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The Implementation of Problem Based Learning (PBL) in Encouraging Independent Learning in Grade 8 at SMP PAB 8 Sampali

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ABSTRACT

This study aims to explore how the implementation of Problem-Based Learning (PBL) supports independent learning among Grade 8 students at SMP PAB 8 Sampali. A descriptive qualitative approach was employed, with data collected through questionnaires distributed to 11 students using a Likert scale. The findings reveal that most PBL components were effectively implemented, including the use of real-world problems, the teacher's role as a facilitator, interdisciplinary learning, critical thinking, reflection, and the development of lifelong learning skills. However, elements that require greater student participation such as active problem-solving and choosing how to learn were found to be less developed. PBL was shown to enhance students' time management, responsibility, self-assessment, and curiosity. Despite this progress, some students still heavily relied on teacher guidance, indicating a gap in their ability to learn on their own. Therefore, it is recommended that teachers provide additional support to build students' confidence and thinking skills, helping them become more independent in their learning. Overall, PBL is proven to be an effective strategy for promoting independent learning, although its success depends on how ready students are to take charge of their own learning.

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INTRODUCTION

In recent years, the paradigm of education has increasingly shifted toward student-centered learning, emphasizing the importance of fostering learner autonomy and responsibility. Central to this educational transformation is the role of teaching strategies structured methods and techniques that guide teachers in delivering instruction effectively while promoting active student engagement. As noted by Sarode (2018), a teaching strategy encompasses an overall plan that outlines instructional goals, student expectations, and the steps required to facilitate meaningful learning experiences. These strategies, when implemented appropriately, can significantly influence students' academic development and personal growth.

One such instructional approach that has gained recognition for its ability to support independent learning is Problem-Based Learning (PBL). PBL immerses students in real-world, complex problems that require inquiry, analysis, and solution-building, thus encouraging them to take an active role in their learning process (Vandenhouten, 2017). Rather than being passive recipients of information, students in a PBL environment are expected to engage in critical thinking, collaboration, and self-directed learning. As Rusmansyah (2018) highlights, PBL develops students' problem-solving skills and enhances knowledge retention through structured activities. Furthermore, PBL aligns with the goals of independent learning by empowering students to set objectives, evaluate resources, and take ownership of their learning journey.

Problem-Based Learning (PBL) is a strategy rooted in social constructivist theory, and it offers an alternative to traditional, teacher-centered instruction. According to Barrett and Moore (2011), PBL provides a framework where students actively construct knowledge through exploration and collaboration. It is designed to promote a student-centered approach to learning, and several scholars highlight its benefits: self-directed learning (Wilkie & Burns, 2003), critical thinking (Davys & Pope, 2006), evidence-based decision making (Halliwell, 2008), and teamwork skills (Sefton, 2009). The process typically involves students: (1) exploring an issue, (2) stating the problem, (3) listing possible solutions, (4) identifying actions to be taken, (5) writing and documenting their solutions, (6) presenting their findings, and (7) submitting the final product (Rahman, 2017). This model allows students to bridge the gap between prior knowledge and new

understanding by collaboratively identifying learning needs and resolving authentic challenges.

According to Ni'mah et al. (2024), the aspects of the Problem-Based Learning (PBL) strategy encompass various interrelated components that together support student development. First, PBL begins with **real-world problems**, where students engage with authentic and complex issues that require multidimensional analysis and decision-making. This is followed by **active learning**, in which students take a hands-on approach to identify what they need to learn, gather relevant information, and apply that knowledge to solve problems. The approach is inherently **student-centered,** placing learners in control of the process as they collaborate with peers, generate ideas, and co-construct solutions. Meanwhile, the teacher adopts the **role of facilitator**, guiding inquiry through thoughtful questioning and the provision of appropriate resources rather than direct instruction. PBL also promotes interdisciplinary learning by encouraging students to draw on knowledge from various fields, such as science, mathematics, and the humanities, reflecting the interconnected nature of real-world challenges. Integral to this approach is the development of **critical thinking and problem-solving skills**, as students analyze information, assess evidence, and make informed decisions. Throughout the process, **reflection and feedback** play a key role, allowing learners to evaluate their performance, learn from feedback, and improve their strategies. PBL also emphasizes the **application of knowledge**, encouraging students to transfer their learning to new contexts and real-life situations. Additionally, the **assessment of learning outcomes** focuses not only on final products but also on students' learning processes, collaboration, and ability to apply their understanding. Ultimately, PBL aims to foster essential **lifelong learning skills**, such as effective communication, adaptability, creativity, and persistence traits that are vital for personal and professional success in a constantly evolving world.

Independent learning, as defined by Candy (1991), involves learners' ability to manage their educational development through self-inquiry, reflection, and decision-making. It enables students to become proactive, self-motivated, and lifelong learners a process further supported by collaborative learning environments and well-designed instructional strategies. According to Kesten (1987), independent learning emerges when students can make informed choices regarding their educational needs, while Bates and

Wilson (2002) emphasize the development of confidence, curiosity, and a sense of purpose through this approach.

In light of this, the present study aims to explore the aspects of Problem-Based Learning (PBL) and how it is used to support independent learning among students. The study focuses on two main questions: (1) What are the aspects of Problem-Based Learning (PBL) used in Grade 8 at SMP PAB 8 Sampali? and (2) How is Problem-Based Learning (PBL) used to help students become independent learners in Grade 8 at SMP PAB 8 Sampali? This research aims to understand how teaching methods can be used on purpose to help students become more responsible and take control of their own learning. To study the aspects of PBL, this research uses the theory from Ni'mah et al. (2024), which explains ten important aspects of PBL: real-world problems, active learning, student-centered learning, the teacher as a guide, interdisciplinary learning, critical thinking and problem-solving, reflection and feedback, applying knowledge, assessing learning outcomes, and building lifelong learning skills.

METHOD

This study used a qualitative descriptive approach to investigate how independent learning is implemented in the classroom at SMP PAB 8 Medan. The research involved 10 Grade 8 students who completed questionnaires designed to explore their learning habits, ability to manage their own learning, and perceptions of the teacher's role in supporting independent learning. Data were collected through these questionnaires and analyzed using Miles and Huberman's (1992) interactive model, which includes data reduction (selecting and simplifying relevant information), data display (organizing data into clear narratives or tables), and conclusion drawing with verification (interpreting the data and checking for consistency). This process allowed the researcher to organize and interpret the data effectively, providing insights into the strategies the English teacher used to promote independent learning and how students experienced them.

RESULTS

The findings of this research aim to find out how Problem-Based Learning (PBL) is applied to support independent learning, especially in Grade 8 at SMP PAB 8 Sampali. The

data were collected through a questionnaire given to 11 students. The questionnaire used a Likert scale to measure students' responses about the components of PBL and how it helps them learn independently. The average score for each statement was calculated and the results were grouped based on two main aspects: the components of PBL and the effect of PBL on independent learning.

Table 4.1 below shows the average scores from students about the components of PBL used in the classroom. This table is adapted from the theory of Ni'mah et al. (2024), which describes ten important components of PBL.

Tabel 4.1Result questionnaire

Statement	Average Score
S1	3.72
S2	2.90
S3	3.09
S4	3.63
S5	3.72
S6	3.45
S7	3.65
S8	3.45
S9	4
S10	3.90
S11	3.81
S12	3.72
S13	3.63
S14	4
S15	4.09
S16	2.54
S17	4
S18	3.63
S19	3.90
S20	3.63

To answer the first research question regarding the components of Problem-Based Learning (PBL) implemented in Grade 8 at SMP PAB 8 Sampali, the students' questionnaire responses were analyzed by calculating the average score of each item related to PBL components. The questionnaire used a 5-point Likert scale with the

following scoring categories: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.

Table 4.2 Interpretation Table

Average	Interpretation
1.00–1.79	Strongly Disagree
1.80–2.59	Disagree
2.60–3.39	Neutral / Fair
3.40–4.19	Agree
4.20–5.00	Strongly Agree

Table 4.3 Implemented Components of Problem-Based Learning

No.	A Way of Learning Based on Problems (Problem-Based Learning)	Statement (S)	Average Score	Interpretation
1	Real-world problems	S1	3.72	Agree
2	Teacher as facilitator	S4	3.63	Agree
3	Interdisciplinary learning	S5	3.54	Agree
4	Critical thinking	S6	3.45	Agree
5	Reflection and feedback	S7	3.65	Agree
6	Lifelong learning skills	S10	3.90	Agree

Based on data collected from a questionnaire distributed to 11 students, the results show that most of the PBL components received average scores within the "Setuju" (Agree) category, with values ranging from 3.40 to 4.00 on the Likert scale. This indicates that students agree that various PBL elements are being practiced in their learning environment. Among the highly rated components were the use of real-world problems (S1 = 3.72), the teacher's role as a facilitator (S4 = 3.63), interdisciplinary learning (S5 = 3.54),

development of critical thinking (S6 = 3.45), and reflection and feedback (S7 = 3.65). In addition, aspects such as applying knowledge beyond the classroom (S8 = 3.45) and the development of lifelong learning skills (S10 = 3.90) were also positively acknowledged by students.

However, not all components showed strong implementation. The item related to active student involvement in problem-solving (S2 = 2.90) and students having freedom in choosing their learning methods (S3 = 3.09) received lower average scores, falling into the "Netral / Cukup" (Neutral / Fair) category. This suggests that while many foundational aspects of PBL are present, some components particularly those that require higher student autonomy and initiative are not yet fully developed.

In summary, the data indicate that the teacher has implemented most of the main components of Problem-Based Learning in the classroom, particularly those related to real-world context, facilitation, and interdisciplinary integration. Nonetheless, to optimize PBL in supporting student development, more attention could be given to increasing students' active participation and freedom in their learning process.

Table 4.4 The Implementation of PBL to Encourage Independent Learning

No	The Impact of Learning on Independent Learning	Statement (S)	Average Score	Interpretation
1	Time management	S14	4.00	Agree
2	Responsibility for their own learning	S15	4.09	Agree
3	Self-assessment	S17	4.00	Agree
4	Curiosity and initiative to seek knowledge	S19	3.90	Agree

The results show that most students agree that PBL supports their ability to learn independently. For example, students agreed that they became more responsible for their own learning (S15 = 4.09), were able to manage their time and assignments independently

(S14 = 4.00), could assess their own learning (S17 = 4.00), and developed curiosity and a desire to learn new things (S19 = 3.90). Other statements such as feeling more motivated due to real-life problems (S12 = 3.72), improved understanding through group discussions (S13 = 3.63), and the feeling of being helped to be more independent by the teacher (S18 = 3.63) also received positive responses from students. These scores fall into the "Agree" category (3.40–4.19), indicating a strong perception that PBL promotes student independence.

However, one statement received a lower score (S16 = 2.54), interpreted as "Disagree." This item reflects students' lack of confidence in learning without waiting for the teacher's explanation, suggesting that while many aspects of independence are encouraged through PBL, some students still depend on direct instruction and guidance.

In summary, the findings reveal that PBL has been effectively implemented to enhance independent learning in Grade 8. Students are increasingly capable of managing their own learning process, being responsible, and showing initiative. Yet, more attention is needed to build students' confidence in becoming fully self-directed learners, especially in reducing their reliance on teacher explanation.

DISCUSSIONS

Based on the findings, the use of *Problem-Based Learning* (PBL) in supporting independent learning at SMP PAB 8 Sampali shows a strong connection with the theory suggested by Ni'mah et al. (2024). This theory explains that PBL includes ten important elements, such as using real-life problems, the teacher acting as a guide, learning from different subjects, thinking critically, and doing self-reflection. The students' responses support this, as they agreed with statements related to those elements—for example, learning through real-world problems (S1 = 3.72), teachers as facilitators (S4 = 3.63), and reflecting on their learning (S7 = 3.65). These results show that the main parts of PBL are applied in the classroom.

However, not all elements of PBL were fully applied. Some parts that need students to be more active and independent received lower scores. For example, students were not

very confident in solving problems by themselves (S2 = 2.90), choosing their own way of learning (S3 = 3.09), or learning without waiting for the teacher's explanation (S16 = 2.54). This shows a difference between the theory and the real situation. According to Dilekli (2020), PBL fosters independence by encouraging students to take responsibility for their learning. They must navigate through information, make decisions, and apply knowledge independently. The gap may happen because students are still used to traditional teaching methods where the teacher explains everything.

There are some reasons for this difference. First, students may lack metacognitive skills the ability to think about their own thinking. Second, PBL might be new for them, so they are not used to it yet. Third, as cited from Schunk(2021) in Bandura's social cognitive theory, students' self-confidence, or *self-efficacy*, affects how willing they are to learn independently. Some students may not feel confident enough to take control of their learning.

The findings also have both positive and negative implications. On the positive side, PBL helps students build 21st-century skills such as time management, responsibility, curiosity, and critical thinking. Othman et al (2024) supports this, saying that PBL encourages students to take initiative in their learning, promoting autonomy and resilience, which are crucial for lifelong learning. On the negative side, some students are still dependent on the teacher, which can limit the full benefits of PBL. If not addressed, this could create a gap between students who are independent and those who are not.

Therefore, teachers need to give more support to help students become independent learners. This can include teaching metacognitive skills, giving regular feedback, and creating a supportive classroom environment. This idea is supported by Raine et al (2025), who says that effective support from teachers plays a vital role in fostering students' independence. Motivated teachers contribute to the enhancement of students' coping mechanisms, promote greater academic engagement, and support the development of students' competence and autonomy.

CONCLUSIONS

The study reveals that the components of Problem-Based Learning (PBL) implemented in Grade 8 at SMP PAB 8 Sampali align with the theoretical framework proposed by Ni'mah et al. (2024). Key components such as real-world problems, teacher facilitation, interdisciplinary learning, critical thinking, reflection, and lifelong learning skills were effectively integrated into the classroom, as evidenced by students' positive responses. However, aspects requiring higher student autonomy, such as active problem-solving and self-directed learning choices, showed lower implementation levels, indicating a need for further development in these areas. Regarding the implementation of PBL to encourage independent learning, the findings demonstrate that PBL significantly enhances students' time management, responsibility, self-assessment, and curiosity. While students exhibited growth in these areas, some still relied heavily on teacher guidance, highlighting a gap in achieving full independence. To maximize PBL's potential, it is recommended that teachers provide additional support to build students' confidence and metacognitive skills, ensuring a smoother transition to self-directed learning.

For teachers implementing PBL, it is advisable to gradually increase student autonomy by providing structured scaffolding in the early stages, including clear guidelines for problem-solving, modeling critical thinking processes, and offering targeted feedback to strengthen students' confidence in independent learning. Furthermore, professional development workshops on PBL facilitation techniques would assist teachers in transitioning from traditional instruction to a more student-centered approach, equipping them to nurture self-directed learners more effectively. Future research should explore the long-term effects of PBL on independent learning through longitudinal studies across different grade levels and subjects. It would also be valuable to investigate specific interventions that can strengthen students' metacognitive skills within PBL frameworks, such as reflective journaling or peer-assessment activities. Moreover, comparative studies between PBL and other student-centered approaches could provide deeper insights into the most effective strategies for fostering student independence in diverse educational contexts.

REFERENCES

Afandi, M. (2021). *Strategi Pembelajaran berbasis Multiple Intelligences*. Penerbit Nem.

Ahmadi, A., & Prasetya, J. T. (2015). *Strategi Belajar Mengajar*. Bandung: CV Pustaka Setia.

Arifin, Z., Tegeh, I. M., & Sukmana, A. I. W. I. Y. (2021). *Independent Learning through Interactive Multimedia Based on Problem Based Learning.* Jurnal Edutech Undiksha, *9*(2), 244-253.

Aropiq, P. R., Nasrullah, A., & Yendra, N. (2025). *Enhancing Problem-Solving and Self-Directed Learning in 8th-Grade Students through a Problem-Based Learning Approach.* Progressive of Cognitive and Ability, 4(1), 30-38.

Bates, I. and Wilson, P. 2002. *Family and education: supporting independent Learning*. Learning and Skills Research, 6(1), 3.

Brown, H. D (2007). *Principles of Language Learning and Teaching. (ed- 5th). Pearson Education.*

Candy, P. 1991. *Self-direction for lifelong learning: a comprehensive guide to Theory and practice*. San Francisco: Jossey-Bass.

Dilekli, Y. (2020). *Project-Based Learning* (pp. 53–68). IGI Global. https://doi.org/10.4018/978-1-7998-3146-4.CH004

Harvey, V. S., & Chickie-Wolfe, L. A. (2007). *Fostering independent learning: Practical strategies to promote student success*. The Guilford Press.b

Hidayat, H., Nurfadilah, A., Khoerussaadah, E., & Fauziyyah, N. (2021). *Meningkatkan Kreativitas Guru dalam Pembelajaran Anak Usia Dini di Era Digital.* Jurnal Pendidikan Anak, 10(2), 97–103.

Jones, R. W. (2006). *Problem-based learning: description, advantages, disadvantages, scenarios and facilitation*. Anaesthesia and intensive care, 34(4), 485-488. https://doi.org/10.1177/0310057X0603400417

Kesten C (1987). *Independent learning.* Saskatchewan: Saskatchewan Education.

Mariyati, M., Wijaya, C., & Anas, N. (2024). *The Effect of Problem Based Learing (PBL) Learning Model and Learning Independence on Problem Solving Ability of Ali Bin Abu Talib Integrated Islamic Junior High School Students Deli Serdang*. Tadrib: Jurnal Pendidikan Agama Islam, 10(1), 61-69.

Maulidia, F., Saminan, S., & Abidin, Z. (2020). *The implementation of problem-based learning (pbl) model to improve creativity and self-efficacy of field dependent and field independent students*. Malikussaleh Journal of Mathematics Learning (MJML), *3*(1), 13-17.

Ni'mah, A., Arianti, E. S., Suyanto, S., Putera, S. H. P., & Nashrudin, A. (2024). *Problem-Based Learning (PBL) Methods Within An Independent Curriculum (A Literature Review).* Sintaksis: Publikasi Para ahli Bahasa dan Sastra Inggris, 2(4), 165-174.

Othman, N., Khalid, N., & Hamid, N. A. (2024). *Mapping the intersection of problem-based learning and lifelong learning: a bibliometric analysis*. Deleted Journal, *8*(2), 153–162. https://doi.org/10.53840/attarbawiy.v8i2.258

Prananda, G., & Hadiyanto, H. (2019). *Korelasi antara Motivasi Belajar dengan Hasil Belajar Siswa dalam Pembelajaran IPA di Sekolah Dasar*. Jurnal Basicedu, 3(3), 450107.

Rahman, T. (2017). The roles of problem-based learning (PBL) in improving the independence and the success of prospective teachers learning. *Advances in Social Science, Education and Humanities Research, 57*, 66-69.

Raine, K. E., Tucker, K., & Skinner, E. A. (2025). *Exploring the Pathways Through Which Teacher Support Predicts Changes in Students' Academic Coping Across the School Year: A Self-Determination Theory Approach*. Journal of Early Adolescence. https://doi.org/10.1177/02724316251314062

Schunk, D. H., & DiBenedetto, M. K. (2021). *Self-efficacy and human motivation* (Vol. 8, pp. 153–179). Elsevier. https://doi.org/10.1016/BS.ADMS.2020.10.001

Sutopo, M., & Kualitatif. (2002). In *Metode Penelitian Pendidikan*. Rosdakarya. https://eprints.uny.ac.id/18100/5/BAB%20III%2009.10.033%20Aji%20p.pdf

Vandenhouten, C., Groessl, J., & Levintova, E. (2017). *How Do You Use Problem-Based Learning to Improve Interdisciplinary Thinking?*. New Directions for Teaching and Learning, 2017(151), 117-133. https://doi.org/10.1002/tl.20252