

Implementation of Problem-Based Learning: Teachers' and Students' Perceptions on Learning Impact

Tiara Cahyani*¹, Siti Hamidah², Khoirun Nisa³

¹English Department, Universitas KH. A. Wahab Hasbullah

²Physics Education, Universitas KH. A. Wahab Hasbullah

³Islamic Education, Universitas KH. A. Wahab Hasbullah

*Email: tiaracahyani64258@gmail.com

ABSTRACT

This research aims to analyze teachers' and students' perceptions of the Problem-Based Learning (PBL) process, including student engagement, learning experiences, and the impact of students' learning on their abilities. This research employs a qualitative approach using a descriptive method. The research subject consisted of 20 students of the tenth grade at MAN 4 Jombang and a representative teacher, selected using a purposive sampling technique. Data collection technique through in-depth interviews with teachers and students. The data were analyzed qualitatively through the stages of data reduction, data representation, and conclusions. The results of research show that the implementation of Problem-Based Learning has a positive impact on the learning process. Teachers view PBL as a student-centered learning model that uses context as the basis of learning activities, thereby making students more active in analyzing problems, discussing, and finding solutions. From the student's perspective, PBL is considered more engaging, challenging, and enjoyable compared to conventional learning. In addition to increasing student engagement, PBL also helps develop critical thinking, communication, and collaboration skills, as well as providing a more meaningful learning experience. However, its implementation still faces several challenges, such as limited learning time and some students lacking confidence in discussions. Overall, the Problem-Based Learning model is deemed consistent with the principles of the Merdeka curriculum, which emphasizes student-centered learning.

Keywords: *Problem-Based Learning; Teacher Perceptions; Student Perceptions; Learning Engagement; Learning Experiences.*

INTRODUCTION

Learning in the era of Merdeka Curriculum demands that students process critical, creative, collaborative, and communication thinking skills. In line with these demands, various innovative approaches to learning have been developed to replace the conventional, teacher-centered learning model, necessitating a learning model that can accommodate students' needs. One learning model that supports the development of critical, creative, collaborative, and communicative thinking skills is Problem-Based Learning (PBL), as the model that uses contextual problems as the starting point of learning to encourage students to actively construct knowledge through the process of investigating and understanding problems. According to Kristiana, Febri & Elvira (2021), Problem-Based Learning is a learning method that introduces the problem at the beginning of the learning process. Therefore, after being presented with a problem, students are guided to identify the problem, share their perspectives, and then design a solution by the end of the learning process.

The implementation of PBL can increase student engagement in learning, enhance critical thinking, and foster independence in learning. However, the success of implementing the Problem-Based Learning (PBL) method is not solely determined by the instructional design but also by the perceptions of teachers and students regarding the ongoing learning process, as the perception can influence motivation, acceptance, and the effectiveness of classroom instruction.

In practice, the implementation of PBL in the classroom does not always run optimally. Success in applying this model is greatly influenced by the teacher's readiness in designing a learning scenario, the students' ability to adapt to a learning pattern that requires them to be active, and a supportive learning environment. This method also emphasizes student-centered learning. Where the teacher acts solely as a facilitator, while students take responsibility for their own learning process (Fonna & Nufus, 2024). This is because the core principle of Problem-Based Learning is to actively engage students in the learning process.

Various previous studies by O. Ariyani, T. Prasetyo (2021), and others have examined the effectiveness of PBL on student learning process outcomes, critical thinking skills, and problem-solving skills. Most of these studies used a quantitative approach that analyzed the comparison of scores before and after the implementation of PBL. The results of these studies indicate that PBL has significant potential to improve students' learning outcomes. A study conducted by Aryani & Tego titled "The effectiveness of the Problem-Based Learning (PBL) and Problem-Solving models in Developing Critical Thinking Skills among Elementary School" indicates that the Problem-Based Learning model is more effective than the Problem-Solving model. However, studies that delve into learning experiences directly through the perceptions of teachers and students remain relatively limited.

Furthermore, research that integrates teachers' and students' perceptions within a single study is also still rare. Generally, research focuses only on one party, either the teacher or the students, resulting in a partial picture of PBL implementation. Therefore, this study aims to analyze teachers' and students' perceptions of the Problem-Based Learning (PBL) process, including student engagement, learning experience, and the impact of PBL on students.

METHOD

This research employs a qualitative approach using a descriptive method aimed at describing and deeply understanding the phenomenon under investigation based on real-world conditions in the field. According to Sembiring et al. (2024), descriptive qualitative research is a study that provides a factual description of events or phenomena without manipulating the subjects. This approach was chosen because it allows the researchers to obtain contextual, holistic, and in-depth data related to the research object. The research focus is directed at the process, meaning, and experiences of the research subjects regarding the phenomenon under study, rather than on statistical measurements.

The subject in this research consisted of 20 tenth-grade students from MAN 4 Jombang and a representative teacher, selected using purposive sampling, a technique of intentionally selecting a sample based on specific considerations and criteria aligned with the research objectives. These criteria were established to ensure the subjects' cloud represents or processes extensive information regarding the issues under investigation (Rasyid, 2022). Data collection was conducted through in-depth interviews. Data analysis was conducted qualitatively through the stages of data reduction, data presentation, and conclusion.

RESULT AND DISCUSSION

The following are the results of in-depth interviews with teachers and students regarding their experiences and the impact of the Problem-Based Learning (PBL) approach that has been implemented. Following the results of the interview with the teacher:

Result

- Teachers' Understanding of the Problem-Based Learning (PBL) Concept

The question posed to the teachers was :

Q1: "How do you understand the concept of Problem-Based Learning?"

"In my opinion, Problem-Based Learning is a student-centered learning model that uses real-world problems as the starting point for learning. In PBL, students do not merely receive material from the teacher; instead, they are encouraged to analyze problems, discuss them, seek information, and then collaboratively find solutions. In this way, students become more active in the learning process.

Based on the interview results, the teacher explained that Problem-Based Learning is a student-centered learning model that uses real-world problems as the starting point for learning. In this process, students do not merely receive information from the teacher; instead, they are actively engaged in analyzing problems, discussing them, seeking information from various sources, and collaboratively finding solutions. As a result, learning becomes more active and meaningful for the students.

Q2: "What is the difference between PBL and the traditional teaching methods used?"

"The difference I have noticed is in the roles of the teacher and the students. In previous teaching methods, the teacher spent more time explaining the material, so students tended to be passive. In PBL, however, the teacher acts as a facilitator, and students are more active in seeking information, discussing, and solving the problems. Additionally, the learning is more contextual because it relates to real-life issues."

The main difference lies in the roles of the teacher and students in the learning process. In conventional learning, the teacher dominates the explanation of the material, so students tend to be passive. Meanwhile, in PBL, the teacher acts as a facilitator, while students are more active in seeking information.

- Teachers' Experiences in Implementing PBL

Q1: "What has been your experience implementing PBL in the classroom?"

"My experience implementing PBL has been quite interesting. At first, the students seemed confused because they were not used to learning through problem-solving. However, after a few sessions, the students began to participate more actively in discussions, express their opinions, and collaborate with their group members to find solutions to the problems presented."

At the start of implementing PBL, students still seemed confused because they were not yet accustomed to problem-based learning. However, after several sessions, students demonstrated positive changes, such as active participation in discussions, the courage to voice their opinions, and the ability to collaborate with group members.

Q2: "What does PBL mean to you as an educator?"

"For me, PBL serves as a learning approach that helps students learn more actively and meaningfully. Through PBL, students not only grasp the concepts of the material but also learn to think critically, collaborate, and confidently express their opinions. This also helps me as a teacher to create a more interactive learning environment."

PBL plays a significant role in fostering more interactive and meaningful learning. Through the implementation of PBL, students not only grasp the concepts of the subject matter but also develop critical thinking skills, collaboration abilities, and the courage to voice their opinions. This also helps create a more active and communicative classroom environment.

- The Impact of the Implementation of PBL on Students

Q1: "How does PBL effect student engagement?"

"PBL has a significant impact on student engagement. When presented with a problem, students are encouraged to discuss and seek answers together with their group. This makes the classroom atmosphere more lively because many students are actively involved in the learning process."

The implementation of PBL has a significant impact on increasing student engagement. When presented with a problem, students are encouraged to discuss it with their group members, making the atmosphere more lively.

Q2: "How does PBL effect students' critical thinking skills?"

"In my opinion, PBL can help improve students' critical thinking skills because they must analyze problems, connect them to concepts they have learned, and determine the most appropriate solution."

PBL is effective in developing critical thinking skills because students must analyze the given problem, connect it to concepts they have learned, and determine the most appropriate solution."

Q3: "How does PBL affect students' collaboration and communication skills?"

"In PBL, students typically work in groups, so they need to discuss, exchange opinions, and share ideas with their peers. This indirectly develops their collaboration and communication skills."

Group discussion activities in PBL provide opportunities for students to exchange opinions, share ideas, and learn to respect others' viewpoints.

Q4: "How does PBL influence students' independent learning?"

"PBL also helps enhance students' independent learning because they are required to seek information on their own from various sources, whether from books or other sources, so they do not rely solely on the teacher's explanations."

PBL helps improve students' learning independence because they are required to seek information from various sources, including books and other resources, so they do not rely solely on the teacher's explanations.

- The Alignment of PBL with the Merdeka Curriculum

Q1: "How does PBL align with the principles of the Merdeka Curriculum?"

"In my opinion, PBL aligns very well with the principles of the Merdeka Curriculum because learning in PBL is student-centered and encourages students to be active in the learning process. Additionally, PBL provides students with opportunities to develop critical, creative, and collaborative thinking skills."

PBL is considered capable of and aligned with the principles of the Merdeka Curriculum because it emphasizes student-centered learning. Students are given the opportunity to be active in the learning process and to develop various important skills such as critical, creative, collaborative, and communicative thinking.

Q2: "How does PBL support the implementation of student-centered learning, because they actively seek information, analyze problems, and find solutions. Teachers serve only as facilitators who guide and direct the learning process."

In PBL, students are the primary subject of learning because they actively seek information, analyze problems, and determine solutions. Teachers serve only as facilitators who provide direction and guidance.

- Challenges in Implementation of PBL

Q1: "What challenges did you encounter in implementing PBL?"

"One of the challenges I faced was limited time, as the discussion and problem-solving processes took quite a long time. Additionally, not all students immediately participated actively in the discussions, as some still lacked confidence."

The most significant challenges are the time required for discussion and the fact that some students are not very active. Many students do not participate in discussions with their group members because they rely on the smarter members of the group.

Q2: "What strategies do you use to address these challenges?"

"The strategy I employ is to divide the students into small groups to make the discussions more effective. I also provide clear instructions regarding the steps of the learning activities and motivate the students to be more confident in expressing their opinions."

Some strategies implemented include dividing students into small groups to make discussions more effective, providing clear instructions regarding the steps of the learning activities, and motivating students to be more confident in expressing their opinions. Teachers also select problems for students to solve that are related to common issues and closely tied to daily life.

The following are the results of an interview with 20 tenth-grade students at Private Islamic Senior High School 4 Jombang. The interview results are presented in the form of descriptions that summarize the results of the interview with students.

- Students' Perceptions and Experiences with PBL
- Experience Participating in PBL

Q1: "What are your thoughts on learning using the Problem-Based Learning model?"

"In my opinion, learning using the Problem-Based learning model is quite enjoyable. This model makes it easier for students to complete assignments because we can discuss them with classmates. Additionally, this approach borders our horizons as we can exchange ideas and share information with group members."

Students stated that learning using the PBL feels more enjoyable because they can discuss and exchange opinions with their group members. Students also feel that his approach makes learning more engaging compared to traditional instruction, where the teacher does most of the explaining.

Q2: "What is the difference between this learning method and the conventional learning you have used to?"

Respondent 1: "The difference is that this learning method makes students more creative in interacting with their peers. We also collaborate more frequently in groups to solve problems, so the learning feels more dynamic compared to the usual learning where we only listen to the teacher's explanations."

Respondent 2: "Regular learning is boring because the teacher just explains the material and then we are just given assignments."

PBL learning encourages students to interact more actively with their peers, collaborate in groups, and engage directly in the problem-solving process. As a result, the learning environment becomes more dynamic and engaging.

- The Learning Process

Q1: "How do you feel when given a problem to solve in a group?"

Respondent 1: "When given a problem to solve in a group, I feel more challenged to find a solution to the problem. I also feel happier because I can work together and exchange ideas with my friends, making it easier to find the answer."

Respondent 2: "It's definitely fun and challenging for me because I really enjoy working in groups to solve problems."

Respondent 3: "At first, I found it difficult and did not understand, but after the teacher explained the learning process, I understood, and after discussing it with my groupmates, it felt enjoyable."

Some students felt challenged and motivated to find solutions together with their group members. However, some students also mentioned that at first, they had difficulty understanding the problem presented, but after receiving an explanation from the teacher and discussing it with their group members, they gained a better understanding of the problem.

Q2: "What role does the teacher play when you are working on Problem-Based Learning?"

Respondent 1: "In my opinion, the teacher acts as a facilitator who guides and helps when students have difficulty understanding the problem or completing an assigned task."

Respondent 2: "In my opinion, yes, the teacher plays a very important role in completing the tasks. Before the tasks are assigned, the teacher explains them, and the teacher also acts as a facilitator for us because when there are problems that are difficult for us to understand, the teacher can explain them."

Students perceive that the teacher acts as a facilitator who helps and guides them when they encounter difficulties. The teacher also provides an explanation of the steps involved in the activity before the task is assigned.

- The Meaning of PBL as a Learning

P1: "What does Problem-Based Learning mean to you?"

Respondent 1: "For me, Problem-Based Learning makes me focus more on the given problem and encourages me to think more actively in finding solutions."

Respondent 2: "In my opinion, Problem-Based Learning is about learning to solve a problem, so that we become better trained to think critically and gain new knowledge."

Students interpret Problem-Based Learning as a learning process that trains them to solve problems and think more critically when seeking solutions.

P2: "What was the most memorable aspect of participating in PBL?"

Respondent 1: "The most memorable part was the discussion process with my classmates because we could share opinions and work together. Additionally, this activity also brought us closer to our classmates."

Respondent 2: "What stood out to me was when we were able to discuss and exchange ideas with my group members."

The most memorable thing for the students was the group discussions and collaborating because they could exchange ideas and get closer to their friends.

- Impact of Learning

T1: "Does PBL help you think more critically when solving problems?"

Respondent 1: "Yes, PBL learning makes me more active in learning because I find it easier to understand the material when discussing with friends and finding solutions together."

Respondent 2: "Yes, in my opinion, I am more active than before because in this PBL learning, we are required to discuss with the group, so we have to be able to express our opinions well."

Most students stated that they became more active in learning because they had to participate in group discussions and express their opinions.

T2: "Does PBL help you think more critically when solving problems?"

Respondent 1: "Yes, PBL helps me think more critically because in our discussion, we have to express our opinions and consider various solutions to the problem presented."

Respondent 2: "Yes, because in this PBL learning, we do not just identify problems, but we have to solve them and offer our opinions."

Students stated that PBL helps them think more critically because they have to analyze problems, offer opinions, and consider various solutions."

T3: "How has PBL affected your ability to work with classmates?"

Respondent 1: "This learning approach has made me more accustomed to working with peers because we have to help each other and share tasks during group discussions."

Respondent 2: "I think it helps a little; initially, I was not very good at critical thinking, but I became more motivated because seeing classmates who could solve problems made me motivated to do the same."

Through PBL, students become more accustomed to working with peers because they help one another and share tasks to solve problems.

T4: "Does PBL help you become more independent in your learning?"

Respondent 1: "Not really, because in this learning process, we work in groups more often. However, I still study to understand the material so I can contribute to group discussions."

Respondent 2: "Not really, because I rely a bit on my smart classmates. I rarely contribute to the discussions."

Respondent 3: "Yes, whereas learning used to be solely from the teacher, in PBL we learn to study on our own and think for ourselves."

Some students feel that PBL helps them work more independently, but others still rely on classmates whom they consider to have a better understanding of the problems.

- Challenges and Hopes

H1: "What difficulties have you experienced while participating in PBL?"

Respondent 1: "The difficulty I faced was sometimes falling behind in taking notes because I was focused on the discussion. Additionally, there were occasional disagreements among group members during discussions."

Respondent 2: "The difficulty is when I cannot solve the problem given by the teacher and try to understand my classmates' opinions."

The difficulties experienced include understanding the problems presented, synthesizing various opinions during group discussions, and occasionally falling behind in taking notes on the problems because of being focused on the discussion.

H2: "How do you overcome these difficulties?"

Respondent 1: "Usually, I ask a classmate who understands the material better. If there's a disagreement, we try to discuss it again and reach a mutual agreement."

Respondent 2: "I ask the teacher and classmates whom I think can help."

Students usually overcome difficulties by asking classmates who have a better grasp of the problem or by seeking an explanation from the teacher.

H3: "In your opinion, what needs to be improved to make PBL learning better in the future?"

Respondent 1: "In my opinion, PBL learning is already running quite well and is engaging, so there is nothing specific that needs to be improved."

Respondent 2: "In my opinion, there's nothing that needs to be improved, because the learning experience has been very enjoyable and engaging for us."

Most students stated that PBL has been running very well and is enjoyable, so there is not much that needs to be improved.

Discussion

Based on the results of this research conducted through interviews with teachers and students, it can be concluded that the implementation of the Problem-Based Learning (PBL) model has a positive impact on the learning process in the classroom. Teachers view PBL as a student-centered learning model that utilizes contextual problems as the starting point for learning, thereby encouraging students to actively analyze problems, discuss, seek information, and find solutions collaboratively. These findings align with the research by Bakar et al. (2023), who state that Problem-Based Learning actively engages students and requires them to explore and find solutions to given problems, with the expectation that students will be motivated to learn. This is also consistent with the statement by Ananda et al. (2022) that learning using Problem-Based Learning is highly effective in improving students' critical thinking.

From the students' perspective, PBL is considered more engaging, challenging, and enjoyable than conventional learning. This aligns with Munawwaroh et al. (2024), who state that Problem-Based Learning can help students feel more confident in expressing their opinions and become more active in critical thinking, thereby transforming what was initially a boring class into a more enjoyable one. PBL is capable of increasing student engagement in the learning process, particularly through group discussions, the sharing of opinions, and collaboration in solving the problems presented. Research results Sandi et al. (2024) indicate that Problem-Based Learning is highly effective when students are required to be actively involved in the problem-solving process.

In addition, the implementation of PBL also provides a more meaningful learning experience for students because they are directly involved in the process of problem-solving and gathering information from various sources. This process helps students better understand the material, develop critical thinking skills, and improve their communication and collaboration skills. This is consistent with the findings of Adrilian et al. (2024), who found that in Problem-Based Learning activities, students are able to develop critical thinking skills by solving problems based on their understanding.

Nevertheless, several challenges remain in its implementation, such as limited class time, differing opinions during group discussions, and some students who lack confidence or rely on peers who have a better grasp of the material. However, overall, both teachers and students have a positive perception of the implementation of PBL because this model is considered capable of creating more active, interactive learning that aligns with the learning principles of the Merdeka Curriculum, which emphasizes student-centered learning.

CONCLUSIONS

Based on the results of the research, the implementation of the Problem-Based Learning (PBL) model has a positive impact on the learning process. Teachers understand PBL as student-centered learning that uses problems or phenomena as the basis for learning activities, with the teacher acting as a facilitator. The implementation of PBL makes students more active in discussions, more willing to express their opinions, and better able to collaborate in groups. Students also find the learning process enjoyable and challenging because they can exchange ideas and seek solutions together. Additionally, PBL helps improve students' critical thinking, communication and collaboration skills, although there are still some challenges, such as time constraints, differing opinions during discussions, and some students who lack confidence. Overall, PBL is considered consistent with the learning principles of the Merdeka Curriculum.

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