

## Increasing Student Learning Activities Through Model Application Problem Based Learning (PBL) Material on the History of Colonialism and Imperialism in Class XI Asteroid at SMA Negeri 2 Medan

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### Abstract

This study seeks to detail how class XI Asteroids students at SMA Negeri 2 Medan were able to increase their learning activities by using the Problem Based Learning (PBL) paradigm to content related to the history of colonialism and imperialism. The classroom action research (PTK) approach is used in this study to address a range of issues that transpire inside the educational setting. The four steps of this PTK are preparation, execution, evaluation, and review. Increasing students' historical learning activities is the primary goal of this study, and these four steps repeat themselves in a cycle to achieve this goal. The study was place in July and August of 2024 at SMA N 2 Medan and included students from class XI ASTEROID. Each of the two cycles of this study included two sessions. The study shows that with each cycle, pupils get more engaged in learning about history. The average proportion of student learning activities, which was 48.91% in cycle I and 75.78% in cycle II, shows this growth. Based on these findings, it can be concluded that the research success indicator has been met, with an average proportion of student learning activity reaching or above 70%, during cycle II.

**Keywords:** Student Learning Activities, Problem Based Learning, Colonialism and Imperialism



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### INTRODUCTION

The smooth operation of the learning process is a measure of educational success. There are many moving parts to this process, and they all communicate and work together. Students, learning goals, learning environments, learning materials, and learning results are all part of this (Aqib, 2021). Professional educators in this field need to be able to instruct, mentor, test, and grade pupils in line with state and federal mandates. As a result, educational achievement is enhanced and instructors are able to cultivate high-quality pupils. Educators often confront challenges when guiding students through the learning process. For example, pupils who don't put much effort into their studies, have little interest in the subject matter, lack the necessary drive to succeed, and exhibit a general lack of engagement in class. The result is a less than ideal learning environment. Creating a strategy for learning may help reduce this issue to a minimum. Learning planning entails deliberation and rational decision-making in relation to predetermined learning objectives, such as behavioural changes and a set of actions to be taken in order to accomplish these goals through the utilisation of all available learning opportunities and resources.

As a measure of academic performance, the acquisition of student competences is important. Student work in the classroom is one indicator of this achievement. Indicators of students' learning activities include their enthusiasm, willingness to ask questions, thoroughness and accuracy of assignment completion, and confidence in presenting work outcomes. As they participate in learning activities, students build their own body of knowledge. They may take an active role in gaining comprehension of the challenges they

encounter. Learning activities shape students' behaviours in various ways. For example, they may become more comfortable asking teachers or friends for clarification when they don't understand something, become better at completing and presenting assignments, become more engaged in class discussions and problem-solving, and so on (Dewi, 2021). Therefore, in order to achieve the best possible learning experiences, it is crucial to focus on the learning activities of the pupils. This is why it's important for educators to be involved in facilitating their students' learning. Students' learning results may be enhanced when they actively participate (Puspita Widya, 2021). Among the fundamental components for attaining learning success are students' learning activities, as Sardiman elucidates (Hariandi & Cahyani, 2021).

Educators have a toolbox full of strategies for engaging their pupils in the learning process. A learning method may be used to try to improve learning activities. Classroom action study by Hariandi and Cahyani found that students' learning activities rose by 62% in the first cycle and by 81% in the second cycle while using the inquiry method (Cahyani, 2021). Prasetyo and Abdul use the discovery learning paradigm, which is a little different. According to Abduh (2021), the research found that student learning activities increased gradually from 41.53% in the pre-cycle to 60.91% in the first cycle and 82.89% in the second cycle. Students are more likely to participate in class when given opportunities to learn from one another and work towards common objectives via the cooperative learning model, which Hasanah suggested as an alternative to discovery learning (Wahyu, 2018).

The use of learning media in accordance with constructivism theory is another approach to boosting student engagement in the classroom. Learning outcomes attainment, which was 74.86% in the first cycle and 80.55% in the second, is the metric (Setioningsih, 2021). Educators may play several roles in fostering student engagement in the learning process, as shown in a number of prior study presentations. Wherein the circumstances of each classroom dictate that teachers use a variety of approaches. In most classrooms, educators choose a hybrid approach that draws from a variety of learning models, methodologies, tactics, and media. This research employs the problem-based learning (PBL) paradigm, an activity-oriented learning framework, in an attempt to increase student engagement with the learning process. Aldo (in Setioningsih, 2021) states that the problem-based learning model is a way of teaching and learning that encourages students to apply what they've learnt by tackling real-world situations. This approach helps students develop critical thinking skills and grasp fundamental ideas. According to Suginem et al. (2021), problem-based learning is a teaching approach that uses authentic challenges to help students develop their critical thinking and problem-solving abilities.

As a teaching method, problem-based learning encourages students to draw inspiration from real-world situations, formulate their own tactics for gathering knowledge, and ultimately decide how to solve a problem. Within problem-based learning (PBL), the issue at hand could be either a specific circumstance or a means to an end. In problem-based learning (PBL), students work together to find solutions. One of the defining features of problem-based learning (PBL) is the way it organises lessons around pressing society and individual issues. Problems covered in problem-based learning (PBL) are real-world issues that may be studied from different academic perspectives. Analysis, hypothesis development, prediction, data collection, experimentation, and conclusion drawing are all tasks that students are expected to do in this context.

The first data was collected on July 2, 2024, at SMA N 2 Medan, and it revealed many issues. To start, class instruction is still a popular method of passing on knowledge. Traditional methods of instruction, insufficient classroom space, and a focus on memorisation of course contents are all red flags. As a consequence, students experience boredom and have trouble absorbing the content, making it appear like they are struggling to understand the history

lesson. Second, there has been a lack of student engagement because professors have not encouraged it. A small percentage of pupils ever respond to a teacher's inquiry. Students' low levels of engagement in studying history are evident from this. Thus, this paper will concentrate on "Increasing Students' Learning Activities Through the Application of the Problem Based Learning Model in Material on the History of Colonialism and Imperialism in Class XI Asteroids at SMA Negeri 2 Medan."

## RESEARCH METHODS

Class Action Research (PTK) is the methodology used. An individual's endeavour to comprehend what is occurring while engaging in a process of development and transformation is known as classroom action research, and it entails integrating research methods with substantive action (Arikunto, 2017). It is now crystal evident that the goal of classroom action research is to enhance the quality of learning by enhancing teachers' professional competencies in the classroom learning process. For the most part, action research follows a standard four-step process: planning, implementing, observing, and reflecting. This is a model for PTK (Classroom Action Research).

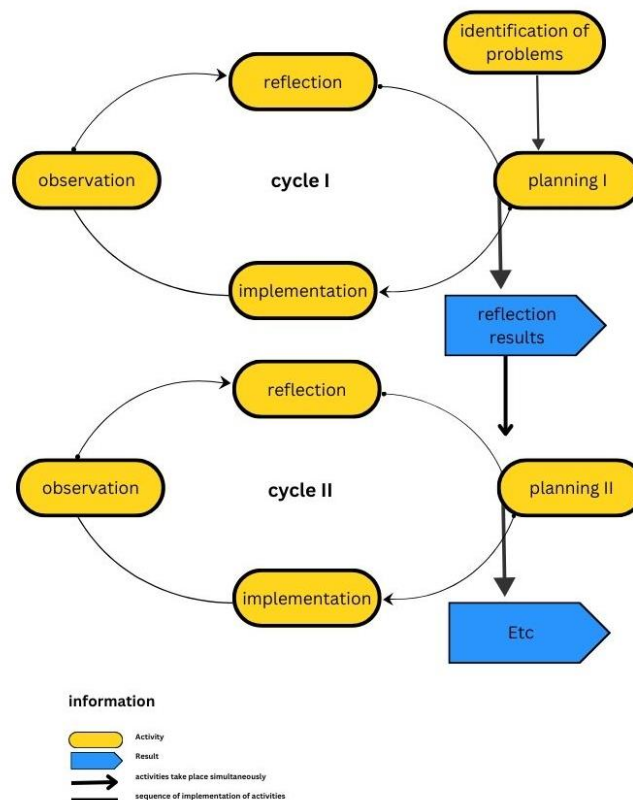


Figure 1. Action Implementation Flow in PTK

Figure 1 depicts the two-cycle PTK implementation flow. From one cycle to the next, and so on, there are four phases that are continuous with each cycle. Planning, doing (or implementing), watching, and reflecting are the four phases that make up each cycle. The researcher creates the lesson plans, learning tools, and observation sheets of students' learning activities during the first step, which is planning. Next, we move on to the step of implementing. Following up on the planning phase, researchers now apply what they learnt to the implementation of the Problem Based Learning (PBL) learning paradigm in the classroom. Here, researchers keep an eye on the important details, such as how well actions are tailored to students' needs and circumstances, how well indicators measure learning success, and how

well execution and planning align (Arikunto, 2017). Third, there's the observation stage, when you watch as things are put into action. Here, the researcher documents every step that students take while learning utilising the PBL methodology. Because the observation sheet was one of the references, the researcher conducted this to find out whether the learning implementation was suitable enhancements for the subsequent cycle. The analysing process of offering activities in each cycle is the fourth step, reflection. In this way, the outcomes of reflection may serve as a benchmark for improvement when formulating plans for the subsequent cycle. The class instructor helped the researcher with this study, and they spoke about several ways to raise the bar for student achievement in the classroom. Researchers get more insight into shortcomings and potential alternatives to existing solutions in the next cycle as a result of this procedure. Participants in this study were tenth graders at Asteroid SMA N 2 in Medan. An interview sheet and an observation sheet with markers of students' learning activities make up this study tool.

### RESEARCH RESULTS AND DISCUSSION

In class XI at Asteroid SMA N 2 Medan, this research was conducted as an action research project. A project-based learning (PBL) approach is used in the educational process with an emphasis on enhancing students' engagement with historical subject matter. There are two rounds to this learning process. There are two meetings in each cycle. The proportion of students actively studying in the first cycle of the first meeting was 45%, and it rose to 52.81% in the second cycle. The average percentage for the first cycle, based on the two meetings, was 48.91%, which was considered adequate. The following information pertains to the first cycle of student learning activities, namely the data collected during the first two sessions, as well as the percentage calculation of those observations:

**Table 1. Recapitulation of Percentage of Learning Activities for Cycle I Learning Students**

No	Sub Variable	Indicator	Meeting Score 1	Meeting Score 2	Average
1	Activity Visual	Students pay attention media used when the teacher explains the material	23 (57,5%)	28 (70%)	63,75%
		Students have discussions between friends	20 (50%)	24 (60%)	55%
Average Visual Activity:			53,75%	65%	59,375%
2	Oral Activities	Students provide ideas or suggestions in the learning process.	18 (45%)	18 (45%)	45%
		Students ask/answer questions or opinions	16 (40%)	20 (50%)	45%
Average Oral Activity:			42,5%	47,5%	45%
3	Mental Activity	Students are able to remember the material that has been discussed.	16 (40%)	19 (47,5%)	43,75%
		Students are able to solve the problems they face and make decisions together or draw conclusions	15 (37,5%)	18 (45%)	41,25%
Average Mental Activity:			38,75%	46,25%	42,5%

4	Emotional Activity	Students feel happy when studying history with the application of Problem Based Learning	18 (45%)	21 (52,5%)	48,75%
Average Emotional Activity:			45%	52,5%	48,75%
Cycle Activity Average					48,91%

There were a number of issues with cycle I that were discovered via the examination of observations. Table 2 provides more explanation of them.

**Table 2. Reflection on Cycle I Learning Actions**

No.	Deficiency	Improvement Planning in Cycle II
1	At the beginning of learning, it was still there students who discuss with their friends outside the learning context	Gives points deduction on students who disrupt the learning process <sup>2</sup>
2	The ability to ask and answer questions by students is still low in terms of the number of active students	Researchers direct students to read more textbooks and be more active in learning activities by providing additional points in learning
3	Students are still embarrassed to raise their hands when answering questions asked by researchers. Students often answer questions simultaneously.	Give additional points to students who dare to raise their hands to answer questions asked by the researcher
4	Students feel afraid to do their work in front of the class, so students only rely on groups	Select students from the group who have a turn to do their work
5	Students feel bored with their group discussions	Ice breaking was held to increase students' enthusiasm in the learning process

Information was gathered indicating students' learning activities had not yet met markers of success based on the outcomes of reflection on learning actions in cycle I. This means that it must be carried over into the subsequent cycle while incorporating the enhancements made possible by the reflections of the previous cycle. Two sessions, each lasting forty minutes, make up Learning Cycle II, which employs the Problem Based Learning approach. There are three sections to this lesson: introduction, conversation utilising LKPD, and content review. The following table displays the outcomes of using observation sheets to track students' learning activities.

**Table 3. Recapitulation of Percentage of Student Learning Activities Learning Cycle II**

No	Sub Variable	Indicator	Meeting Score 1	Meeting Score 2	Average
1	Activity Visual	Students pay attention media used when the teacher explains the material	30 (75%)	35 (87,5%)	81,25%
		Students have discussions between friends	29 (72,5%)	33 (82,5%)	77,5%
Average Visual Activity:			73,75%	85%	79,38%
2	Oral Activities	Students provide ideas or suggestions in the learning process.	28 (70%)	31 (77,55%)	73,75%
		Students ask/answer questions or opinions	31 (77,5%)	34 (85%)	81,25%
Average Oral Activity:			73,75%	81,25%	77,50%

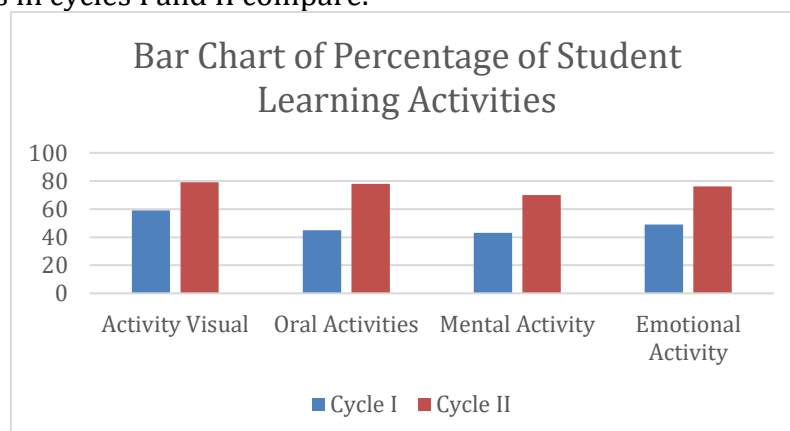
3	Mental Activity	Students are able to remember the material that has been discussed.	28 (70%)	30 (75%)	72,50%
		Students are able to solve the problems they face and make decisions together or draw conclusions	26 (65%)	28 (70%)	67,5%
Average Mental Activity:			67,5%	72,5%	70%
4	Emotional Activity	Students feel happy when studying history with the application of Problem Based Learning	28 (70%)	55 (82,5%)	76,25%
		Average Emotional Activity:	70%	82,5%	76,25%
Cycle Activity Average					75,78%

In order to find out what proportion of students engaged in learning activities, we used student learning activity observation sheets to compile data. Each step of the learning process may also be analysed and reflected upon using observation sheets. In the table below, you can see the outcomes of the student activities that were observed.

**Table 4. Observation Results of Student Learning Activities**

No.	Activity Components	Average Percentage	
		Cycle I	Cycle II
1	Activity Visual	59,38%	79,38%
2	Oral Activities	45%	77,5%
3	Mental Activity	42,5%	70%
4	Emotional Activity	48,75%	76,25%
<b>Average</b>		48,91%	75,78%

An average of 48.91% seems to be low for cycle I based on the results shown on the student activity observation sheet. The average student's learning activity, however, rose to 75.78 percent in cycle II. Students' engagement with learning about the past is enhanced when they use the Problem Based Learning approach. Student learning activities increased by an average of 26.88 percent. In the following graphic, we can see how the proportion of student learning activities in cycles I and II compare.



**Figure 2. Bar graphed with the percentage of student learning activities**

Analyses of students' historical learning activities revealed an average percentage of 75.78 percent in cycle II. Students in cycle II have shown an increase in their average learning

activity, reaching the success markers of this study where the proportion of students learning activity is equal to or more than 70%. Findings from student interviews show that the Problem Based Learning approach is well-received by students. Students' engagement in studying history has been significantly enhanced by the effective implementation of this learning methodology.

## **CONCLUSIONS**

It is possible to draw the following conclusions from the data analysis and the debate that has been presented. (1) Students' engagement in learning may be enhanced by the use of the Problem Based Learning approach. The 26.88 percent of pupils who actively sought out historical information may attest to this. The statistics show that in cycle I, an average of 48.91% of students were engaged in learning activities, and in cycle II, that number rises to 75.78%. Students who were once on the sidelines are now actively participating, which is evidence of this; (2) data gathered from student interviews shows that students are highly engaged in their learning while adopting the Problem Based Learning approach. Thanks to the well-executed implementation of this learning model, students' historical learning activities are significantly enhanced. Because it has met the established success markers, the implementation of the Problem Based Learning model to increase students' historical learning activities may be regarded successful. Hence, there's no need to go on with this study in the following cycle. In light of the above, we propose the following solutions: (1) schools should be able to use the Problem Based Learning model, which can enhance students' historical learning activities; (2) study field instructors should choose one student at random from each group to present their work in front of the class, so that students become accustomed to public speaking; (3) students participate more actively when they work in groups to solve problems; (4) we hope that the findings of this study can serve as a basis for future research in related fields.

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