

Effectiveness of the *Problem-Based Learning* Model in the Finance Subject of Class XI, State Vocational High School 1 Antang Kalang, Academic Year 2025 – 2026

Ramadanita¹, Ifan Julianta², Siti Halimah³

^{1,3}Universitas Muhammadiyah Sampit, Indonesia

Article Info

Article history:

Received: 29 June 2026

Published: 6 July 2026

Keywords:

Problem-Based Learning;

Learning Effectiveness;

Vocational High School;

Finance Subject.

Abstract

This study aims to analyze the effectiveness of the application of the Problem-Based Learning model in the subject of Finance in class XI of SMK Negeri 1 Antang Kalang in the 2025/2026 Academic Year. This research is based on the fact that the learning process is still dominated by a conventional approach that places the teacher as the center of learning activities, so that student involvement is not optimal and learning outcomes still need to be improved. The study uses a descriptive qualitative approach to gain a deeper understanding of the learning process, student involvement, their responses during the learning process, and various obstacles faced in implementing the model. The research data were obtained through systematic classroom observations, in-depth interviews with the Finance teacher and three students who served as key informants with the initials RA, NK, and AL, and supported by documentation related to the learning implementation. All collected data were analyzed using the Miles and Huberman model through three main stages: data reduction, data presentation, and conclusion drawing. Research findings show that the application of the Problem-Based Learning model can improve students' critical thinking skills, foster collaboration among students, and encourage a shift in learning methods from mere memorization to a more meaningful and contextualized understanding of concepts. Based on these research results, it can be concluded that the application of the Problem-Based Learning model makes a positive contribution to improving the quality of finance learning in vocational schools by connecting theoretical concepts with financial management practices encountered in everyday life.

This is an open access article under the [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/)



Corresponding Author:

Ramadanita

Universitas Muhammadiyah Sampit, Indonesia

Email Coresspondent: decocotata31@gmail.com

1. INTRODUCTION

Based on Law Number 20 of 2003, it is an effort that is carried out consciously, directed, and planned to realize a learning process that can optimize the development of the potential of each student. In the current era, the development of the industrial world and the world of work requires graduates who not only have academic abilities, but also the ability to think critically, analyze problems, and solve various issues faced in the work environment. However, conditions found in the field show that learning activities in Vocational High Schools (SMK) are still dominated by conventional learning approaches with learning patterns that place the teacher as the center of learning activities (*Teacher-Centered Learning*). In this learning pattern, the teacher delivers material mostly through lectures, with students tending to act as recipients of information without much active involvement. This situation results in students having less opportunity to develop critical thinking skills, improve problem-analysis skills, or find solutions independently.

The tendency for students to remain passive is a significant issue, particularly in Finance, a core subject in vocational high schools. Finance requires students not only to understand concepts but also to apply them in real-life situations, such as budgeting, analyzing profit and loss statements, and managing financial risk. Therefore, learning that relies solely on memorization fails to provide students with a comprehensive understanding. Therefore, it is necessary to implement learning models that encourage active student involvement in every stage of the learning process, one of which is...*Problem-Based Learning*. This model uses real-life problems as the primary learning material, encouraging students to seek information, connect theory to real-world conditions, and collaborate to find appropriate solutions.

The results of preliminary observations conducted in class XI of SMK Negeri 1 Antang Kalang indicate that the implementation of Finance learning takes place using a variety of methods. Learning outcome data shows that 37 students obtained an average class score of 70, while the learning completion level achieved by the class was 78%. Although this figure seems quite good, there are still several students who have not reached the Minimum Completion Criteria (KKM). Based on the results of interviews with teachers, it was found that learning activities still mostly use the lecture method as the main approach. The application of the learning model of *Problem-Based Learning* has just begun to be implemented by a subject teacher (Mrs. M). According to the teacher's experience, the implementation of this model has had a positive impact on increasing students' learning motivation and critical thinking skills. However, several obstacles were encountered in its implementation, such as limited learning time, teacher readiness to implement the model, and differences in learning abilities among students.

Until now, most previous studies, such as research by Abdullah et al. (2024), still use a quantitative approach that focuses on testing the influence of the model. *Problem-Based Learning* on learning outcomes. This research has not yet explained much about the process of implementing the learning model. *Problem-Based Learning* takes place in the classroom as a whole. Based on these considerations, this study uses a qualitative descriptive approach so that the phenomena studied can be understood more deeply. Based on these considerations, this study uses a qualitative descriptive approach so that the phenomena studied can be understood more deeply with the aim of gaining a more comprehensive understanding of the effectiveness of the implementation of the Problem-Based Learning model in Finance learning in class XI of SMK Negeri 1 Antang Kalang. This study not only examines the learning process, but also looks at the involvement of students, their responses during the learning process, while identifying various factors that support and hinder the implementation of the *Problem-Based Learning* model in the classroom

2. RESEARCH METHODS

This study applies a qualitative approach with a descriptive research type. This approach is used to obtain a comprehensive picture of the implementation of the problem-based learning model in financial subjects and to understand the process of its implementation in depth in the school environment. The study was conducted for two months, namely from June to July 2026. The study was conducted at SMK Negeri 1 Antang Kalang located at Jalan Serunai Number 13, Tumbang Sangai Village, Telaga Antang Kalang District, Kotawaringin Timur Regency, Central Kalimantan Province. The selection of this school is based on the consideration that the application of the problem-based learning model is still relatively new, so it needs further study to determine the effectiveness of its implementation.

The research subjects included all 11th-grade students taking the Finance course at SMK Negeri 1 Antang Kalang, totaling 37 students. To ensure the data obtained was more

2260 | **Effectiveness of the *Problem-Based Learning* Model in the Finance Subject of Class XI, State Vocational High School 1 Antang Kalang, Academic Year 2025 – 2026** (Ramadanita)

in line with the research needs, the selection used a purposive sampling technique, namely determining informants based on considerations that align with the research objectives. The research informants consisted of three students with the initials RA, NK, and AL, as well as a finance teacher, Mrs. M. The selection of informants was based on their involvement in the learning process and their ability to provide information that is in line with the research needs. This research focuses on the effectiveness of the application of the model *of problem-based learning, which* is analyzed through several indicators, including increasing student understanding of the material and their active involvement during learning activities.

Data collection was conducted through triangulation techniques, combining several data collection methods to ensure higher levels of accuracy. The research data sources were obtained through direct classroom observation, semi-structured interviews with teachers and students, and the collection of documents related to the learning process. Observation and interview guidelines were developed based on predetermined learning effectiveness indicators. The next stage was data analysis using the Miles and Huberman model, which includes three main steps: data reduction, data presentation, and conclusion drawing and verification. These steps were taken to ensure the data obtained could be systematically organized and produce reliable conclusions.

3. RESULTS AND DISCUSSION

3.1. Research Results

a. Research Location and Participant Profile

SMK Negeri 1 Antang Kalang is a public vocational high school located in Telaga Antang District, East Kotawaringin Regency, Central Kalimantan Province. The school is committed to developing student competencies by providing knowledge and skills relevant to the demands of the Business and Industrial World (DUDI). In this study, the application of the learning model *Problem Based Learning*. This study was conducted in the teaching of finance subjects to 11th-grade students. The research informants consisted of three students with different characteristics: RA as a student with high learning motivation, NK as a student who was active during learning, and AL as a student who still experienced some difficulties in learning. In addition, this study also involved Mrs. M as a Finance subject teacher who played a role in implementing the *Problem-Based Learning model* in the classroom.

b. Interview Data Presentation

Based on the interview results, RA revealed that the implementation of the Problem-Based Learning model had a positive impact on the development of his learning outcomes. RA's grades improved because he began to understand the material better, rather than simply memorizing it. Through group discussions, RA found it easier to solve accounting and financial problems with his peers. Furthermore, he also gained more confidence in asking questions and expressing opinions during the learning process.

NK expressed a similar sentiment. He stated that problem-based learning makes financial material easier to understand because it relates to situations frequently encountered in everyday life. After participating in the problem-based learning model, NK's learning outcomes showed significant improvement. In addition to conceptually understanding the material, NK was also able to apply this knowledge in his daily life, for example by prioritizing monthly expenses and developing a more planned personal budget.

Unlike RA and NK, AL explained that the implementation of the Problem-Based Learning model had not significantly improved his learning outcomes. According to AL, some of the Finance material was still quite difficult to understand when analyzed independently in groups. AL found it easier to understand the material if the teacher provided a direct explanation first. AL's activeness during learning also varied and was influenced by the difficulty level of the material being studied.

c. Observation Data Recording

Observations showed that RA and NK displayed good attention and concentration throughout the learning process. Both actively participated in group discussions, were able to express ideas and opinions, and readily accepted input from the teacher and their peers.

Meanwhile, observations of AL showed that the student still tended to be passive during learning activities and required teacher guidance to complete assigned tasks. AL also appeared to have difficulty analyzing financial problems independently, particularly with open-ended questions, requiring teachers to guide the learning process.

Table of Results of Analysis of the Effectiveness of Problem-Based Learning Model Based on Subject Characteristics

Effectiveness Indicators	RA subjects	Subject NK	AL Subject
Learning Evaluation Result Value Achievement	The value has increased considerably and has reached KKM.	The grade indicates gradual improvement in each learning evaluation.	Learning outcomes have not fully improved, and there are still difficulties with some of the material provided.
Consistency in Improving Learning Outcomes	The development of learning outcomes appears stable and continues to improve over time.	Show good progress and remain active in group discussion activities	The development of learning outcomes is still changing and is influenced by the level of understanding of the material being studied.
Level of Understanding of Learning Material	Understand financial material well and be able to master important concepts	Understand the material well and be able to apply it in daily financial management	Understanding of the material is still limited to basic concepts, so it still requires guidance from the teacher during the learning process.

3.2. Discussion

Based on triangulation results from various data sources, this study shows that the implementation of the Problem-Based Learning model in Finance learning in grade XI of SMK Negeri 1 Antang Kalang provides a more comprehensive picture of the implementation of the learning process in the classroom. Judging from the results of the learning evaluation, the improvement in student grades did not occur equally in each individual. Students with high learning readiness, such as RA and NK, showed better development because problem-based learning was able to encourage critical thinking skills, resulting in a better understanding of the material and an increase in their grades. Conversely, students who still had difficulty analyzing the material, such as AL, did not show the same improvement. In the initial stages of implementation, *Problem-Based Learning*, AL still requires direct explanations from the teacher, resulting in slower learning outcomes. The subject teacher, Ms. M., explained that the transition from conventional learning to the implementation of the Problem-Based Learning model requires time for each student to adapt to the different learning patterns.

In terms of student participation levels, the research results show that the implementation of the Problem-Based Learning model can create a learning environment that encourages students to be more active in collaborating and engaging in discussions. Interaction between students during learning makes them more interested in participating in learning activities. However, the teacher explained that the number of students who are consistently active in a class still ranges from 50% to 60%. Meanwhile, other students still tend to be passive or less involved in group discussions. This condition is influenced by previous learning experiences and a lack of confidence when expressing opinions in front of the class.

Advantages of applying the model: *Problem-Based Learning*. The most visible improvement is in students' increased understanding of finance. Material previously considered difficult due to its many concepts and calculations becomes easier to understand when related to everyday situations. Teachers also implement various project-based activities, such as group cash management simulations and family budgeting. These activities help students connect theory with practice, enabling them not only to memorize the material but also to understand how to apply it. Thus, the application of the Problem-Based Learning model can guide students not only to memorize the material but also to understand the concepts and be able to apply them in their daily lives.

4. CONCLUSION

Based on the research findings that have been obtained, it can be concluded that the implementation of the *Problem-Based Learning model* in the subject of Finance in class XI of SMK Negeri 1 Antang Kalang shows good effectiveness and can improve the quality of the learning process while helping students obtain a more optimal understanding of the material. Although the increase in learning outcomes does not occur evenly in all students, the learning model of *Problem-Based Learning* able to increase the courage to express opinions, develop critical thinking skills, and change the way students learn from memorizing to understanding concepts more meaningfully.

Students with better learning abilities, such as RA and NK, showed improved learning outcomes and more consistent activeness. Meanwhile, students who still had difficulty analyzing the material, such as AL, continued to show progress, although they still needed guidance and direction from the teacher (*scaffolding*) and mentoring through project-based learning activities related to real situations. Therefore, the application of the *Problem-*

2263 | **Effectiveness of the Problem-Based Learning Model in the Finance Subject of Class XI, State Vocational High School 1 Antang Kalang, Academic Year 2025 – 2026 (Ramadanita)**

Based Learning model needs to be adjusted to the characteristics and needs of each student so that the results obtained can be more optimal.

5. ACKNOWLEDGMENTS

The author would like to thank the Faculty of Teacher Training and Education, Muhammadiyah University of Sampit for all forms of academic support, guidance, and facilities provided during the implementation of the research until the preparation of this article. The author also expresses appreciation and gratitude to the principal, all teachers, staff, and all parties at SMK Negeri 1 Antang Kalang who have granted permission, established cooperation, and helped during the implementation of research data collection. Thanks, are also extended to the students who served as informants, who have been willing to take the time and provide the necessary information so that this research can be well-impressed.

6. Bibliography

- Abdullah, & Munawarroh, F. (2024). Pobleem Based Learning Untuk Meningkatkan Keterampilan Berpikir Kritis Siswa. *Jurnal Educatio*, 156-162.
- Baharsyah, T., & Nurjannah, I. (2023). Pengaruh Model Problem Based Learning Terhadap Hasil Belajar Siswa Kelas Xi Tkr Di Smk Negeri 1 Jabon. *Journal Of Vocational And Technical Education*, 115-124.
- Darmansyah, A., Susanti, A., & Rahman , A. A. (2023). Pengembangan Modul Ajar Berbasis Problem Based Learning Untuk Meningkatkan Literas Finansial Siswa Sekolah Dasar. *Jurnal Basicedu*, 3630-3645.
- Dulyapit, A., Supriatna, Y., & Sumirat, F. (2023). Penerapan Model Problem Based Learning Pbl Untuk Meningkatkan Hasil Belajar Siswa Kelas V Di Uptd Sd Negeri Tapos 5 Kota Depok. *Bima Journal Of Elementary Education*, 1-8.
- Hermansyah. (2020). Problem Based Learning In Indonesian Learning. *Jurnal Uns*, 2258-2261.
- Isma, T. W., Putra, R., Wicaksana, T. I., Tasrif, E., & Huda, A. (2021). Peningkatan Hasil Belajar Siswa Melalui Problem Based. *Jurnal Ilmiah Pendidikan Dan Pembelajaran*, 155-160.
- Julianta, I., Norhayatun, Hadianur, M., Norlela, & Zahroni, K. (2020). Efforts To Strengthen Student Character Value Through The Talking Stick Method In Social Studies Learning. *Journal Of Social Studies Progress*, 79-82.
- Khoir, M., & Murlita. (2024). The Effectiveness Of Village Financial Management On The Welfare Of The People Of Lubuk Sepang Village, Pendopo District, Empat Lawang Regency. *Jurnal Indonesia : Manajemen Informatika Dan Komunikasi*, 1960-1966.
- Mukminin, D. S., & Yuswono, L. C. (2021). Model Problem-Based Learning Untuk Meningkatkan. *Jurnal Pendidikan Vokasi Teknik Otomotif* , 47-55.
- Nuris, D. M., & Rizqi, A. I. (2022). Online Problem Based Learning Pada Pembelajaran. *Journal Of Education Action Research*, 125-131.
- Pramitha, D. A., & Wahjudi, E. (2020). Penerapan Model Pembelajaran Problem Based Learning (Pbl). *Jurnal Pendidikan Ekonomi Undiksha*, 216-223.
- Rahmawati, C., Fitriani, D., Haira, F., & Panorama, M. (2022). Pengaruh Layanan Dan Kinerja Karyawan Terhadap Kepuasan,Kepercayaaan Dan Loyalitas Nasabah (Studi Kasus Bank Muamalat Kantor Cabang Palembang). *Sibatik Journal*, 1073-1085.