

Implementation of Case-Based Learning to Enhance Students' Engagement and Academic Performance in Advanced Financial Accounting

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Abstract:

The learning paradigm shifts from teaching to learning, teaching to learning community. According to Permendikbud Number 3 of 2021, Key Performance Indicator (KPI) number 7 is to realize a collaborative and participatory classroom. The aim is to analyze the application of the case-based learning method to understanding advanced financial accounting and how to understand advanced financial accounting regarding the preparation of combined financial statements of head offices and branch offices. The object of this research is undergraduate Accounting students of the Faculty of Economics, University of Semarang, with a total of 6 classes. The subject of this research is Advanced Financial Accounting. The results showed that with this learning model system, lecturers will more easily provide a deep understanding to students. In this system, students act as the center of learning. It can increase student cognition and make them more active and innovative. Thus, this research can answer the question of whether the project-based learning model system with a case method approach can increase student creativity and innovation in understanding the Advanced Financial Accounting course, which is so complex.

Keywords: Advanced, Accounting, CBL, Collaborative, Participatory

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1. Introduction

Education plays a pivotal role as the cornerstone of preparing human resources (HR) to navigate and thrive in a rapidly evolving world. It is not merely about mastering technical skills but also cultivating adaptability, critical thinking, and ethical commitments to coexist harmoniously in diverse societies (Biggs, 2012). This paradigm shift necessitates educational institutions to move from a teaching-centered to a learning-centered approach, emphasizing active and collaborative learning methods (Armstrong & Fukami, 2008). Active learning, as underscored by research, significantly improves student engagement and learning outcomes (Prince, 2004).

The current demands of the millennial generation, combined with rapid advancements in science and technology, have compelled educational institutions to innovate their

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pedagogical strategies. The Ministry of Education and Culture of Indonesia's introduction of the "Merdeka Belajar" curriculum aligns with this objective, emphasizing independent learning and the achievement of key performance indicators (IKU) for universities (Permendikbud, 2021). Among these indicators, IKU 7—fostering collaborative and participatory classes—is particularly relevant, requiring lecturers to design learning activities that enhance student engagement and foster critical problem-solving skills (Krathwohl, 2002; Savery, 2006).

Advanced Financial Accounting, a critical subject within accounting education, poses unique challenges due to its technical complexity. Students often struggle with understanding transaction journaling, profit analysis, and preparing combined financial statements. Observations and interviews with lecturers reveal that traditional lecture-based teaching methods dominate, leaving little room for active student participation (Bonney, 2015). This approach fails to address the critical need for students to develop reasoning, analytical, and problem-solving skills essential for professional practice in accounting (Schmidt, Rotgans, & Yew, 2011).

Case-based learning (CBL) has emerged as a transformative pedagogical approach to address these challenges. Combining cooperative learning and real-world case analysis, CBL engages students in active problem-solving, fostering deeper understanding and retention of complex concepts (Michael, 2006; Springer, Stanne, & Donovan, 1999). By situating learning in authentic contexts, CBL not only enhances academic performance but also prepares students for real-world applications (Herreid, 2007). Research demonstrates that integrating CBL in classroom settings can significantly improve student motivation, engagement, and academic achievement (Smith et al., 2011).

Despite its proven benefits, there remains a gap in implementing CBL in advanced accounting courses, particularly in aligning teaching strategies with the dynamic demands of the modern workplace (Clanchy & Ballard, 1995). While existing studies emphasize the general effectiveness of active learning techniques, there is limited research exploring the specific application of CBL in advanced financial accounting from an economic perspective (Mills & Treagust, 2003). This study aims to fill this gap by analyzing the impact of CBL on student engagement and academic performance in this critical area.

The novelty of this research lies in its focus on integrating CBL to bridge the gap between theoretical knowledge and practical application in advanced financial accounting. By fostering collaborative and participatory learning environments, this study aligns with the broader goal of cultivating critical thinking and problem-solving skills among students (Kolb, 1984; Chin & Osborne, 2008). Furthermore, it contributes to the strategic objectives outlined in the roadmap for social and economic research, emphasizing applied studies in management and accounting sciences.

This study has two primary objectives: (1) to analyze the effectiveness of the casebased learning method in enhancing students' understanding of advanced financial accounting concepts and (2) to evaluate how this understanding facilitates the preparation of combined financial statements for head offices and branch offices. By addressing these objectives, this research seeks to provide actionable insights into designing innovative and effective teaching strategies for advanced accounting education.

In conclusion, the implementation of CBL represents a promising avenue for addressing the challenges in accounting education. By fostering active engagement and bridging the gap between theory and practice, CBL can enhance students' academic performance and readiness for professional roles. This aligns with broader educational goals of preparing adaptable, critical-thinking graduates capable of thriving in a complex and dynamic global environment (McCarthy & Anderson, 2000; Loo, 2002).

2. Theoretical Background

Case-based learning (CBL) has been extensively explored as a pedagogical strategy to enhance student engagement, critical thinking, and problem-solving skills across various disciplines, including accounting. Active learning strategies, such as CBL, shift the focus from passive listening to active student participation, thereby fostering deeper understanding and application of concepts (Prince, 2004). In the context of accounting education, CBL is particularly effective in bridging the gap between theoretical knowledge and practical application (Armstrong & Fukami, 2008).

Research by Bonney (2015) demonstrated that case study teaching methods significantly improved students' perceptions of learning gains and their academic performance. Students reported feeling more engaged and capable of applying theoretical concepts to real-world problems. Similarly, Herreid (2007) highlighted the importance of situating learning in authentic contexts, suggesting that CBL not only aids in academic achievement but also prepares students for real-world challenges.

Specific to accounting education, studies have shown the transformative impact of CBL. For instance, Pujiati, Bangun, and Putri (2018) analyzed the effectiveness of problem-based learning models in intermediate financial accounting courses. Their findings indicated marked improvements in accounting competencies across several areas, including analyzing financial transaction documents, recording journal entries, preparing trial balances, and developing financial reports. These competencies are crucial for preparing students to handle advanced topics such as the preparation of consolidated financial statements.

Schmidt, Rotgans, and Yew (2011) examined the process of problem-based learning and found that active engagement through case analysis promotes intrinsic motivation and deeper learning. Their findings align with Krathwohl's (2002) revision of Bloom's taxonomy, which emphasizes the importance of higher-order cognitive skills, such as analysis and evaluation, in educational settings.

In advanced financial accounting courses, where the material is inherently complex, CBL has been shown to alleviate students' difficulties in understanding transaction journaling, profit analysis, and elimination entries in consolidated financial statements. Observational data and student feedback analyzed by Michael (2006) revealed that CBL methods combined with direct instruction create a positive learning environment. Students found the material more accessible and reported higher satisfaction levels.

Further evidence from McCarthy and Anderson (2000) suggests that active learning techniques, including CBL, outperform traditional lecture-based approaches in enhancing student engagement and academic outcomes. The integration of collaborative and participatory elements in CBL ensures that students not only master the content but also develop critical soft skills, such as communication and teamwork (Smith et al., 2011).

Despite these benefits, gaps remain in the literature regarding the application of CBL in advanced accounting courses, particularly its alignment with economic perspectives and professional competencies. Clanchy and Ballard (1995) underscored the need for educational strategies that prepare students for the dynamic demands of the workplace. Mills and Treagust (2003) further emphasized the importance of aligning pedagogical approaches with industry requirements to ensure graduates are job-ready.

This study seeks to address these gaps by evaluating the impact of CBL on students' understanding and performance in advanced financial accounting. By incorporating insights from experiential learning theory (Kolb, 1984) and problem-based learning frameworks (Savery, 2006), this research aims to contribute to the development of innovative teaching strategies that enhance both academic and professional outcomes.

In summary, the literature underscores the efficacy of CBL in fostering active engagement and improving learning outcomes. However, its application in advanced financial accounting remains underexplored, presenting an opportunity for this study to provide valuable insights. By addressing these gaps, this research aligns with the broader goals of preparing students for the complexities of professional practice in a rapidly evolving economic landscape.

3. Methodology

The object of this study is the undergraduate students of Accounting, Faculty of Economics, Semarang University, with a total of 6 classes. The subject of this study is Advanced Financial Accounting, with the material of head office and branch office. A population is a group of individuals, objects, or elements to be studied that have one or more similar characteristics. Some populations can be known in number, and some are difficult to know in number. This study uses a qualitative research method with a descriptive analysis approach. Descriptive research is a study of problems in the form of current facts from a population that aims to test hypotheses or answer questions related to the current status and the subject being studied.

The research stages in this study include:

- 1. Problem identification: Researchers start with the research targets, which means the specifications of the issues/phenomena to be studied/researched. The target of this research is related to case-based learning innovation.
- 2. Literature review (library search): In this section, researchers look for materials or reading sources related to the phenomenon to be studied. Several studies have been reviewed and analyzed to form a roadmap that is expected at the end of the study.
- 3. Determining the research objectives: The researcher identifies the primary purpose/objective of his/her research. This research aims to apply a case-based learning method to the understanding of advanced financial accounting.
- 4. Data collection: Researchers must pay attention to selecting and determining potential objects/participants in order to reach the participants' ability to be actively involved in the research.
- 5. Data analysis and interpretation: data that researchers have obtained is then analyzed or interpreted to produce new ideas or theories. The analysis used in this study uses the data collection technique of observation and survey methods.
- 6. Reporting: Researchers report their research results in a descriptive style because they use qualitative methods, requiring broad descriptions in their reports. They must position the reader as if they were people involved in the research.

This research is qualitative. Two steps must be implemented in this research: stage 1, for the learning model system using the Case Based Learning (CBL) approach, and stage 2, the implementation of the learning model system using the Case Based Learning (CBL) approach.

The steps in the stages of the Case Based Learning (CBL) learning model system for the Advanced Accounting II course include the following:

- 1. Preparing the Syllabus and RPS for the Advanced Financial Accounting II course.
- 2. Determining student activities in learning the Advanced Financial Accounting II course using the CBL system.
- 3. Students can observe and explore the latest phenomena regarding the Advanced Financial Accounting II course as a case reference.
- 4. Determine the case material for students and the number of cases.
- 5. Preparing case modules that will be given to students during the Case Based Learning (CBL) learning process for the Advanced Financial Accounting II course.

The next stage is the implementation of the learning model system using the Case Based Learning (CBL) approach, including:

- 1. Deliver the syllabus and RPS to students and implement the learning methods.
- 2. The lecturer will provide materials and cases, which will later be solved by students in groups.
- 3. The lecturer organizes study groups to solve cases.
- 4. The lecturer will organize the implementation of discussions in group presentations in class regarding the case studies that have been completed.
- 5. Lecturers conduct evaluations related to student activities in class (especially discussions).

- 6. The lecturer will straighten out the students' discussions in class related to the cases presented and the participants' Q&A with the presenter.
- 7. The final stage is the lecturer assessing the students' learning outcomes.

The instruments used in this study were observation and interviews. Based on the aspects to be known, the understanding of work skills and student activities was measured by the indicator Acceptance and understanding of *cases-based learning*, *which* is described by analyzing themes or cases and presenting them. The assessment items in the presentation are who the presenter is, the ability to answer questions, and the ability to conclude the results of field observations. The interview was conducted by inviting several students to become respondents. Several questions were arranged to make it easier for researchers to conduct a Q&A about students' responses to the learning. The following are the questions asked in the questionnaire:

- 1. Do lecturers prepare students before the lecture begins?
- 2. Does the lecturer motivate before the lecture starts?
- 3. Is the lecturer's delivery of lecture material easy to understand?
- 4. Are you happy with this learning model?
- 5. Are learning activities with this model exciting?
- 6. Is the material with this learning model easy to understand?
- 7. Is the evaluation pattern carried out by lecturers easy to implement?

4. Empirical Findings/Result

Before conducting this research, the Team prepared various things that have been explained in Chapter Research Methods, namely the steps in the stages of the Case Based Learning (CBL) learning model system for the Advanced Accounting II course, including:

- 1. Preparing the Syllabus and RPS for the Advanced Financial Accounting II course. Semester Learning Plan (RPS) is a learning planning document prepared as a guide for students in carrying out lecture activities for one semester to achieve the learning outcomes that have been set. In the RPS, there are forms of learning, details of activities, and evaluations. Student learning activities will be explained in number 2. As for evaluation, by the concept of collaborative and participatory classes, achieving a final value of 50% of the value weight must be based on the quality of class discussion participation.
- 2. Determining Student activities in learning Advanced Financial Accounting II courses with the CBL system. Some of the activities selected for class discussion participation (CBL) include explanations from lecturers (because in CBL classes, the delivery of materials is not eliminated); analyzing cases and finding solutions; presentations in class discussions; discussions and questions and answers; reading and analyzing articles (cases); and working in groups.
- 3. Observing and studying the latest phenomena regarding the Advanced Financial Accounting II course as a reference for cases that will be given to students, including (1) The relationship between the head office and general procedure branches; (2) The relationship between the head office and special problem branches; (3) Installment sales; (4) Consignment.

4. Preparing case modules that will be given to students during the Case Based Learning (CBL) learning process for Advanced Financial Accounting II. The modules have been prepared before the lecture began, namely 8 cases.

This research was conducted in the even semester of 2022/2023 with a total of 6 classes, including:

Table 1. Number of Research Object Classes

No	Day	O'clock	Number of Students
1	Tuesday	08.00	43
2	Wednesday	08.00	37
3	Thursday	11.00	28
4	Monday	17.00	27
5	Tuesday	17.00	35
6	Tuesday	18.30	52

The next stage is the implementation of the learning model system using the Case Based Learning (CBL) approach, including:

- 1. Deliver the syllabus and RPS to students and implement the learning methods.
- 2. The lecturer will provide materials and cases, which will later be solved by students in groups.
- 3. The lecturer organizes study groups to solve cases.
- 4. The lecturer will organize the implementation of discussions in group presentations in class regarding the case studies that have been completed.
- 5. Lecturers conduct evaluations related to student activities in class (especially discussions).
- 6. The lecturer will straighten out the students' discussions in class related to the cases presented and the participants' Q&A with the presenter.
- 7. The final stage is the lecturer assessing the students' learning outcomes.

The implementation of learning is carried out using the face-to-face method. Before the lecture begins, the lecturer will explain the syllabus and RPS, with the RPS students obtain lecture guidance because the RPS is equipped with learning media and learning resources that are relevant to the learning objectives to be achieved (Maryam, Sukaesih, Pamungkas, & Diningsih, 2017). Furthermore, the lecturer will create eight groups for each class, and each group will be asked to complete the Case prepared in the module.

During the lecture, the lecturer will prepare study materials, which will then be explained in class and will distribute learning materials on each topic so that students gain knowledge before analyzing cases and proposing solutions. After the lecturer explains the material, students will be asked to solve the Case (analyze and find solutions) and read and analyze articles, which will be presented in class in the next two meetings. Discussions and questions and answers will be conducted. Solving the Case will be carried out in 4 materials with eight meetings.

During the implementation of the case study, the lecturer acts as a facilitator, designer, and motivator, while students will be required to be more active and participatory.

This means that students will analyze according to the Case being worked on to find a solution, which will be tested in a discussion in class. Most discussion activities are from student conversations; the lecturer only facilitates by directing the discussion and giving questions and observations. In the final stage, the lecturer will evaluate each discussion.

5. Discussion

Evaluation using descriptive method. This study aims to determine the application of the case-based learning method to the understanding of advanced financial accounting and advanced financial accounting understanding regarding the preparation of combined financial reports of the head office and branch offices. This study focuses on how students can solve cases that are teaching materials in the Advanced Financial Accounting II course and its implementation in the business world. The evaluation carried out in this case study learning model is a description of learning outcomes based on the justification of the course lecturer, exam results, and results from discussion activities and interviews with several students.

The following are details of the level of student understanding based on the results of the learning evaluation, as follows:

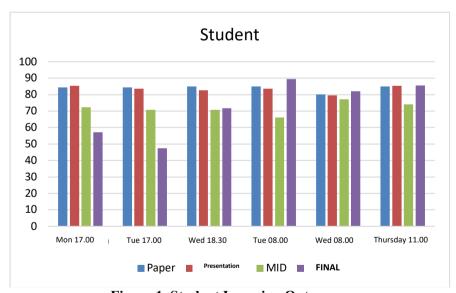


Figure 1. Student Learning Outcomes

In this study, there are two learning groups: Monday 17.00, Tuesday 17.00, and Tuesday 18.30, which only focus on solving cases provided in the module. However, for Tuesday 08.00, Wednesday 08.0, and Thursday 11.00 classes, in addition to being required to solve cases prepared in the module, students must search for articles about the Case in the business / real world and analyze the solution.

Figure 1. shows that teamwork learning allows students to be more active in learning because students are encouraged to actively ask questions, investigate, explain, and

interact with problems. This can be seen from the paper and presentation scores, which average above 80. Meanwhile, the MID and UAS evaluations show differences, especially in the UAS assessment, in that classes with students who study more cases in the business / real world show better results than other classes.

The results of interviews with students regarding their impressions of learning using the case-based learning method include:

Excess:

- 1. Students are thrilled, especially since the even semester of 2022/2023 is the first offline class. After 2 years, previously, students had to take online and blended lectures.
- 2. With the case-based learning method, students are much more expressive because they can look for cases, solve problems, make decisions, carry out investigative activities, and convey solutions during discussions in class.

Weakness

- 1. The AKL II course has limited references, so students have limited opportunities to study the materials to be completed.
- 2. Although this case-based learning class requires more active student participation, some students are still less active. This will indirectly burden other group participants

5. Conclusions

This project-based learning model system with a case-based learning approach certainly contributes to the courses taught. With this learning model system, lecturers will find it easier to provide in-depth understanding to students. In this system, students act as the center of their learning. It can improve students' cognitive abilities and make them more active and innovative. Thus, this study can answer the research question of the project-based learning model system with a case method approach that can increase students' creativity and innovation in understanding the complex Advanced Financial Accounting course. Based on experience in implementing the project-based learning model system process in this course, it is recommended for other courses. So that the achievement of IKU, especially IKU 7, namely collaborative and participatory classes in the Study Program in particular and Higher Education in general, will be achieved

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