

Application of the Problem Based Learning Learning Model to Increase the Activeness and Learning Outcomes of Class II Students in Yogyakarta

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1. Abstract

An ineffective learning model results in low student involvement, which reduces student interest in learning. The purpose of this study was to increase the activity and learning outcomes of grade 2 students in Yogyakarta by using a problem-based learning model (Problem Based Learning). This classroom action research was conducted in two cycles, four meetings. 23 grade 2 students were the subject of this study. In this study, data was collected through testing and observation. Testing will be used to measure student learning outcomes and observations to monitor how active students are through problem-based learning models (Problem Based Learning) which is applied in each lesson. Data analysis will include both qualitative and quantitative analysis. The results of this study indicate that the average score is 67.93 for cycle I, and the average score is 78.80 for cycle II. The results show that students' activities get better when they learn with a problem-based learning model (Problem Based Learning). This shows that the problem-based learning model (Problem Based Learning) is very effective in increasing student activity.

Keywords: Learning Outcomes, Activity Students, Problem Based Learning.

2. Introduction

After children are educated by their parents at home, education in elementary schools becomes their source of education. This is in accordance with the opinion of Nurfirdaus and Hodijah (2018), who state that elementary school is a place for students and a source of basic education for children to gain knowledge after their parents educate them at home. Basic education helps students deal with the development of globalization and balance the changing demands of the times.

The 2013 curriculum for elementary schools in Indonesia is thematically based. Sugiyarti et al. (2018) stated that in the 2013 curriculum era, students must have four important competencies: creativity, communication, critical thinking, and collaboration. As teachers, they must create an ideal learning environment with a variety of learning resources to implement learning by considering the four student competencies. So students more easily understand the concept of the material provided.

During the teaching and learning activities that take place, there is a purposeful interaction between the teacher and students. This interaction occurs because the teacher creates a beneficial learning environment for the benefit of students. Teachers strive to provide the best for their students by creating a fun and engaging environment. To ensure a harmonious two-way relationship between teachers and students, teachers try to be Mintono's kind and wise mentors. (2018).

Teachers do not only play a role in the success of the learning process in the classroom, but also students. The independent curriculum is currently the education system in Indonesia. In the previous Indonesian education system, the teacher served as a center for students. Thus, students are only given the opportunity to listen, listen, and write, without being given the opportunity to study subject matter independently and are

not trained to deal with problems related to subject matter (O. W. Ariyani & Tego, 2021).

If the lesson is interesting, students will be active and participate in the lesson, and if the lesson is interesting, students will explore their own abilities (Liliyana & Nirmalasari, 2021).

Most students do not understand the learning material because they do not participate in the learning process. This problem requires a learning model that increases student activity and their learning outcomes. This condition requires classroom action, which is a study conducted by researchers to improve the teacher's ability to complete assignments and improve learning practice conditions. This class action uses fun learning methods and problem-based learning methods (Problem Based Learning), which increases student activity (Nurul & Palembang, 2022).

Problem-based learning models can encourage students to think critically and learn to solve problems (Putra et al., 2023). This is in line with the statement made by Setiyaningrum (2018) that problem-based learning begins with a given problem and is followed by an information-seeking process that focuses on students. Students' thinking skills can be improved by applying a problem-based learning model that emphasizes problems. Because the problems shown relate to everyday life. The problems shown require real investigation. During the learning process, the teacher acts as a facilitator and helps students carry out investigations and provides guidance to create problem-solving plans.

Previous research that is relevant to this topic, such as research conducted by (Pamungkas et al., 2018) entitled "Increasing the Activeness and Learning Outcomes of Students Through the Problem Based Learning (Pbl) Learning Model in Class 4 Elementary Students" with the results of the research is Problem-based learning activities, group

cooperation, and discussions can improve student learning outcomes on theme 7 "The Beauty of Diversity From my country" Sub-theme 1 "Diversity of Nations and Religions in My Country" and Subthemes 2 "The Beauty of Cultural Diversity in My Country" class 4 SDN Panjang 03 Ambarawa. In addition, research conducted by (Wardani et al., 2021) entitled "The Influence of the Problem-Based Learning Model on the Activeness and Learning Outcomes of Social Studies Class V Elementary School Students in Ngantru District" with the results of the research is that the learning outcomes of class V students in the Ngantru sub-district are influenced by the teacher's problem-based learning model and activeness, showing that 49.9 percent of learning outcomes are influenced by problem-based learning models, while 50.1 percent are influenced by other factors such as interest, motivation, or other factors related to learning.

3. Methods

Classroom action is the type of research used. This study aims to increase the effectiveness of learning in the classroom. This study was conducted in Yogyakarta. 23 second grade students were involved in this study. This study uses the steps of planning, implementing, observing and reflecting on the results of the implementation (Susilo, 2018). Researchers used tests and observations to collect data. Evaluation questions are used to measure the progress of student learning outcomes, and observation is used to measure how actively students are involved in learning activities.

Second class action research in Yogyakarta was conducted in two cycles. The first cycle starts the action after planning, and the second cycle continues the research results from the first cycle. Each cycle lasts for two meetings, with 2 hours of lessons each. Each hour of elementary school lessons lasts 35 minutes. Thus, in each cycle, there are two meetings (Astrani et al., 2021).

The process of collecting data comes from data sources in the form of tests, and making observations. Two data analysis methods were used: quantitative or qualitative analysis. Quantitative analysis involves analysis of test results, descriptive statistics are used to analyze the quantitative data obtained (Setyawati et al., 2019). Meanwhile, qualitative analysis involves analyzing quantitative data obtained from observing student activities during the study (Nurjanatin, 2021). The observation sheet consists of five aspects of observation, namely: 1) Student activity in group activities; 2) Students ask for help from the teacher to complete the LKPD; and 3) Students ask questions, responses, and comments during learning; 4) Students can complete LKPD; and 5) Students present conclusions at the end of learning. and the scale for assessing student activity by the teacher is between 0 and 100. The results of student activity are categorized into very good, good, sufficient, and poor qualifications (Wahyono & Husamah, 2020).

4. Results and Discussion

The results of research with problem-based learning models (Problem Based Learning) indicates that the pre-cycle, cycle I, and cycle II learning activities were completed as planned. Data on the activeness of grade 2 students in Yogyakarta are shown in Table 1 below.

Table 1. Comparison of Activity of Students of 2nd Class Yogyakarta

Score range	Criteria	Pre-cycle		Cycle 1		Cycle II	
		f	%	f	%	f	%
80-100	Very active	-	0 %	2	8 %	5	23 %
60-80	Active	4	18 %	9	39 %	11	47 %

40-60	It's pretty active.	5	23 %	5	23 %	4	17 %
0-40	Less active	13	59 %	7	30 %	3	13 %
Total		22	100 %	23	100 %	23	100 %

In the pre-cycle, cycle I, and cycle II, the ratio of student activity increased, as shown in table 1. In the pre-cycle, there were no students who were very active, 4 students were in the active category with a percentage of 18%, 5 students are in the quite active category with a percentage of 23%, and 13 students are in the less active category, with a percentage of 59%. Activeness increases as a result of the actions taken by applying the learning model Problem Based Learning. In cycle I, there were 2 students who were very active with a percentage of 8%, 9 students were in the active category with a percentage of 39%, 5 students were in the quite active category with a percentage of 23%, and 7 students were in the less active category, with percentage 30%. In cycle II, there were 5 students who were very active with a percentage of 23%, 11 students were in the active category with a percentage of 47%, 4 students were in the quite active category with a percentage of 17%, and 3 students were in the less active category, with procetase 13%. The results of reflection in cycle II showed an increase in the percentage of active students, pre-cycle with cycle II of 52%, indicating that the problem-based learning model (Problem Based Learning) can significantly increase student involvement in each grade II lesson in Yogyakarta. This is in line with (Wahyono & Husamah, 2020) that the use of models in learning activities is an effort that can be made to achieve learning goals. Teachers hope to increase student motivation through the use of learning variations. Effective learning allows teachers and students to work and interact well together. This means that learning activities in the classroom are no longer just about

the teacher teaching the material and students listening and taking notes;, but students can also actively participate in discussions, express their opinions, explore their knowledge, and share their learning.

Data on improving student learning outcomes in each grade 2 student lesson in Yogyakarta are shown in Table 2 below.

Table 2. Comparison of Study Results of Second-Class Students of Yogyakarta

No	Reproduction	Pre-cycle	Cycle 1	Cycle II
1	Average	66,48	67,93	78,80
2	Pass	11	14	16
3	Not passed	11	9	7
4	Percentage of graduation	50%	61%	70%
5	Percentage of not passing studies	50%	39%	30%

Difference the learning outcomes of pre-cycle, cycle I, and cycle II are shown in table 2. KKM for each lesson is 70. In pre-cycle, there are 11 students who complete or 50%, and 11 students who have not completed or 50%, with a total of 22 students. In cycle I, there are 14 students who complete or 61%, and 9 students who have not completed or 39% with a total of 23 students. In cycle II, there are 16 students who complete or equal 70%, and 7 students who have not completed or 30%, with a total of 23 students. Reflection on cycle II shows a decrease in the number of students with scores below the KKM. This shows that the problem-based learning model (Problem Based Learning) can improve student learning outcomes in each lesson.

6. Conclusion

The PBL method can increase learning activity and thematic learning outcomes. This

can be achieved through the use of steps such as problem orientation for students so that they can listen to the teacher's explanation of problems, organizing student learning so that they can prepare assignments, and guiding individual and group investigations so that students can gather information through experiments to solve problems (Setyawati et al. ., 2019).

By applying a problem-based learning model (Problem Based Learning) in each lesson in class II in Yogyakarta, the possibility of increasing student activity can be achieved. The results of the study explained that students who were very active and active reached 47% in cycle I, and 70% in cycle II, with an increase of 23%. By applying the problem-based learning model (PBL), students are more active and can achieve an activity level above 60%. Then, the test results showed that the percentage of complete learning outcomes in cycle I reached 61%, while in cycle II it reached 70%, an increase of 9%. The more participation of students, the better the learning achievement of students.

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