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# Application of Problem-Based Learning (PBL) in Capital Market Material at SMA Negeri 3 Palembang

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## *Abstrak*

*Pembelajaran Berbasis Masalah (PBL) adalah metode pengajaran yang menempatkan siswa sebagai pusat proses pembelajaran dengan melibatkan mereka dalam memecahkan masalah dunia nyata. Studi ini bertujuan untuk mengevaluasi efektivitas PBL dalam pengajaran materi Pasar Modal kepada siswa kelas X.4 di SMA Negeri 3 Palembang, serta untuk meneliti respons siswa terhadap pengalaman belajar. Studi ini menggunakan pendekatan kualitatif deskriptif melalui observasi kelas, bantuan pengajaran, dan praktik mengajar mandiri. Hasil menunjukkan bahwa PBL berhasil meningkatkan keterlibatan aktif siswa, pemahaman konseptual, dan keterampilan analitis dalam mempelajari topik Pasar Modal. Rata-rata nilai kelas meningkat dari 80 menjadi 90, partisipasi aktif siswa meningkat dari 89% menjadi 97%, dan tingkat kepuasan meningkat dari 92% menjadi 98%. Namun, beberapa tantangan dihadapi, seperti kesulitan mempertahankan fokus di antara beberapa siswa dan keterbatasan waktu belajar. Secara keseluruhan, PBL terbukti efektif dalam pengajaran ekonomi dan mampu mendorong siswa untuk berpikir kritis dan berpartisipasi aktif sepanjang proses pembelajaran. Refleksi terhadap pengalaman ini juga diharapkan dapat meningkatkan praktik pembelajaran di masa mendatang.*

***Kata kunci*: *Pembelajaran Berbasis Masalah, Pasar Modal, Pendidikan Ekonomi, Berpikir Kritis.***

## Abstract

Problem-Based Learning (PBL) is an instructional method that places students at the center of the learning process by engaging them in solving real-world problems. This study aims to evaluate the effectiveness of PBL in teaching Capital Market material to Class X.4 students at SMA Negeri 3 Palembang, as well as to examine students' responses toward the learning experience. The study employed a descriptive qualitative approach through classroom observation, teaching assistance, and independent teaching practice. The results indicate that PBL successfully increased students' active involvement, conceptual understanding, and analytical skills in learning the Capital Market topic. The average class score increased from 80 to 90, students' active participation rose from 89% to 97%, and satisfaction levels improved from 92% to 98%. However, several challenges were encountered, such as difficulty maintaining focus among some students and limited learning time. Overall, PBL proved to be effective in economics instruction and capable of encouraging students to think critically and participate actively throughout the learning process. Reflection on the experience is also expected to enhance future learning practices.

**Keywords**: Problem-Based Learning, Capital Market, Economics Education, Critical Thinking.

## 1. INTRODUCTION

Education is vital in producing human resources capable of thinking critically, creatively, and adapting to the rapid advancements of the current period (Zaakiyyah, 2024). In this setting, the learning process in schools should not only focus on theoretical delivery, but also offer meaningful and relevant learning experiences to pupils (Bell & Bell, 2020)Ferdaus & Novita, 2023). Educators' teaching approaches should foster students' active participation, critical

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thinking, and the capacity to integrate concepts gained in class with real-world problems (Williyan et al., 2024; Crompton et al., 2024).

One teaching method considered suitable to meet these needs is Problem-Based Learning (PBL) (Zhao et al., 2020). In this approach, students become the center of the learning process, where they are presented with real problems that must be analyzed and solved through discussion, collaboration, and information gathering. PBL not only strengthens students' cognitive abilities but also enhances communication skills, teamwork, and decision-making skills (Siregar, 2025; Matondang et al., 2020).

PBL is especially useful in economics lectures, particularly when discussing capital markets. Capital market content is intimately tied to real economic occurrences that involve analytical skills and the capacity to create arguments, rather than just theory (Shiller, 2020). The capital market plays a significant role in the economy as a source of funding, an investment tool, and an indicator of economic stability (Sofiyan, 2024). Thus, students need to understand these concepts in context so they can relate them to everyday economic life.

In actual classroom practice, students often show passive attitudes when traditional teaching methods are used (Haidet et al., 2024) . They tend to listen to explanations from the teacher without opportunities to analyze or solve problems independently. This leads to low levels of deep understanding of the material, including capital market concepts that require logical thinking skills (Baihaqqy & Sari, 2020). Therefore, an active and student-centered learning approach is needed.

The implementation of PBL at SMA Negeri 3 Palembang, particularly in Class X.4, was carried out to improve students' understanding of capital market concepts. Through PBL, students are encouraged to identify problems, analyze capital market phenomena, conduct group discussions, and present the solutions they have developed (Pratama & Aprizal, 2024). This process is expected to help students build stronger conceptual understanding compared to traditional theory-focused learning (Borup et al., 2020).

Furthermore, this learning activity gives pre-service teachers significant experience in using novel teaching strategies in the classroom (Yildiz Durak, 2021). The teacher no longer works only as an information provider, but rather as a facilitator who conducts discussions and provides aid when pupils meet challenges (Gautam & Agarwal, 2023). This leads to more active and fruitful teacher-student relationships.

## 2. METHOD

This study used a descriptive qualitative approach to provide a full explanation of the process, effectiveness, and student responses to the use of Problem-Based Learning (PBL) in teaching the Capital Market topic. This strategy was chosen because it allows researchers to study learning phenomena in their normal classroom setting (Adams et al., 2022).

### *Type and Approach of the Study*

The study is classified as descriptive research, which stresses presenting information methodically and precisely about the economic learning scenario utilizing the PBL paradigm (Lubis & Lubis, 2022). A qualitative method was utilized because the focus of the study is on the learning process rather than the final results. Data were obtained through observations of student activities, classroom interactions, field notes, and behavioral patterns throughout learning (Katz Buonincontro & Anderson, 2020).

### *Location and Participants*

The research was conducted at SMA Negeri 3 Palembang, located on Jl. Jend. Sudirman Km. 3, Palembang. The participants were 37 students of Class X.4, consisting of 12 male and 25 female students. This class was selected based on teacher recommendations and its diverse academic abilities.

***Research Design and Procedures***

The research was carried out through several stages (Schoch, 2020):

***Initial Observation***

Conducted to:

1. examine classroom conditions,
2. understand student characteristics,
3. observe communication patterns,
4. identify learning needs.

Observations took place over seven days.

***Lesson Planning***

This stage included:

1. preparing lesson plans based on the Merdeka Curriculum,
2. identifying contextual issues related to the capital market,
3. designing PBL-based worksheets (LKPD),
4. preparing learning media (presentations, stock market videos, IHSG charts, etc.).

***Implementation of PBL***

The learning process followed the steps of the PBL model (Nurfajriah et al., 2022):

Problem Identification

The instructor presented real-world issues related to the capital market.

Group Formation

Students were divided into groups of 4-6 members.

Individual and Group Investigation

Students analyzed information, discussed findings, and formulated solutions.

Presentation of Findings

Each group presented the result of their analysis.

Reflection and Evaluation

Teacher and students reflected on the learning process together

***Evaluation and Documentation***

Conducted through (Morris et al., 2021):

1. assessment of group discussions,
2. evaluation of presentations,
3. documentation of classroom activities,
4. formative assessments such as quizzes,
5. student reflections.

***Data Collection Techniques***

Observation

Used to observe (Mirhosseini, 2020):

1. students' behavior,
2. participation during discussion,

3. student–teacher interaction,
4. students' ability to identify and analyze problems.

Limited Interviews
Conducted with:
1. economics teachers,
2. selected groups of students.

Documentation
Including (Aghajani et al., 2020):
1. photos and videos of activities,
2. lesson plans,
3. student assignments,
4. and other supporting materials.

## 3. RESULT AND DISCUSSION

### *Result*

The findings were acquired via classroom observations, student assessments, interviews, documentation, and field notes during the PBL implementation in Capital Market learning (Sugeng & Suryani, 2020).

**Table 1.** Comparison of Learning Outcomes

| **Aspect** | **Before PBL** | **After PBL** |
|---|---|---|
| Average Score | 80 | 90 |
| Student Participation | 89% | 97% |
| Student Satisfaction | 92% | 98% |

Before the implementation of Project-Based Learning (PBL), the learning environment was predominantly lecture-based, which led to limited student engagement. Only about 6–8 students (22%) were actively involved in the lessons, with the majority remaining passive, which resulted in a relatively low level of conceptual understanding. The pre-test scores, averaging 80, indicated that while students had a basic level of knowledge, their ability to apply concepts deeply was still limited. The introduction of PBL aimed to address this issue by fostering greater engagement and understanding, but several challenges emerged. Some students struggled to stay focused due to the higher level of autonomy required by PBL, which can be difficult for students accustomed to more passive learning styles. Time limitations also posed a challenge, as PBL necessitates more time for exploration and in-depth analysis, something that traditional schedules did not accommodate. Additionally, technical issues like projector malfunctions disrupted the learning process, especially since many PBL activities relied on digital tools for presentations. Some students also encountered difficulties when interpreting stock market charts, an integral part of the PBL tasks, which hindered their ability to draw meaningful insights from the data.

To overcome these challenges, several solutions were proposed to improve the PBL experience. These included increasing student engagement through more interactive learning methods, such as think-pair-share or peer teaching, which could ensure that all students are actively involved in the process. Extending project timelines would also allow for deeper exploration of topics, along with the inclusion of reflective practices that help students process their learning. Moreover, ensuring reliable technical infrastructure and having backup

plans in place for potential disruptions would help mitigate the impact of technical issues. To help students better interpret stock market charts, additional resources, such as tutorials or guides, could be provided. By implementing these solutions, the effectiveness of PBL in enhancing student engagement and conceptual understanding could be significantly improved, better preparing students for real-world challenges. The comparison of learning outcomes before and after PBL, as shown in Table 1, reflects this improvement, with average scores increasing from 80 to 90, student participation rising from 89% to 97%, and student satisfaction growing from 92% to 98%.

**Discussion**

The study highlights that Project-Based Learning (PBL) has proven successful in improving students' thinking skills and participation. By engaging students with real-world issues, particularly those related to the financial market, PBL made learning more relevant and engaging, as supported by Razak et al. (2022). This approach aligns with previous research, which emphasizes that PBL fosters increased student participation and enhances critical thinking. One of the key improvements observed was the significant rise in student participation, from 89% to 97%. This increase was attributed to several factors, including small-group discussions, where students could actively engage in collaborative problem-solving; opportunities for independent information gathering, which encouraged autonomy and deeper exploration; presentation responsibilities, which gave students a platform to share their findings; and increased student confidence, as they became more comfortable with taking ownership of their learning.

Additionally, the improvement in understanding capital market concepts was evident, as reflected in the average score increase from 80 to 90, indicating notable learning gains. This improvement underscores the effectiveness of PBL in enhancing students' grasp of complex topics by connecting theoretical knowledge with real-world applications. The teacher's role as a facilitator was crucial in the PBL process. Teachers were responsible for guiding problem identification, supporting students in making connections between theory and real-life cases, asking probing questions that encouraged deeper thinking, and providing constructive feedback that helped refine students' understanding.

Several supporting factors contributed to the success of PBL, including adequate school facilities, which provided the necessary tools for learning; student enthusiasm, which drove engagement and participation; and guidance from subject teachers, who helped students navigate the learning process. However, some obstacles were encountered during the implementation of PBL, such as lack of focus among some students, insufficient time for analysis, and occasional technology issues. Despite these challenges, the overall effectiveness of PBL was not diminished. The study concluded that, despite the difficulties, the benefits of PBL in fostering student engagement, critical thinking, and a deeper understanding of the subject matter far outweighed the obstacles, making it an effective teaching strategy.

## 4. CONCLUSION

Based on the findings, several conclusions can be drawn. First, Project-Based Learning (PBL) effectively promotes critical thinking and active engagement in learning, particularly in subjects like capital markets. It helps students make real-world connections, which enhances their understanding and interest. Second, PBL has been shown to improve academic performance, participation, and student happiness, as students become more actively involved in their learning process, leading to better outcomes. Third, addressing the challenges faced during PBL implementation, such as improving media usage and time management, can significantly enhance the overall learning experience. Fourth, PBL proves to be an effective strategy for teaching economics at the high school level, offering a more interactive and

practical approach compared to traditional methods. Lastly, PBL fosters stronger teacher-student interaction, which contributes to increased productivity and a more collaborative learning environment.

In terms of implications, these findings suggest that educators should consider adopting PBL as a central teaching strategy, as it leads to deeper student engagement and more meaningful learning experiences. Furthermore, schools should focus on optimizing technological resources and time allocation to ensure that PBL can be implemented effectively.

For future research, further studies should explore how PBL can be adapted and scaled across different subjects and educational levels to measure its long-term impact on students' skills and academic success. Additionally, investigating the role of student autonomy and collaboration in PBL could provide valuable insights into how these elements influence learning outcomes and student satisfaction.

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