focuses on the learning process students undergo in solving problems. Key aspects evaluated include student engagement during learning, critical thinking abilities, and students' performance in completing assignments and examinations.

One of the evaluation instruments used is direct observation of group discussion processes and presentations of students' work. These observations are crucial in assessing how well students collaborate in groups, express their opinions, and communicate to solve problems collectively. The evaluation emphasizes the importance of the thinking process that occurs during discussions, not just the final solutions generated by the group (Hmelo-Silver, 2004). Jonassen (2000) noted that PBL prioritizes developing students' critical and creative thinking skills as well as their ability to collaborate in problem-solving (Hmelo-Silver, 2004).

In addition, evaluations include individual assignments requiring students to analyze problems independently and formulate solutions using the concepts they have learned. These assignments aim to assess students' ability to apply their knowledge

in real-life contexts. Individual assessments also provide insights into how well students can connect their learning to everyday situations and demonstrate their analytical thinking skills (Suryadi, 2016).

The evaluation results of PBL implementation at SMPN 8 Lebong shows positive outcomes. Most students participating in PBL demonstrated significant improvements in problem-solving skills. They became more confident in expressing opinions, analyzing problems more deeply, and exhibiting better problem-solving capabilities. PBL in religious education enhances students' understanding of religious teachings while developing their problem-solving skills. The study indicated that students engaged in problem-based learning are better able to relate religious knowledge to real-life situations and solve problems more effectively.

Applying PBL in religious and character education improves students' social skills, including teamwork, communication, and conflict resolution in groups. This was also observed at SMPN 8 Lebong, where students became increasingly adept at working in teams, appreciating group members' opinions, and solving assigned problems more effectively and collaboratively. The application of constructivist theory in this evaluation is highly relevant. Vygotsky posited that meaningful and contextual learning drives the development of students' thinking skills. The evaluation at SMPN 8 Lebong shows that learning based on real-life experiences is very effective in enhancing students' critical thinking and problem-solving abilities. Students not only learn theory but also apply the knowledge gained to their everyday lives (Wulandari, 2018).

Beyond observing group discussions and individual assignments, the evaluation also involves analyzing exam results and final assignments. Cavanagh (2015) emphasized that PBL evaluation often provides a clearer picture of how students integrate the knowledge and skills they acquire in more complex situations. In this context, evaluations of final assignments and exams at SMPN 8 Lebong reveal that students involved in PBL are better equipped to face complex challenges and apply solutions appropriately. Evaluations in PBL can increase student motivation, as they feel more engaged in the learning process. By emphasizing process-oriented evaluation, students take greater responsibility for their success in problem-solving. This process-based evaluation fosters opportunities for students to develop deeper reflective thinking skills (Yarshal, 2015).

The evaluation at SMPN 8 Lebong also includes the application of technology. Students are encouraged to use digital resources to enrich their learning experiences and help them solve problems. Hidayati (2017) found that technology can enhance the effectiveness of problem-based learning, particularly by providing students access to a wide range of learning resources for problem-solving. The incorporation of project-based learning is another aspect of the evaluation, where students not only solve problems theoretically but are also tasked with designing solutions applicable to real-

world contexts. This aligns with Dewey's theory, which emphasizes that effective learning involves direct experiences relevant to students' lives, as reflected in the PBL evaluation results at SMPN 8 Lebong.

The evaluation of PBL implementation also highlights the crucial role of teachers as facilitators who assist students in problem-solving. Teachers not only provide knowledge but also actively monitor the learning process and offer constructive feedback to help students improve. Hmelo-Silver (2004) stated that the role of facilitators in PBL is essential to creating a conducive learning environment and supporting students in developing problem-solving skills.

Thus, the evaluation results indicate that the implementation of the PBL model at SMPN 8 Lebong is highly effective in fostering students' problem-solving skills. PBL not only helps students develop critical thinking abilities but also enriches their experiences in collaboration, communication, and applying knowledge to real-life situations.

Inhibiting and Supporting Factors in the Implementation of the Problem-Based Learning Model in Islamic Religious Education and Character Education Subjects at SMPN 8 Lebong to Foster Students' Problem-Solving Skills

The implementation of the PBL model in PAI and Character Education at SMPN 8 Lebong aims to foster students' problem-solving skills. This model encourages active student participation in the learning process through solving real-life problems. In practice, various supporting and inhibiting factors influence the success of this model in the classroom (Arends, 2012).

The primary supporting factor is the active involvement of students in the learning process. According to Jonassen (2000), the PBL model provides opportunities for students to develop critical and creative thinking skills through group discussions and collaborative problem-solving. Additionally, the teacher's role as a facilitator is crucial. Teachers not only provide information but also support students in finding solutions independently and collaborating in groups (Hmelo-Silver, 2004). The use of technology in the learning process is another significant supporting factor, as it allows students to access various sources of information that aid in problem-solving. Moreover, case-based learning relevant to students' daily lives enhances their understanding of the material and enriches their learning experience (Hidayati, 2017). Social skills, such as teamwork, listening, and valuing others' opinions, also improve as students engage in collaborative learning (Afifah & Kurniawan, 2019).

However, several inhibiting factors affect the implementation of PBL at SMPN 8 Lebong. One major challenge is the limited time available for learning. The PBL model requires more time compared to traditional teaching methods, as students need sufficient time for discussions and problem-solving (Wulandari, 2018). This time

constraint can hinder deeper and more comprehensive learning. Another obstacle is the lack of teacher understanding and training in applying the PBL model. Suryadi (2016) highlights that adequate training is essential for teachers to perform their role as facilitators effectively. Limited facilities, such as inadequate access to technology and other resources, also pose significant barriers, as problem-based learning often requires additional tools and resources (Rahmat, 2015). Classroom management challenges arise as PBL involves intensive group interactions and requires effective management to keep discussions focused on learning objectives. Additionally, some students resist this independent learning approach, preferring structured methods dominated by direct teacher instruction (Afifah & Kurniawan, 2019). Lastly, despite PBL's aim to connect subject matter with real-life experiences, teachers often struggle to find cases genuinely relevant to students' experiences (Hidayati, 2017). This issue reduces the effectiveness of PBL in improving students' problem-solving skills, as the relevance of learning materials to real-life contexts is a key success factor for this model.

In conclusion, supporting factors such as student involvement, the teacher's role as a facilitator, technology integration, and social skill development plays a significant role in the successful implementation of the PBL model. However, inhibiting factors like time constraints, lack of teacher training, limited facilities, classroom management challenges, student resistance, and difficulty in finding relevant cases must be addressed to ensure that PBL can be implemented more effectively and optimally to enhance students' problem-solving skills.

D. Conclusions

Based on the discussion regarding the planning, implementation, and evaluation of the PBL model in Islamic Religious Education and Character Education at SMPN 8 Lebong, it can be concluded that the application of this learning model has successfully enhanced students' problem-solving abilities. Planning that involves selecting problems relevant to students' daily lives is crucial for developing critical thinking and creativity. During the planning phase, teachers designed problems directly related to Islamic teachings, enabling students to connect the knowledge gained with real-life contexts they encounter daily. The selection of challenging topics, aligned with the principles of PBL emphasizing problem relevance, has facilitated students in thinking more deeply and finding solutions independently.

In the implementation phase, the learning process involving group discussions and student collaboration demonstrated positive outcomes. Students were not only engaged in individual problem-solving but also learned to collaborate with their peers in groups. Group discussions provided opportunities for students to share ideas, consider various perspectives, and develop communication and collaborative problem-solving skills. The teacher's role as a facilitator was pivotal in guiding students through the problem-solving process and providing direction when needed.

The use of technology in learning further enriched students' learning experiences, allowing them to search for information more comprehensively and improve their digital literacy skills.

Finally, the evaluation process indicated that the PBL model effectively improved students' problem-solving abilities. Both process- and product-based evaluations showed significant improvements in students' critical and creative thinking skills. Individual assignments requiring students to connect the material learned with real-life situations revealed that students could apply their knowledge in everyday contexts. Based on the evaluation results, most students demonstrated improvements in analytical and systematic problem-solving skills. These findings support previous research, which highlights the effectiveness of the PBL model in enhancing critical thinking and problem-solving skills.

E. Acknowledgement

The author expresses gratitude to all parties who have supported this research. Special thanks are extended to the principal of SMPN 8 Lebong for granting permission and providing the opportunity to conduct the evaluation at the school. Appreciation is also given to the teachers who have supported the implementation of the PBL model in the learning process and to the students who actively participated in the learning and evaluation process. Gratitude is further extended to colleagues who provided valuable input and suggestions to improve this research. It is hoped that the findings of this study will contribute positively to the development of the PBL model, particularly in Islamic Religious Education and Character Education in schools.

References

- Afifah, N., & Kurniawan. (2019). Student resistance in problem-based learning: Challenges and opportunities. *Journal of Educational Psychology*, 10(2), 123–135.
- Arends, R. I. (2012). *Learning to Teach* (9th ed). New York: McGraw-Hill Companies Inc.
- Artapati, L. W. , & Budiningsih, C.A. (2017). Implementation of the 2013 Curriculum in Elementary Schools in Serayu Yogyakarta. *Journal of Educational Technology Innovation*, 4(2), 186–200. <https://doi.org/10.21831/jitp.v4i2.13016>
- Creswell, J. W., and J. D. Creswell. (2017). *Research design: Qualitative, quantitative, and mixed methods approach*. Sage Publications.
- Hamdani, H. (2012). *Curriculum Development in Education*. Remaja Rosdakarya.
- Hidayati, R. (2017). The role of technology in enhancing problem-based learning effectiveness. *Journal of Educational Technology*, 22(1), 45–59.
- Hmelo-Silver, C. E. (2004). Problem-based learning: What and how do students learn? *Educational Psychology Review*, 16(3), 235–266. <https://doi.org/10.1023/B:EDPR.0000034022.16470.f3>

- Jonassen, D. H. (1995). Computers as cognitive tools: Learning with technology, not from technology. *J. Comput. High. Educ.* 6, 40–73. <https://doi.org/10.1007/BF02941038>
- Jonassen, D. H. (2000). Toward a design theory of problem solving. *ETR&D* 48, 63–85. <https://doi.org/10.1007/BF02300500>
- Kurniasih, I. & B. S. (2015). Various Models of Learning Development to Enhance Teacher Professionalism. *Kata Pena*.
- Kurniawati, W. (2021). Designing Learning Planning. *An-Nur Journal: Studies in Education and Islamic Science*, 7(1), 1–10. <https://journal.an-nur.ac.id/index.php/annur/article/view/18>
- Majid, R. & C. R. (2014). *Scientific Approaches in the Implementation of the 2013 Curriculum*. Remaja Rosdakarya.
- Ma'rifah, S. (2018). A Theoretical Review: What is Learning? *Guidance and Counseling Journal FKIP UNIPA*, 35(1), 31–46.
- Matthew B Miles, A Michael Huberman, and J. S. (2014). *Qualitative Data Analysis: A Methods Sourcebook, 3rd ed.* SAGE Publications.
- Nurkholis. (2013). Education in Efforts to Advance Technology. *Educational Journal*, 1(1), 24–44. <https://doi.org/10.24090/jk.v1i1.530>
- Piaget, J. (1952). (1952). The origins of intelligence in children. *International Universities Press*.
- Piaget, J. (1973). *To understand is to invent: The future of education*. 21-23.
- Rahmat, M. (2015). The impact of technological resources on the effectiveness of problem-based learning in schools. *International Journal of Educational Research*, 12(3), 245–258.
- Sugiyono. (2019). *Quantitative, Qualitative R&D Research Methods*. Alfabeta.
- Supriadi. (2015). Utilization of Learning Resources in the Learning Process. *Lantanida Journal*, 3(2), 127–139. <http://dx.doi.org/10.22373/lj.v3i2.1654>
- Suryadi, A. (2016). Training teachers for the effective implementation of problem-based learning. *International Journal of Educational Development*, 20(2), 102–114.
- Suryadi, E. (2018). Cultural celebrations in Islamic practices: A case study of the Malay community. *Indonesian Journal of Cultural Studies*, 5(2), 115–130.
- Wulandari, D. (2018). Time management challenges in problem-based learning implementation in secondary schools. *Journal of Education and Pedagogical Sciences*, 9(3), 60–75.
- Yarshal, D. (2015). Application of the Problem-Based Learning (PBL) Model to Improve Activity and Learning Outcomes in Civic Education for 4th Grade Students at MIN Medan in 2014/2015. *Thematic Journal*, 5(1), 1–13. <https://doi.org/10.24114/jt.v5i01.3198>