

THE EFFECTIVENESS OF PROBLEM-BASED LEARNING IN ENHANCING JUNIOR HIGH SCHOOL STUDENTS' SPEAKING SKILL

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Abstract

This research investigates the effectiveness of Problem-based Learning (PBL) in improving the speaking skills of eighth-grade students at MTs. Putri 'Aisyiyah Palu. The study addressed both linguistic (vocabulary, grammar, pronunciation) and psychological (nervousness, shyness) challenges. Using a pre-experimental design with a total sampling of 18 female students, data were collected through oral tests (describing pictures). The findings showed a slight increase in the mean score, yet statistical analysis revealed that the t-counted (1.177) was lower than the t-table (2.110) at a 0.05 significance level. Consequently, the null hypothesis was accepted, indicating that PBL did not significantly improve speaking skills in this context. The lack of significant impact was attributed to the complexity of the tasks and the researcher's inability to strictly follow the full PBL syntax.

Keywords: Speaking Skill; Problem-based Learning; Pre-Experimental.

BACKGROUND

Education is a fundamental aspect of human life that serves to develop one's potential in line with the demands of the times. Nationally, education in Indonesia aims to shape individuals who are faithful, of noble character, creative, independent, and responsible citizens, with English proficiency as a key enabler for global competitiveness and communication (Chasani et al., 2023). In Indonesia, English is studied as a foreign language (Hijriati, 2023), encompassing four core skills: listening, speaking, reading, and writing. Among these, speaking stands out as the cornerstone of social interaction and the primary vehicle for conveying ideas, feelings, and information verbally (Catur et al., 2023), yet it remains the most formidable barrier for many learners due to its real-time demands and exposure risks.

Empirical evidence consistently highlights that EFL students can comprehend input but struggle with output, primarily owing to insufficient practice, diminished motivation, and eroded self-confidence, leading to persistent communication breakdowns (Catur et al., 2023). This phenomenon was also observed at MTs Putri 'Aisyiyah Palu, where preliminary observations in English classes revealed multiple speaking challenges. Linguistically, students grappled with limited vocabulary, poor grammar, and inadequate pronunciation. Psychologically, they exhibited nervousness, low self-confidence during English communication, and shyness about practicing in front of peers. To address these issues, the researcher implemented Problem-Based Learning with eighth-grade students at MTs Putri

'Aisyiyah Palu to investigate its effects on their speaking skills.

To counteract these intertwined barriers, the Problem-Based Learning (PBL) model was strategically implemented. PBL fosters authentic problem-solving through collaborative inquiry, compelling students to articulate hypotheses, debate solutions, and present findings (Rahmawati & Ashadi, 2018), directly targeting linguistic gaps via contextualized practice and psychological hurdles by building confidence in supportive group dynamics, as its constructivist foundation promotes active engagement over passive reception. This targeted intervention addresses the core deficiencies identified, positioning PBL as an optimal strategy for EFL speaking enhancement. Accordingly, this study investigates: "Can the application of Problem-based Learning improve speaking skill of the eighth-grade students of MTs. Putri' Aisyiyah?"

LITERATURE REVIEW

Definition of Speaking

Speaking is a fundamental verbal communication technique used to engage in social interaction and convey mental information, such as thoughts and emotions. It is primarily defined as an interaction conducted to establish communication between two or more individuals, fostering mutual understanding through clear and accessible language. According to Arung and Jumardin (2016), mastering speaking skills is essential as it enables learners to effectively deliver opinions and express ideas to others.

Harmer (2007) points out, speaking is a skill that not only demands understanding the language being used, but also the capacity to interpret what others are saying. Bueno et al. (2006) state, One of the four most crucial English abilities to master is speaking, which is also the most challenging for language learners to learn.

Furthermore, speaking is a multifaceted skill that requires more than just linguistic

knowledge; it demands the capacity to interpret the messages conveyed by others in a given context. Despite its importance in daily life, speaking is widely recognized as one of the most crucial yet challenging skills for language learners to master among the four fundamental language abilities.

The Important of Speaking

Speaking skills are not merely the ability to produce sounds, but rather the cornerstone of human interaction and practical language learning. In social and functional contexts, speaking serves as the primary means for individuals to interact with one another and is crucial in language learning to facilitate real-world language use. At the heart of the importance of speaking lies the ability to understand and convey information, ideas, or other matters to others, whether individually or in groups.

From the perspective of academic and professional competence, Usmonov (2020) emphasizes that to achieve high competence in learning and work activities, one must be able to communicate in a foreign language, both orally and in writing. The ability to communicate effectively with peers can build high self-confidence, provided that the individual is able to speak carefully. An articulate speaker will feel more confident in their social life because efficient oral communication allows them to advocate and persuade.

Furthermore, speaking plays a role in career prospects in the Global Era. Rao (2019) emphasizes that English speaking skills are highly beneficial for advancing one's career, developing business, and facilitating social interactions. Possessing good communication skills is considered a "ticket" to broader job opportunities. Relational skills play a vital role in the modern era, where mastery of these abilities is a prerequisite for success across various fields. Given the global reach of the English language, students must develop their

relational skills in English to compete on a global scale.

Problem-Based Learning

Definition and Goals

Problem-Based Learning is a student-centered pedagogical approach that engages learners in prolonged inquiry processes centered on complex, real-world problems through collaboration, information gathering from diverse sources, and application of knowledge to develop authentic solutions. According to Kamdi (2007), this model involves students actively solving specific problems to acquire targeted knowledge. Furthermore, Shoimin (2014) emphasizes that the primary goal of PBL is to equip students with the ability to address real-life challenges while cultivating critical thinking and problem-solving skills. In the context of EFL speaking development, PBL fosters autonomous learning, promotes meaningful interactions, and compels students to communicate ideas, such as hypotheses and solutions, thereby enhancing oral proficiency through negotiation of meaning (Rahmawati & Ashadi, 2018).

Characteristics and Considerations

A fundamental shift in PBL, distinguishing it from traditional methods, is presenting the problem or issue first to drive inquiry, rather than delivering relevant material beforehand and then requiring application. PBL assignments vary in duration, from brief tasks to semester-long projects, accommodating diverse educational contexts. As a typically group-oriented approach emphasizing collaboration, it necessitates preparing students for effective teamwork to foster meaningful interactions essential for EFL speaking development (Rahmawati & Ashadi, 2018). In this process, students must:

- Analyze and specify the core issue.

- Identify their existing knowledge regarding the fundamental problems involved.
- Determine the necessary information, data, and equipment required to address the issue.
- Consider all potential options for a solution.
- Report and present the final results, often orally to negotiate meaning and enhance speaking proficiency (Rahmawati & Ashadi, 2018).

Syntax of Problem-based Learning

The implementation of Problem-Based Learning follows a systematic syntax comprising five distinct stages that drive student-centered inquiry, collaboration, and application of knowledge to real-world problems (Suwastini et al., 2021).

- 1) Student Orientation: The teacher introduces the learning objectives, provides foundational concepts, and offers instructions pertinent to the problem, initiating student engagement.
- 2) Organizing Students for Learning: The teacher guides students in identifying key concepts within the problem and organizes collaborative learning activities.
- 3) Guided Investigation: The instructor facilitates the collection of accurate data through investigations or experiments to explore viable solutions.
- 4) Developing and Presenting Work: The teacher supports the class in planning and producing high-quality work or artifacts to solve the problem, often involving oral presentations that promote negotiation of meaning and enhance speaking proficiency (Rahmawati & Ashadi, 2018).
- 5) Analyzing and Evaluating the Process: The instructor collaborates with students to reflect on, analyze, and assess the procedures and problem-solving processes, fostering critical thinking.

Benefits of Problem-based Learning

Implementing PBL offers comprehensive advantages for both students and instructors. Weimer (2007) categorizes these benefits into increased engagement, higher fulfillment, and the promotion of deeper knowledge acquisition. Students who participate in PBL often rate their own talents higher and develop essential skills for lifelong learning.

Furthermore, Nilson (2010) highlights that PBL provides opportunities to develop a wide array of competencies, including:

- Teamwork, leadership, and project management.
- Oral and written communication skills.
- Critical thinking, analysis, and self-directed learning.
- The application of course material to real-world examples and cross-disciplinary problem solving.

In summary, PBL shifts the focus of the learning process toward the student, allowing them to be more inventive and creative while the teacher acts as a guide.

METHOD OF THE RESEARCH

Research Design

This study employs an experimental research design to determine the effect of a deliberately administered intervention. Specifically, the researcher applied a pre-experimental design using a one-group pre-test and post-test model. The research procedure follows the formulation by Suprpto (2013), represented by the pattern $O \rightarrow X \rightarrow O_2$. In this pattern, O_1 is the pre-test, X is the treatment using the Problem-Based Learning method, and O_2 is the post-test.

Population and Sample

The population in this study consisted of all 18 eighth-grade female students at MTs. Putri 'Aisyiyah Palu. The researcher used total sampling, so all 18 students in the population were included in the study

sample. All of these students were consistently present throughout all stages of the study.

Instruments of Data Collection

The primary instrument used to collect data was an oral test administered as a pre-test and a post-test.

1. Pre-test: Administered before the intervention to assess students' initial speaking and language comprehension skills.
2. Intervention: The intervention consisted of six sessions using the Problem-Based Learning method.
3. Post-test: Administered after all treatment sessions are completed to measure improvements in students' speaking skills and mastery of the material.

The tests were conducted using the describing pictures method and matching pictures based on given instructions. Both tests (pre-test and post-test) had the same number of items but used different pictures to ensure the validity of the results.

Data Analysis Technique

The data obtained from the oral tests were analyzed quantitatively through several stages:

1. Calculation of Individual Scores: Each student's score was calculated based on the ratio of the score obtained to the maximum score, in accordance with the guidelines provided by Sudijono (2007).
2. Determination of the Mean: The researcher calculated the class mean for both the pre-test and post-test to assess the overall performance of the students.
3. Hypothesis Testing: To determine whether there is a statistically significant difference between the pre-test and post-test results, the researcher conducted a paired sample t-test. The calculated t-counted value was then compared with the t-table value at a significance level of 0.05 with a degree of freedom (df) of 17

(18 - 1) to determine whether the null hypothesis (H_0) was accepted or rejected.

FINDING AND DISCUSSION

Findings

This section presents research data obtained through pretest and posttest to evaluate the effectiveness of the Problem-Based Learning (PBL) method on the speaking skills of eighth-grade students at MTs. Putri 'Aisyiyah Palu. The primary instrument used to collect data was an oral test in the form of picture description.

Results of the Students' Speaking Skills

Test

The researcher administered a pre-test to determine the students' initial speaking ability and language comprehension before the intervention. After implementing the PBL method, the researcher administered a post-test to determine whether the students' speaking ability had improved. Based on the data analysis, the implementation of Problem-Based Learning showed a slight increase in student scores, although this increase was not statistically significant. A summary of the comparison of these scores is presented in the following table:

Table 1. Results of Statistical Analysis of Students' Speaking Skills

Statistical Components	Value
Sample Size (N)	18 students
Maximum Score	15
t-counted	1.177
t-table	2.110
Hypothesis Status	H_0 is accepted

Hypothesis Testing

To determine the significance of the improvement in students' skills, the researcher conducted a hypothesis test with a significance level of 0.05. The statistical calculations showed that the t-counted (1.177) was lower than the t-table value

(2.110). Based on this comparison, the null hypothesis (H_0) was accepted. This indicates that the implementation of the Problem-Based Learning method did not result in a significant improvement in the speaking skills of eighth-grade students at MTs. Putri 'Aisyiyah Palu within the context of this study. This lack of significance was influenced by several factors, including the difficulty level of the questions administered and the researcher's challenges in strictly implementing all stages of the PBL framework.

Discussion

This study was conducted starting on January 31, 2023, involving 18 eighth-grade female students at MTs. Putri 'Aisyiyah Palu. The main focus of the study was to test the effectiveness of the Problem-Based Learning (PBL) model in addressing students' speaking skills, both from linguistic and psychological perspectives. Based on the data analysis results, although there was a slight improvement in students' speaking skills after the intervention, this improvement was not statistically significant because the t-counted (1.177) was lower than the t-table (2.110) at a significance level of 0.05.

Analysis of PBL Method Implementation

During the six treatment sessions, the researcher applied a PBL framework focused on problem-solving through group discussions and the use of visual aids. In the initial sessions, students appeared to require extensive clarification as this method was a new approach for them. Although the intensity of discussions was increased in subsequent sessions, observations indicated that most students still struggled to express their ideas orally in English. This confirms the presence of psychological barriers such as shyness, nervousness, and a lack of self-confidence experienced by students when they had to speak in front of their peers.

Comparison with Previous Research

The findings in this study offer a critical perspective when compared to several previous studies. Khotimah (2014) reported that the implementation of PBL successfully increased students' enthusiasm and oral skills through social collaboration. However, the failure to achieve statistical significance in this study aligns more closely with the concerns raised by Asra and Sumiati (2019), who stated that the inappropriate selection of methods or materials can lead to low student engagement. In this case, the mismatch between the complexity of the method and the students' basic proficiency level was a key factor in this failure.

Factors Causing the Lack of Significance

Based on an in-depth analysis of the learning process, there are two main factors that led to the suboptimal results of this study:

- **Material Difficulty Level:** The researcher identified that the questions provided were too difficult for eighth-grade students to understand and answer. This triggered linguistic issues, where limited vocabulary and grammar hindered students from formulating problem solutions into proper English sentences.
- **Inconsistency in Syntax Application:** The researcher acknowledged challenges in strictly following all PBL syntax stages during the treatment process. As emphasized in the theory, the success of PBL heavily depends on the teacher's role in systematically guiding each stage to foster students' independence and creativity. Without the full implementation of the PBL framework, the benefits of PBL in enhancing students' active engagement cannot be optimally achieved.

Overall, although PBL theoretically offers various benefits for the development of critical thinking skills and oral proficiency, its effectiveness in practice is highly determined by students' readiness as well as

the teacher's ability to adjust the difficulty level of tasks to the linguistic capacity of the learners.

CONCLUSION AND SUGGESTION

Conclusion

Based on the results of the data analysis and discussion, it can be concluded that the implementation of the Problem-Based Learning (PBL) method among eighth-grade students at MTs. Putri 'Aisyiyah Palu has not yet resulted in a significant improvement in their speaking skills. Statistically, this is evidenced by the t-counted value (1.177) being smaller than the t-table value (2.110), so the null hypothesis (H_0) is accepted. This study successfully identified that the main obstacles students face in speaking English stem from two main factors: 1) Linguistic Constraints: Limited vocabulary mastery, poor understanding of grammar, and minimal pronunciation skills; and 2) Psychological Barriers: The emergence of nervousness, low self-confidence, and shyness about practicing English in the classroom environment. Although PBL is theoretically an effective method for increasing students' active participation and critical thinking skills, its effectiveness in this study was hindered by two technical factors. First, the difficulty level of the questions or problems provided by the researcher exceeded the students' linguistic comprehension capacity (too difficult). Second, the researcher was unable to fully and systematically implement all stages of the PBL process during the treatment phase. Therefore, the success of the PBL method in improving speaking skills is highly dependent on the alignment between the complexity of the problems presented and the students' language proficiency level, as well as the teacher's precision in carrying out each established learning procedure.

Suggestion

For students, it is crucial to understand the importance of learning English and to realize that mastering speaking skills will help them communicate more fluently. Students need to make independent efforts to learn a wide range of vocabulary, understand grammar, and build confidence when speaking English without feeling embarrassed about any mistakes they might make. Additionally, students are encouraged to regularly engage with various English-language media, such as books, music, and films, to consistently enrich their understanding and skills. Teachers are expected to be more creative and innovative in providing English learning materials to help students feel more motivated, particularly in improving their speaking skills. Teachers must be able to offer the most effective methods or media to support improvements in students' skills and actively strive to identify and resolve the speaking difficulties students face in the classroom. Finally, for future researchers planning to conduct research in the field of speaking skills, it is recommended to apply the Problem-Based Learning method by incorporating more engaging activities during the intervention phase. The use of a variety of engaging activities is crucial for fostering students' desire and enthusiasm to learn English more actively and deeply.

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