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The Impact of Problem-Based Learning on Students' Collaboration Skills and Critical Attitudes in History Education

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© 2024 The Authors. This open access article is distributed under a (CC-BY License) Abstract- History education has often been perceived as boring and focused on rote memorization due to the dominance of traditional teaching methods. Therefore, the Problem-Based Learning (PBL) model is needed to develop students skills and understanding. This study aims to examine the impact of implementing Problem-Based Learning on students' collaboration skills and critical attitudes. The research uses a literature review approach to gather relevant information on the research topic. Information was collected from various books, scientific journals, articles, and other reliable sources. The findings of the study conclude that: (1) The PBL model can be applied in history education because it involves significant events that provoke students' critical thinking, and (2) The PBL model has an impact on students' collaboration skills and critical attitudes, which is also supported by previous studies.

Keywords: Problem Based Learning, Collaboration, Critical Attitudes, History Education

1 Introduction

Higher education institutions play a strategic role in preparing human resources with high competitiveness. One of the key aspects is developing collaboration skills and critical attitudes so that students can adapt to the work environment without losing their identity. These two aspects are crucial, considering the rapid societal changes that require specific skills, which can be acquired through the learning system. In history education, collaboration skills and critical attitudes can be developed through Problem-Based Learning (PBL).

PBL is a learning model that focuses on real-world problems, encouraging students to actively find solutions to these issues. Through PBL, students not only gain theoretical knowledge but also develop critical thinking skills and the ability to work collaboratively in teams. In line with Djonomiarjo's (2019) view, which states that thinking skills and interpersonal skills are difficult to develop using passive approaches, PBL is highly suitable for history education due to the nature of history itself, which involves complex issues such as social, political, and economic conflicts from the past.

In PBL, students are encouraged to explore specific issues holistically and develop analytical skills (Asih, 2022). This model is considered effective in increasing student engagement while also enhancing their understanding of the learning material (Arisetiyana, 2020). In the context of history education, PBL can help students understand historical events not just as past facts, but also as occurrences that can be constructed and analyzed.

Collaboration skills and critical attitudes are essential in the 21st century to adapt to the ever-evolving changes (Adil, 2023). History education, which has often been perceived as boring and focused on rote memorization, should be reconstructed to involve active student participation. Through PBL, students can

share ideas and critically analyze the issues presented. This makes history education more enjoyable and provides new perspectives in understanding historical events.

The purpose of this article is to analyze the impact of implementing Problem-Based Learning (PBL) on students' collaboration skills and critical attitudes in history education. This study has the potential to develop teaching methods in the field of history education that align with the skill requirements of the 21st century. The application of PBL is expected to help students construct historical material, making history education less about doctrination and more about the result of students' critical thinking.

There is previous research by Safitri (2024) that discusses the impact of Project-Based Learning (PjBL) and Problem-Based Learning (PBL) on students' self-confidence and learning outcomes. Additionally, the study by Cahyati (2024) also examines Problem-Based Learning (PBL), emphasizing its role in improving learning outcomes in Pancasila education. Furthermore, Liu (2022) explored the effects of the PBL model on enhancing critical thinking in higher education. A similar study by Seibert (2021) focused on strategies to improve critical attitudes among Generation Z through the Problem-Based Learning model. Finally, Suswati's (2021) research addresses the application of the Problem-Based Learning model in improving chemistry learning outcomes.

None of the five studies mentioned above discuss the impact of PBL on students' collaboration skills and critical attitudes. This is what distinguishes this study from the previous research. This study focuses on the impact of PBL on students' collaboration skills and critical attitudes.

2 Research Methodology

This study uses the literature review method to explore and find information related to the impact of PBL on students' collaboration skills and critical attitudes. The literature review method was chosen because it offers the advantage of allowing researchers to collect, analyze, and summarize information from various sources such as books, scientific journals, articles, and other reliable sources (Sarnoto, 2023). In the context of this study, the literature review is conducted to find answers related to the impact of PBL on students' collaboration skills and critical attitudes, in the form of concepts and theories related to the topic.

During the research process, the researcher sought information from various journals and books that discuss the basic concepts of PBL, PBL approaches, and the factors influencing students' collaboration skills and critical attitudes. The data obtained through this literature review were then analyzed systematically to gather supporting data regarding the impact of PBL on students' collaboration skills and critical attitudes. The results of this literature review are expected to contribute to the body of literature on the research topic.

3 Results and Discussion

History education has often been considered boring and monotonous. This is driven by teaching methods that do not involve active student participation. However, historical studies always contain controversial events that can stimulate critical thinking and debates among students. Historical events have diverse perspectives, so they need to be constructed through discussion and debate. The Problem-Based Learning (PBL) model is well-suited for history education, given the nature of history topics, which are rich in critical thought.

In the PBL model, the role of the lecturer is merely as a facilitator who provides guidelines in the classroom. The lecturer's responsibility is to manage the flow of discussions, meaning that the discussion activities are entirely handed over to the students. In addition, the lecturer designs relevant and challenging problems that align with the learning objectives and real-life situations. To ensure smooth discussions, the lecturer can emphasize that solutions to these problems must involve critical thinking and collaboration among students.

PBL has been recognized as an effective approach in building students' collaboration skills and critical attitudes. In the PBL process, students collaborate to solve problems and discover new perspectives on issues. The PBL model allows students to interact with one another, discuss ideas, and work together to find solutions, which indirectly impacts their collaboration skills. PBL provides students with the opportunity to learn in groups and exchange perspectives. This encourages students to be open in communication, respect others' opinions, and express their ideas. Through this experience, students are able to understand the differences within their group and collaborate to generate solutions and construct their own knowledge. This aligns with Mayasari's (2022) view that PBL is a learning approach based on the constructivist paradigm.

According to Barrow in Yani (2020), there are six key characteristics of PBL, which are: (1) The learning is student-centered, meaning that students are the main actors in building their own knowledge; (2) Learning takes place in small groups of 5-6 people; (3) The lecturer acts as a facilitator and prepares case studies that will be solved by the students; (4) The learning must emphasize real-world problems; (5) The problems in PBL are designed to build systematic problem-solving skills; (6) The problem-solving process in PBL provides new information for the students.

Learning conducted through discussion is more effective in building students' understanding compared to conventional methods. This is in line with the research findings of Nurrohma (2021), which state that students' understanding of learning material is better when using group discussion methods, meaning they are actively involved in the learning process. As many as 68% of the respondents in the study stated that they found it easier to gather information using the PBL model.

The PBL model can develop students' collaborative skills compared to traditional methods such as lectures. This is because the PBL model provides opportunities for students to interact with others, exchange ideas and thoughts, thereby fostering social skills, namely collaboration. According to Hasanah (2021), the PBL model can stimulate curiosity and improve learning outcomes, especially in the context of social sciences, which are full of topics related to societal life. Collaboration skills are crucial for students to share tasks and solve problems together. Through PBL, students not only work individually but are also required to work in groups. This enhances communication and coordination skills among group members with diverse backgrounds.

In addition, the PBL model also impacts the development of students' critical attitudes. Students are not only expected to memorize information, but are also required to analyze, evaluate, and critique the information provided. They are encouraged to use different perspectives in solving problems and to seek supporting evidence for their arguments. They are challenged to consider alternative solutions based on the strengths and weaknesses of each option. This aligns with the research by Lapuz (2020), which states that there is a relationship between PBL and the improvement of critical thinking skills.

According to Tan (2003), the PBL model can help students develop lifelong learning in the form of openness, reflectiveness, critical thinking, and active learning. He argues that traditional models should be changed because they place students as passive recipients of information, whereas the PBL model positions students as problem solvers. For further clarification, the following model can be seen.

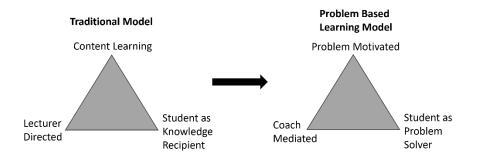


Figure 1: Traditional Learning Model and Problem-Based Learning Model

The image above can be interpreted as showing that the PBL model places students at the center of learning, while the lecturer acts only as a mediator. Students are the main actors in constructing their own knowledge based on their experiences. Moreover, the lecturer's role as a mediator is crucial. The lecturer provides real-world problems or new challenges to engage students in finding solutions. According to Tan (2003), there are four types of problems commonly found in the education system: routine problems like exercises, artificial problems like assignments, real-world problems, and novel problems. For further clarification, the following image can be seen.

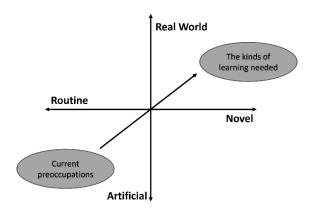


Figure 2: Types of Problems in the Curriculum

So far, various education systems tend to focus on problems that are routine, such as completing exercises, and artificial, such as assignments. These two aspects are not wrong, but they only measure students' conceptual abilities. Students may tend to think that every problem has only one solution, which can stifle creativity in thinking. As a result, students develop narrow thinking and a shallow perspective when facing problems. On the other hand, when the problems are real-world and novel or unique, students are encouraged to approach problem-solving from various perspectives by identifying, evaluating, and critiquing the issues. Below is a schematic of the PBL model that can be applied in the classroom.

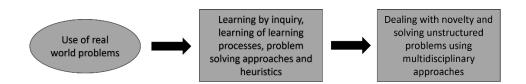


Figure 3: Schematic of the Problem-Based Learning Model

Lecturers can begin the PBL model by using real-world problems that are occurring in society. This aligns with Abidin's (2024) view that the PBL model should focus on real problems. In this way, students will seek and discover approaches to solve these problems. Students can use various multidisciplinary approaches, resulting in diverse solutions and providing opportunities for the group to express their opinions. This is what distinguishes PBL from traditional methods; in PBL, the answers to each problem are always different, and students are encouraged to have different perspectives within their group.

In the context of history education, the steps that can be applied are as follows. Ensure that the problem being discussed is a real issue that occurs in society.

 Table 1: Application of the PBL Model in History Education

No.	Activity Stages	Lecturer's Role	Description
1	Forming groups of 5-6 students	Guide the formation of groups evenly	Group division should consider the students' backgrounds to ensure that the groups are balanced in terms of academic abilities.
2	Presenting the problem to be discussed	Present real-world problems to students	The problem can be presented as a case study narrative or a video.
3	Discussion activity	Set a time limit for the discussion	Students discuss, share ideas and opinions, exchange thoughts, and formulate problemsolving approaches using a multidisciplinary approach.
4	Presentation activity	Observe the presentation process	Focus on observing the solutions, collaboration skills, critical and reflective attitudes.
5	Closing activity	Provide guidance to students	Provide feedback, reflection, and motivation to students.

The application of the PBL model above is not fixed; lecturers can develop their own discussion and presentation formats. Essentially, the PBL model should focus on student engagement. Students are given the freedom to develop their own ideas and critique the information they find. The PBL model in history education has the potential to enhance students' collaboration skills and critical thinking attitudes.

4 Conclusion

History education, which is rich in past events, is very suitable to be delivered through the Problem-Based Learning (PBL) model. The PBL model allows students to work together in groups to solve problems and provide solutions to these issues. This model encourages students to collaborate, which essentially serves as training in effective communication, listening to others' opinions, and appreciating team contributions.

Additionally, the PBL model gives students the opportunity to think deeply to find solutions. Students are accustomed to evaluating and critiquing the learning sources they encounter. With this habit, they can develop a critical perspective and sharp analytical skills. In general, the PBL model can enhance students' collaboration skills and critical attitudes, which are essential in the 21st century. Regularly using PBL is akin to training students to face complex problems that are ever-present in life.

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