

IMPLEMENTATION OF PROJECT-BASED LEARNING TO IMPROVE BANKING STUDENT COMPETENCIES

Novitasari^{1*}, Nayla Laudya Kirani²

^{1,2}Politeknik Negeri Jakarta, West Java, Indonesia

*Correspondence email: novitasari@akuntansi.pnj.ac.id

ABSTRACT

There is still a gap between the competencies possessed by university graduates and those required by the banking industry. This gap is evident in analytical skills, problem-solving, professional communication, utilization of financial technology, and the ability to integrate theoretical knowledge into work practices. To address this issue, a learning model is needed that can effectively connect theory and practice. One approach that can be applied is Project-Based Learning (PjBL), a learning model that provides students with the opportunity to identify problems, design solutions, collect and analyze data, and produce accountable outputs. This study aims to analyze the application of Project-Based Learning in improving the competencies of banking students through assessments involving students and lecturers. This study uses a descriptive quantitative approach with primary data obtained through questionnaires, assessment rubrics, and documentation. Data analysis was conducted using descriptive statistics. The results show that the implementation of Project-Based Learning has a positive impact on improving the competencies of banking students, especially in the aspects of technical competency, teamwork, and problem-solving. The research findings also indicate that the implemented projects are highly relevant to the needs of the banking industry. From an academic perspective, Project-Based Learning can be used as the main learning model in practice-based banking courses. Practically, the banking industry can utilize student project results as a form of collaboration with universities in human resource development. This research's contribution lies in providing empirical evidence that Project-Based Learning can improve students' banking competencies through an active, contextual, and problem-oriented learning process. It can also serve as a reference for banking study programs in developing industry-based curricula that are more adaptive to workplace needs.

Keywords: Banking, Competence, Project Based Learning, Problem solving, Teamwork

1. INTRODUCTION

The increasingly complex development of the banking industry due to digital transformation, changes in consumer behavior, increased regulatory demands, and advances in financial technology have brought about changes in the competency requirements of human resources in the banking sector. The banking industry now requires not only graduates with a conceptual understanding of financial intermediation functions, bank operations, credit analysis, and risk management, but also workers with critical thinking, problem-solving, professional communication, digital literacy, data analysis skills, and the ability to adapt to changing business environments.

However, a growing phenomenon indicates a persistent competency gap between the competencies possessed by university graduates and those expected by the banking industry. Many graduates possess adequate theoretical knowledge but are unable to fully apply banking concepts to real-world problems. This situation indicates a gap between the academic competencies acquired by students during their studies and the practical competencies required by banking institutions.

Based on initial observations in the banking learning process, students generally still experience difficulties when faced with real-world situations such as creditworthiness analysis, interpreting prospective customer financial statements, identifying banking risks, developing service strategies, and making business decisions. The dominant teaching method, which still relies on lectures and theoretical delivery, results in students acting more as recipients of information than as problem solvers. Consequently, their ability to connect academic concepts with industrial practices has not developed optimally.

This issue has become increasingly important with the shifting paradigm of higher education, which demands graduates possess 21st-century skills. Universities are required to produce graduates who excel not only academically but also possess professional skills relevant to the needs of the workplace. The policy of strengthening the link between higher education and industry through the "link and match" concept emphasizes the importance of learning that provides students with real-world experiences. In the context of banking education, a learning approach is needed that can provide professional experience through problem-solving and product creation relevant to industry needs.

One learning approach deemed relevant to address this need is Project-Based Learning (PjBL). According to (Siminto et al., 2025), PjBL is a learning method that places real-world projects at the center of the learning process, enabling students to actively engage in designing, analyzing, solving problems, and producing specific products or solutions. Through PjBL, students not only understand concepts theoretically but also gain practical experience that resembles professional activities.

In banking education, the implementation of Project-Based Learning (PjBL) can be carried out through various activities such as preparing credit analyses, creating bank performance analysis reports, developing customer service models, simulating bank operational processes,

and conducting community financial literacy projects. These activities provide students with opportunities to integrate banking knowledge with analytical, communication, collaboration, and decision-making skills.

Various previous studies have shown that Project-Based Learning (PBL) positively contributes to improving student competency. Research by (Yeh et al., 2011) explains that project-based learning can improve students' competency in applying concepts, solving complex problems, and producing meaningful learning products. Furthermore, (D. S. Sari & Wulanda, 2019) state that PjBL can develop students' creative thinking skills. Research by (Kokotsaki et al., 2016) also shows that PjBL can increase student engagement and encourage students to become active learners.

Although numerous studies on Project-Based Learning (PBL) have been conducted, most previous research has focused on improving students' learning outcomes, motivation, creativity, and critical thinking skills in general. For example, research by (Lesmana & Jaedun, 2015) only analyzed the effectiveness of Project-Based Learning in improving student learning outcomes. Similarly, research by (Anggraini & Wulandari, 2021) examined the effectiveness of Project-Based Learning in increasing student engagement. This study specifically examined This study examines the application of Project-Based Learning (PjBL) to improve banking students' competencies. Furthermore, there are still few studies linking PjBL implementation to efforts to reduce the competency gap between university graduates and the needs of the banking industry.

This research gap indicates the need for research that not only measures the effectiveness of PjBL in a learning context but also examines how this approach can serve as a strategy to produce banking graduates who are better prepared to meet industry needs. Banking competencies have unique characteristics because they involve technical skills, risk analysis, decision-making, regulatory understanding, and the ability to provide solutions to customer needs. Therefore, a project-based learning approach needs to be studied more deeply as a learning model capable of connecting academic theory with industry practice.

Based on this description, the main problem in this study is the persistent gap between the competencies possessed by banking students/graduates and the competencies required by the banking industry. This study starts from the assumption that the application of Project-Based Learning through projects based on real-life industry problems can improve students' banking competencies. Therefore, this study aims to analyze the application of Project-Based Learning in improving students' banking competencies and identify its contribution to reducing the gap between academic competencies and the needs of the banking industry. This research is expected to provide theoretical implications in the form of strengthening studies on project-based learning in higher education in the fields of finance and banking. Practically, this research provides benefits for universities in designing learning strategies that are more relevant to industry needs, and for the banking sector as a partner in developing the competencies of prospective workers.

Based on these objectives, the research questions posed are: (1) How is Project-Based Learning implemented in student banking learning?; (2) How can the implementation of Project-Based Learning improve students' banking competencies?

The originality of this research lies in its focus on integrating the Project-Based Learning approach with the development of specific competencies in the banking sector. The scientific novelty of this article is demonstrated through the development of the perspective that project-based learning is used not only as a strategy to improve learning outcomes but also as a strategic approach to bridge the competency gap between university graduates and the ever-changing needs of the banking industry. This aligns with the direction of higher education policy, which emphasizes collaborative, contextual, and experience-based learning (Penjaminan Mutu Pendidikan Tinggi, 2023).

2. LITERATURE REVIEW

The Concept of Student Banking Competencies

Competencies are a crucial aspect of graduates' readiness to enter the workforce. Competencies reflect not only academic ability but also practical skills, thinking abilities, professional attitudes, and the ability to apply knowledge in real-world situations. According to Spencer and Spencer (1993) in (Sari & Assajad, 2023), competencies are fundamental individual characteristics that have a causal relationship with effective or superior performance in a job. Competencies consist of several key elements: knowledge, skills, self-concept, personal characteristics (traits), and motivation.

In the context of banking education, student competencies relate not only to a theoretical understanding of banking activities but also to the ability to apply these concepts to various industry conditions. Banking students are required to possess skills in financial statement analysis, creditworthiness analysis, risk management, understanding banking regulations, customer service, business communication, and data-driven decision-making.

Changes in the banking industry environment due to digitalization, the development of financial technology (fintech), and increasing risk complexity have led to changes in graduate competency standards. Today's banking graduates require not only technical skills, but also critical thinking, problem-solving, collaboration, creativity, and adaptability. This demonstrates that a learning approach solely focused on delivering theory is insufficient to produce graduates prepared to face industry demands.

According to (Kharbach, 2024) and (Wicaksono et al., 2023), competency assessment dimensions include: 1) Understanding key concepts, 2) Information Collecting, 3) Application of technology, 4) Collaboration and teamwork, 5) Critical thinking and problem-solving, 6) Communication and presentation.

Project-Based Learning (PjBL)

Project-Based Learning (PjBL) is a learning model oriented toward completing a real-world project as the primary means of acquiring knowledge and skills. According to (Nababan et al., 2023), Project-Based Learning is a project-based learning model where students are directly confronted with a real-world problem they deem meaningful and then work collaboratively to create the best solution.

Project-Based Learning (PjBL) is part of a student-centered learning approach that positions students as the primary actors in the learning process. In this approach, the lecturer is no longer the sole source of information, but rather acts as a facilitator, guiding students in designing, implementing, and evaluating projects.

According to (Yeh et al., 2011), the implementation of Project-Based Learning (PjBL) can be implemented using the Delfi Technique with the following dimensions: 1) Teamwork, 2) Self-learning, 3) Self-discipline, 4) Leadership, 5) Work ethics, 6) In-depth study, and 7) Transferable skills.

Theoretical Basis of Project-Based Learning

The implementation of Project-Based Learning is supported by several learning theories, namely:

a. Constructivism Theory

Constructivism theory explains that students construct knowledge through experience and interaction with the environment. According to Piaget (1972) in (Erawati & Adnyana, 2024), the learning process occurs when individuals actively construct understanding through new experiences linked to prior knowledge. In the context of PjBL, students not only receive information from lecturers but also construct their understanding through information seeking, discussion, experimentation, and project completion.

b. Experiential Learning Theory

According to Kolb (1984) in (Jumhasnimar, 2025), through Experiential Learning theory, effective learning occurs through a cycle:

1. Concrete experience
2. Reflection on experience (reflective observation)
3. Concept formation (abstract conceptualization)
4. Testing concepts in practice (active experimentation)

PjBL is closely related to this theory because students gain direct experience through projects that mimic real-world work conditions. In the banking sector, students can learn through experience analyzing credit cases, preparing financial reports, or designing financial service solutions.

c. Contextual Learning Theory

According to (Meutiawati, 2023), contextual learning emphasizes that knowledge becomes more meaningful when linked to real-world situations. Project-Based Learning (PjBL) allows students to connect banking theory with industry practice, making learning more relevant.

Implementation of Project-Based Learning in Strengthening Banking Competencies

According to (Mukhlisin et al., 2024), Project-Based Learning is believed to improve student competency because the learning process does not stop at understanding theory but encourages students to apply concepts in completing real-world projects.

According to (Utami et al., 2025) in banking education, Project-Based Learning has the potential to improve several key competencies, namely: 1) Technical banking competency, 2) Critical and analytical thinking skills, 3) Professional communication skills, 4) Collaboration and leadership skills, and 5) Work readiness.

3. METHODS

Research Type and Approach

This research uses a quantitative approach with a quasi-experimental method. This approach was used to analyze the effectiveness of implementing the Project-Based Learning (PjBL) model in improving students' banking competencies.

The research design used was a one-group posttest design, which measures student competencies after implementing project-based learning. This design was chosen because the research focused on measuring student competencies after participating in the project-based learning process.

The research design can be described as follows:

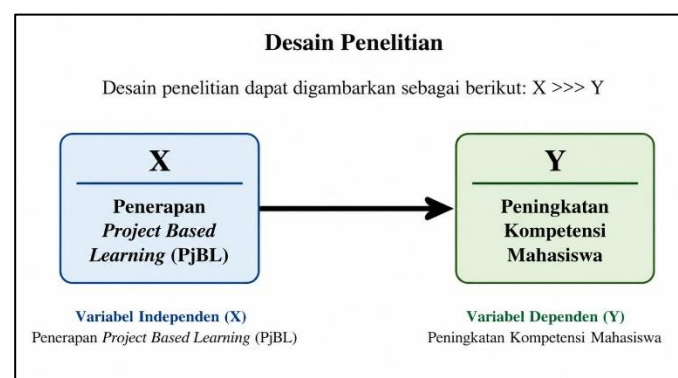


Figure 1. Research Design

Source: Processed data, 2026

Research Objectives and Variables

This study aims to analyze the application of Project-Based Learning in improving students' banking competencies and to determine changes in student abilities after participating

in project-based learning oriented toward solving real-life banking problems. The research variables consist of:

a. Independent Variable (X): Project-Based Learning

Project-Based Learning is a learning model that places students at the center of learning through project completion activities related to real-life banking problems. Project-Based Learning (PjBL) is measured using the Delfi Technique, with the following assessment dimensions: 1) Teamwork, 2) Self-learning, 3) Self-discipline, 4) Leadership, 5) Work ethics, 6) Depth of study, and 7) Transferable skills.

b. Dependent Variable (Y): Student Banking Competencies.

Competencies are measured using a project assessment rubric by lecturers, with assessments using a Likert scale of 1-5. Student banking competencies are defined as students' ability to understand concepts, analyze cases, and apply the technical and professional skills required in the banking sector. Student competency assessment uses the following dimensions: 1) Understanding key concepts, 2) Information gathering, 3) Application of technology, 4) Collaboration and teamwork, 5) Critical thinking and problem solving, 6) Communication and presentation.

Research Target

a. Research Population

The population in this study were finance and banking students taking banking courses and participating in Project-Based Learning.

This population was selected because these students had acquired basic banking material and were therefore able to participate in project activities based on banking industry problems.

b. Research Sample

The research sample was determined using a purposive sampling technique, which selects samples based on specific criteria. The sample criteria were: 1) Students taking banking courses, 2) Students participating in the project-based learning process, 3) Students participating in all project activities, and 4) Students willing to participate as research respondents. The sample size was adjusted to the number of students in the class implementing the project-based learning model.

Data Collection Techniques

Research data were collected through:

a. Questionnaire

The questionnaire was used to measure students' perceptions of the implementation of Project-Based Learning and the development of their banking competencies. The instrument

used a Likert scale of 1-5. The questionnaire was administered after the project-based learning process was completed.

b. Lecturer Project Assessment Rubric

The assessment rubric is used to measure student competency achievement based on the quality of the product or project results produced.

The assessment is conducted by the lecturer based on the following aspects: 1) Understanding of key concepts, 2) Information gathering, 3) Application of technology, 4) Collaboration and teamwork, 5) Critical thinking and problem solving, 6) Communication and presentation. The rubric uses a rating scale of 1–5.

c. Documentation

Collect data through journal articles, books, and other reference sources related to the implementation of Project-Based Learning.

Research Development

The stages of research development can be illustrated in the following diagram:

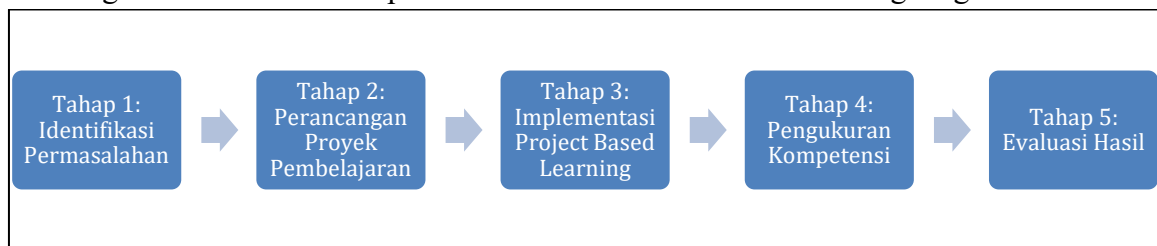


Figure 2. Stages of Research Development

Source: Processed data, 2026

The research began by identifying the gap between the competencies of banking graduates and the competency needs of the industry. Lecturers then developed projects based on real-life banking cases. Students then implemented the projects. Upon completion, student competency was assessed using a project assessment rubric by the lecturer. The results were then evaluated to determine the success and effectiveness of the PjBL implementation in improving students' banking competencies.

Data Analysis Techniques

Data analysis was conducted using SPSS V.27 statistical software. Descriptive statistical analysis was used to describe students' perceptions of PjBL implementation and their assessment of their banking competencies. The analysis was conducted using mean values, frequencies, standard deviations, minimum values, and maximum values.

4. RESULTS AND DISCUSSION

Result

Research data was obtained by distributing questionnaires to students enrolled in project-based learning in banking courses (Business Communication, Financial Statement Analysis,

Macroeconomics, and Fundamentals of Banking Operations). Student competency was assessed using a project assessment rubric developed by the course lecturer.

Data analysis was conducted using descriptive statistics to illustrate the level of Project-Based Learning implementation and the students' banking competency achievements after participating in project-based learning.

a. Description of Project-Based Learning Implementation

Project-Based Learning variables were measured across several dimensions: teamwork and knowledge sharing, self-learning, self-discipline, leadership, work ethics, depth of study, and transferable skills. The results of the descriptive analysis of Project-Based Learning implementation are presented in the following table:

Table 1. Descriptive Statistics of Project-Based Learning Variables

<i>Project Based Learning Dimensions</i>	<i>Female Students</i>	<i>Male Student</i>	<i>Average Score</i>	<i>Highest Score</i>	<i>Highest Frequency</i>
Teamwork and Sharing Knowledge	79	26	4.43	5	52
Self Learning			4.03	4	52
Self Discipline			4.41	5	50
Leadership			4.05	4	52
Work Ethics			4.31	4	60
Depth of Study			3.92	4	59
Transferable Skills			3.99	4	61
Average			4.16	4.29	55.14

Source: SPSS V.27 Output (Processed)

Based on the descriptive statistics for the variable of student perceptions regarding the implementation of Project-Based Learning (Table 1), of the 105 students in the study sample, 79 were female and 26 were male.

Based on the descriptive statistical analysis, the implementation of Project-Based Learning obtained an overall average score of 4.16, indicating that the implementation of project-based learning is in the high category.

The dimension with the highest average score was teamwork and knowledge sharing with a score of 4.43, followed by self-discipline with a score of 4.41 and work ethics with a score of 4.31. Meanwhile, the dimensions with the lowest average scores were depth of study with a score of 3.92 and transferable skills with a score of 3.99.

b. Description of Student Banking Competency Assessment

In addition to measuring the implementation of Project-Based Learning (PjBL), this study also measured students' banking competencies after participating in project-based learning. Competency measurement is conducted through assessments of several competency dimensions relevant to the needs of the banking sector, namely conceptual understanding,

information gathering, technology application, collaboration, problem-solving, and presentation skills. Student banking competency assessment is measured through the following dimensions: 1) Understanding key concepts, 2) Information gathering, 3) Technology application, 4) Collaboration and teamwork, 5) Critical thinking and problem-solving, and 6) Communication and presentation.

Competency assessment is based on the results of student projects and is assessed using a rubric by the lecturer. The results of the descriptive statistical analysis of student competency are presented in the following table.

Table 2. Descriptive Statistics of Student Banking Competency Assessment

Competency Assessment Dimensions	Komunikasi Bisnis			Dasar Operasional bank			Ekonomi Makro			Analisa Laporan Keuangan		
	Mean	Score 5	Percent	Mean	Score 5	Percent	Mean	Score 5	Percent	Mean	Score 5	Percent
Concepts	5	10	100	4.6	6	60	4.2	2	20	4.6	6	60
Information Collecting	4.4	4	40	4.5	5	50	4.3	4	40	4.5	5	50
Technology Application	4.8	8	80	4.6	6	60	4.3	3	30	4.6	6	60
Teamwork	4.2	2	20	4.8	8	80	4.5	6	60	4.6	6	60
Problem Solving	4.8	8	80	4.4	4	40	3.9	9	90	4.8	8	80
Presentation	4.6	6	60	4.5	5	50	4.3	4	40	4.5	5	50
Average	4.63		63.33	4.57		56.67	4.25		46.67	4.60		60.00

Source: SPSS V.27 Output (Processed)

Based on the descriptive statistics, student competency after participating in project-based learning was categorized as high, with an average score of 4.50 for all courses. The competency dimensions with the strongest achievements were seen in business communication (63%), financial statement analysis (60%), and basic banking operations (56.67%). The Teamwork and Problem-Solving dimensions were rated highest across all courses.

In the business communication course, students demonstrated strong ability to convey ideas, explain analytical results, and present solutions to banking problems. Meanwhile, in the financial statement analysis course, students were able to understand financial information and use it as a basis for analyzing banking cases.

Discussion

The results show that the implementation of Project-Based Learning creates a learning process that encourages students to actively engage in applied academic activities. The high average score indicates that the project-based approach provides a learning experience that focuses not only on theoretical understanding but also on developing skills relevant to the needs of the banking workforce.

The teamwork and knowledge sharing dimensions achieved the highest achievement. This indicates that project-based learning can improve students' collaborative work skills. In completing banking projects, students need to share information, discuss issues, and combine the skills of each group member to develop solutions. Collaboration skills are a crucial competency in the banking industry, as work activities in the banking sector involve interdepartmental coordination, customer communication, and team decision-making.

The self-discipline dimension also demonstrated high achievement. This illustrates that Project-Based Learning (PjBL) encourages students to take responsibility for the process and results of their projects. Students are required to manage their time, complete tasks on time, and maintain the quality of their work. This disciplined character supports the development of a professional attitude necessary in the banking workplace.

Furthermore, the work ethics dimension demonstrates that project-based learning is able to develop students' work attitudes. Through projects with deadlines, task allocations, and specific outcome standards, students learn to apply responsibility, commitment, and ethics in completing their work. This demonstrates that PjBL not only improves technical skills but also fosters behavioral aspects of work.

Meanwhile, the depth of study dimension scored relatively lower than the other dimensions. This finding suggests that students still need reinforcement in conducting in-depth studies of banking concepts and issues. In the context of project-based learning, students need more guidance in exploring literature, analyzing data, and connecting theory to real-world industry conditions.

The transferable skills dimension also scored relatively lower, indicating that students' ability to transfer knowledge and skills from projects to new situations still needs to be developed. Competencies such as the ability to analyze new cases, adapt to change, and make decisions need to be further developed through a variety of projects that address industry issues.

Project-based learning allows students to gain a more contextual learning experience because they not only learn banking concepts theoretically but also apply them to solving projects that mimic real-world problems.

Student projects are assessed using a rubric provided by lecturers to measure their competency levels. High scores in the banking concepts dimension demonstrate that project activities help students strengthen their understanding of the basic theories that underpin banking practice. Through information seeking, group discussions, and project report preparation, students are able to connect theory to real-world situations.

The information gathering dimension demonstrates that PjBL encourages students to develop the ability to search, select, and process information. In the banking industry, the ability to obtain relevant information is a critical competency because decision-making processes, such as credit analysis and customer service, are highly dependent on the quality of available information.

In terms of technology application, project implementation provides students with the opportunity to use technology as part of the problem-solving process. The ability to use digital devices, process data, and present information are increasingly needed competencies in the digital transformation of the banking sector.

The teamwork dimension achieved good results because the characteristics of PjBL require students to work in groups. Each member has a role in completing the project, thus developing

coordination, communication, and collaboration. These competencies align with the needs of the banking industry, which involves cross-unit work and team-based service delivery.

Furthermore, the problem-solving aspect demonstrates that project-based learning can train students to identify problems and determine alternative solutions. Students are not only required to understand concepts but also to apply analytical skills to address banking issues.

However, competency assessment results indicate that macroeconomics courses show relatively lower achievement compared to other courses. This indicates that students still need reinforcement in connecting macroeconomic factors to banking decisions and strategies. An understanding of economic conditions such as inflation, interest rates, and economic policy needs to be more fully integrated into learning projects.

This study obtained positive results from students' assessments of banking competencies. Based on questionnaire results and the assessment rubric provided by lecturers, it was evident that banking students were able to apply Project-Based Learning (PjBL) in their learning activities. This was demonstrated by the high percentage of agree and strongly agree responses, indicating that students understood and implemented the objectives of PjBL to improve their competencies. These results were also supported by the lecturers' assessments, which showed that students achieved success in each indicator.

Overall, the research results show that Project-Based Learning (PBL) can improve student competency through active, collaborative, and experiential learning. This approach helps students develop both technical and professional competencies needed in the banking world. Project-based learning provides students with the opportunity to not only understand banking concepts theoretically but also apply these concepts to solve real-life cases (Alia & Mauladaniyati, 2025).

In PjBL learning, students can be involved from the problem identification stage, information collection, data analysis, solution development, and presentation of project results. This process develops students' critical thinking and decision-making skills, which are essential competencies in the banking sector. This aligns with research by (Sholeh et al., 2024).

The implementation of banking case-based projects, such as creditworthiness analysis, customer financial statement analysis, and banking service simulations, provides students with a more contextual learning experience. Students can understand the relationship between the theory learned in class and the practice of the banking industry. This aligns with the views of (Dewi et al., 2024) stated that this approach enables students to better understand and apply theoretical concepts in practical contexts.

In addition to technical competencies, project-based learning also enhances students' non-technical competencies. Group work activities during project completion foster students' communication skills, collaboration, responsibility, and professionalism. These competencies are crucial for the banking industry to meet increasingly complex job demands (Khaeruddin et al., 2025) also aligns with the findings of this study, which found that the implementation of

Project-Based Learning (PjBL) can bridge the gap between theory and practice provided by universities. This approach allows students to prepare themselves as graduates with the theory and competencies expected by the banking industry.

The findings of this study indicate that Project-Based Learning (PjBL) can be an alternative learning strategy that can reduce the gap between students' academic competencies and the competency requirements of the banking workforce. Learning based on real-world experiences enables students to be better prepared for the professional environment (Mukhlisin et al., 2024).

Research Implications

The results of this study provide several implications:

a. Implications for Educational Institutions

Universities can develop project-based learning as a learning approach that integrates theory and practice. The implementation of Project-Based Learning (PjBL) can be a strategy to improve students' readiness to meet industry needs.

b. Implications for Lecturers

Lecturers can use banking industry case-based projects as a learning medium that encourages students to think analytically and creatively, and to solve real-life problems.

c. Implications for Students

Students gain a more applied learning experience, thereby improving their technical competencies and professional skills required in the banking workforce.

d. Implications for the Banking Industry

The results of this study indicate that collaborating project-based learning with industry cases can help produce graduates with competencies more relevant to the needs of the banking sector.

Overall, this study demonstrates that the implementation of Project-Based Learning contributes to improving students' banking competencies through an active, contextual learning process oriented toward solving real-life problems.

5. CONCLUSION AND LIMITATION

This research demonstrates that the implementation of Project-Based Learning (PBL) can improve students' banking competencies through a learning process oriented toward experience, problem-solving, and active student involvement. The project-based learning model provides students with the opportunity to develop academic and professional skills relevant to the needs of the banking industry, such as collaboration, knowledge sharing, discipline, communication, analysis, problem-solving, and the application of banking concepts in real-world situations. The implementation of projects that integrate various aspects of

banking helps students connect theoretical understanding with practice, making learning more contextual and applicable. This research contributes to the notion that Project-Based Learning can be an alternative learning strategy in preparing students to develop competencies more aligned with the demands of the workplace, particularly in the banking sector.

This research has several limitations that should be considered. The study was conducted on a limited sample of respondents, namely students enrolled in project-based learning within a specific banking course. Therefore, the results cannot be broadly generalized to all banking students. Furthermore, the measurement of student competency still uses questionnaires and project assessment rubrics, which can be influenced by respondent perceptions and assessment subjectivity. Further research can expand the scope of respondents, use an experimental design with a comparison group, and integrate assessments from external parties such as banking industry practitioners to provide a more comprehensive picture of student competencies that are in line with the needs of the world of work.

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