

Application of problem based-learning learning models to increase social studies activity and achievement

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Abstract

The purpose of this study was to find out whether the application of the Problem Based Learning learning model had an effect on increasing the social studies activity and achievement in class VII students of SMP Negeri I Glagah. The results showed that using the Problem Based Learning learning model had a positive impact on increasing activity and achievement. learning Social Sciences (IPS) in class VII students of SMP Negeri 2 Lamongan. Cycles 1 and 2 of the learning outcomes obtained by students show that cycle 1 can be seen that classically the learning completeness has increased, namely 68.75%, compared to the learning outcomes before the cycle, but still has not reached the specified classical completeness, which is 85% and the average value is 78,41. Cycle 2 can be seen that classically the learning completeness has been achieved because it is more than 85%, namely 87.50% and the average value is 82.91. Problem-based learning model, gradually students are able to increase their activeness in discussions and improve their problem-solving skills.

Keywords: problem based learning, activeness, learning achievement

Introduction

In the current era of globalization, every country is required to have qualified human resources so that they are not unable to compete with other countries. The only place that is seen as having the most role in creating quality human resources is education. Indonesia is no exception. The national education system faces very complex challenges in preparing quality human resources. This requires innovation in education (Abdul Malik; 2014). The implementation of the 2013 curriculum can be said to be a form of innovation in the field of education and is one of the government's efforts to achieve excellence in the nation's community in mastering science and technology so that it is able to speak in global competition. The 2013 Curriculum Development is a follow-up to the Competency-Based Curriculum Development which was pioneered in 2004 and the 2006 KTSP which includes attitudes, knowledge and skills competencies in an integrated manner. The 2013 curriculum was developed based on the competencies needed as an instrument to direct students to become: (1) quality human beings who are capable and proactive in responding to the challenges of an ever-changing era; (2) educated who believe in and fear God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent; and (3) democratic and responsible citizens.

One of the educational activities that play an important role in education is learning activities. Learning is the essence of the whole educational process. According to Degeng in Uno (2008) learning or teaching is an effort to teach students. Learning focuses on "how to teach students", and not on "what students learn". Therefore, in the learning process, students not only interact with educators as learning resources, but can interact with all learning resources used to achieve the desired learning objectives. (Afni,N. Kharitil & Abdullah: 2014).

The 2013 curriculum mandates the nature of a scientific approach in learning, the learning process can be equated with a scientific process. The scientific approach is believed to be a golden bridge in fostering and developing students' attitudes, skills and knowledge. Permendikbud no. 81 A of 2013 appendix IV, The learning process consists of five main learning experiences namely: (1) observing, (2) asking questions, (3) gathering information, (4) associating, and (5) communicating. Apart from being presented with a scientific approach, social studies learning must also be presented using the model recommended in the 2013 curriculum, namely discovery inquiry-based learning, project-based learning, and problem-based learning.

In learning activities the teacher must be able to develop a learning model that has three basic principles, namely: focusing on students, using a systems approach and maximizing the use of learning resources so as to create an effective and efficient learning process. Problem based learning is known as Problem Based Learning or Problem Based Instruction. There are many opinions about the notion of problem-based learning, including: a) Problem-based learning is a learning method that is first encountered by students. b) The problem is followed by a process of inquiry and reflection that is systematic and centered on learning (Teacher and Educational Development: 2002). That is, problem-based learning is a learning method in which the learner faces problems that are arranged systematically, the discovery is centered on the learner and the process of reflection. c) Problem-based learning is a learning model that requires students to think critically, be able to solve problems, learn independently, and require skills to participate in teams. (Barrows dan Kelson dalam Riyanto: 2010). d) Problem-based learning can be interpreted as a model in which students work on authentic problems with the intention of compiling their own knowledge while developing independence and self-confidence (IPS VII Teacher's Book: 2013). e) Problem-based learning is a learning model designed so that students gain important knowledge, which makes them proficient in solving problems, and has their own learning model and has the skills to participate in a team (2013 Curriculum Implementation Training Module). F). Problem-based learning is learning that begins with presenting problems to students. Students are exposed to real world problems to learn. This problem must be authentic or real in everyday life in the form of facts or phenomena that students often encounter. So, problem-based learning is learning that begins with presenting problems to students. Students are exposed to real world problems to learn. This problem must be authentic or real in everyday life in the form of facts or phenomena that students often encounter.

In the 2013 curriculum, IPS learning is presented with a scientific approach. Recommended models include; discovery-investigation-based learning, problem-based learning, and project-based learning. Learning with a scientific approach is learning that is designed in such a way that students actively construct concepts, laws, or principles through the stages of observing, formulating questions, gathering information, processing information, and drawing conclusions and communicating conclusions (5M). These steps can be continued by making (IPS VII Teacher's Book, 2014).

Table 1. Problem-based learning sequence pattern

Fase	Teacher Activity
Fase 1: Student orientation for that problem	The teacher explains the learning, propose phenomena or demonstrations or stories to raise issues, motivate students to get involved in the chosen problem
Fase 2: Organizing participants students to learn.	Teachers help students to define and organize learning tasks related to the problem
Fase 3: Assistance individual investigation and groups.	Teachers encourage students to collect the appropriate information, perform a finding test for Get clarification and troubleshooting
Fase 4: Develop and present findings.	Teachers help students in plan and prepare findings according to findings reports and help them share tasks

Fase 5: Analyze and evaluate processes solution to problem.	Teachers help students to reflect on or evaluate their investigations and the processes they took
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Source: IPS VII Teacher's Book, 2014

The Problem-Based Learning model or problem-based learning arises from the many concerns that teachers place more emphasis on mastering a number of information/concepts that sometimes these concepts are useless, so that students only memorize concepts and are unable to use them. they face problems in learning. real life related to the concept it has. Problem-based learning has actually been known since John Dewey which is characterized by an interaction between stimulus and response, namely the relationship between the two directions of learning and the environment (IPS VII Teacher's Book, 2013).

IPS education in schools is essentially developed as a subject in the form of integrated IPS. IPS content comes from history, economics, geography, and sociology. Social studies education is expected to be a vehicle for students to learn from themselves and their environment in everyday life in the past and present (Idris: (2009). In fact, not many students like social studies subjects, because they are considered difficult, too much memorization, and boring, plus the learning model that is applied is more conventional learning models which emphasize the lecture method. In the learning process students are still often found only listening (passively), not asking questions or expressing opinions. When asked, "do you understand?", will answer "already..", but when the test was held the results were not as expected (did not reach the KKM). Based on Learning) in Classroom Action Research (PTK) activities with the title "Application of Problem-Based Learning Models to Increase the Social Studies Learning Activity and Achievement of Class VII Students SMP Negeri 2 Lamongan". Based on the background of the problem in the section above, the formulation of the problem in this study is Can the application of the Problem Based Learning model improve social studies learning achievement?

Metode

This research is a quantitative research through classroom action, because this research was conducted to solve learning problems in the classroom. This research also includes descriptive research, because it describes how a learning technique is applied and how the desired results can be achieved. Classroom action research is practical with the main objective of solving problems in learning that are experienced by teachers and students every day where the implementation is carried out in the classroom to improve the quality of learning.

In general, there are four stages in classroom action research, including: 1) planning, 2) implementation, 3) observation, 4) reflection (Arikunto, 2009). The stages of each cycle can be described as follows:

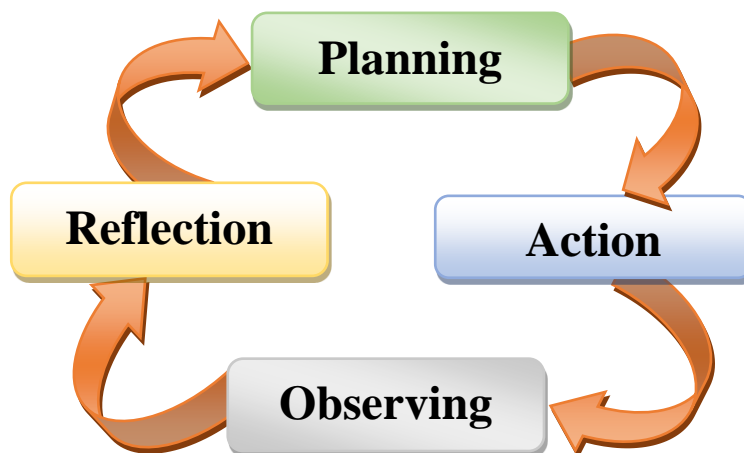


Figure 1. Stages of classroom action research

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In this study using quantitative descriptive analysis techniques and qualitative descriptive. Quantitative descriptive is used to analyze the level of success or the percentage of success of students after the teaching and learning process at the end of each cycle, carried out by providing evaluations in the form of written test questions or formative tests. The calculation uses simple statistics with the formula:

$$X = \frac{\sum X}{\sum N}$$

Description: X = Average value
 $\sum X$ = Sum of all student scores
 $\sum N$ = Number of students.

To calculate completeness with the formula:

$$P = \frac{\sum \text{Students who complete learning}}{\sum \text{Student}} \times 100 \%$$

A student is declared complete when he has achieved a score of 80% and above, a class is declared complete when 85% of students in the class have achieved an absorption capacity of 80% and above. Qualitative descriptive analysis is a research method that describes reality or facts according to the data obtained with the aim of knowing the learning achievements achieved by students and to obtain student responses to learning activities and student activities during the learning process. Qualitative descriptive analysis was used to analyze the observation data.

Indicators of success in this classroom action research are students' activeness in learning and increasing student achievement. The criteria for assessing student learning activeness that researchers observed from discussion and presentation activities (skills) are as follows:

1. Very good, if a score is obtained between 86 and 100
2. Good, if a score is obtained between 76 and 85
3. Enough if a score is obtained between 66 to 75
4. Less, if a score is obtained between 0 and 65.

Students are considered to have achieved completeness if they get good and very good categories.

For the assessment of student learning achievement (knowledge) the researcher used the KKM achievement score range (minimum completeness criteria) for social studies subjects, namely 80. Classes were declared complete when 85% of students had achieved KKM

Result

Initial Conditions

An overview of student activity and achievement in the initial conditions (before the cycle) can be seen in the table below:

Table 2. Student activity before the cycle

No.	Ability	Category							
		Very good		Good		Enough		Not enough	
		Total	Pro	total	pro	total	pro	total	pro
1	Discussion Activities:								
	a. Retention of material	2	6.25%	9	28.12%	13	40.63%	8	25%
	b. Express opinions/solve problems	1	3.12%	7	21.88%	12	37.5%	12	37.5%
	c. Accept opinion	5	15.62%	13	40.63%	12	73.50%	2	6.25%

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2.	Presentation Activities:								
	a. Presentation	2	6.25%	6	18.75%	14	43.75%	10	31.25%
	b. argument	2	6.25%	5	15.62%	17	53.13%	8	25%
	c. Answer the question	3	9.37%	7	21.88%	13	40.63%	9	28.12%

From the table above it can be seen that the average student involvement/ activity is still lacking, the ability to solve problems is also still lacking. Based on the results of observations during the learning process, several causative factors were found, such as: Student activity in learning activities before the cycle in discussion activities was 38.54%, while presentation activity was 26.04%. As for the results of the achievement of learning completeness through the provision of formative tests before the cycle , it can be seen that classically the students' learning completeness is still low, namely 28.13%, still very far from the classical completeness set at 85% and the average value is 69.88.

Cycle 1

The results of observations on the condition of students with problem-based learning models during the learning process in cycle 1 are as follows:

Table 3. Cycle 1 student activity

No.	Ability	Category							
		Very good		Good		Enough		Not enough	
		total	Pro	total	Pro	total	Pro	total	pro
1	Discussion Activities:								
	a. Retention of material	4	12.5%	11	34.38%	12	37.5%	5	15.62%
	b. Express opinions/solve problems	3	9.37%	12	37.50%	11	34.38%	6	18.75%
	c. Accept opinion	8	25%	12	73.50%	10	31.25%	2	6.25%
2.	Presentation Activities:								
	a. Presentation	5	15.62%	7	21.88%	12	37.5%	8	25%
	b. argument	4	12.5%	8	25%	14	43.75%	6	18.75%
	c. Answer the question	6	18.75%	9	28.12%	13	40.63%	4	12.5%

From the table above it can be seen that the activeness of students, especially in discussions and presentations, has increased, activeness in discussion (understanding of the material, expressing opinions, accepting opinions) the average completion (good and very good categories) is 56.25%, while the average presentation ability that has been completed (very good and good categories) is 40.63%. While the results of the evaluation of student learning cycle 1 can be seen that classically the learning completeness has increased, namely 68.75%, but still has not reached the specified classical completeness, which is 85% and the average value is 78.41.

Cycle 2

The results of observations on the condition of students with problem-based learning models during the learning process in cycle 2 are as follows;

Table 4. Cycle 2 student activity

No.	Ability	Category							
		Very good		Good		Enough		Not enough	
		total	pro	total	pro	total	Pro	total	pro
1	Discussion Activities:								
	a. Retention of material	8	25%	15	46.88%	8	25 %	1	3.12% %
	b. Express opinions/solve problems	9	28.12%	17	53.13%	5	15.63%	1	3.12%
	c. Accept opinion	11	34.38%	15	46.88%	6	18.75%	-	-
2.	Presentation Activities:								
	a. Presentation	12	37.5%	10	31.25%	7	21.88%	3	9.38%
	b. argument	13	40.63%	12	37.5%	5	15.63%	5	15.63%
	c. Answer the question	9	28.12%	17	53.12%	3	9.38%	3	9.38%

From the table above it can be seen that student activity, especially in discussions and presentations, has increased, activeness in discussions (understanding material, expressing opinions, accepting opinions) has been completed on average (good and very good categories) of 78.13%, while the average presentation ability that has been completed (very good and good categories) is 76.84%. While the results of the evaluation of student learning in cycle 2 can be seen that classically the learning completeness has been achieved because it is more than 85%, namely 87.50% and the average value is 82.91.

DISCUSSION

Various efforts are made by the teacher in the learning process so that students are not only passively listening but also active, so that the learning that takes place is not *teacher centered* but *student centered*. Many types of models or methods are applied, including one problem-based learning model.

In cycle 1 the activity of students, especially in discussions and presentations, experienced an increase compared to before the cycle, activity in discussions (understanding of material, expressing opinions, accepting opinions) the average completion (good and very good categories) was 56.25%, while the average presentation ability that has been completed (very good and good categories) is 40.63%. In cycle 2 the activity of students, especially in discussions and presentations, has increased, activeness in discussions (understanding of material, expressing opinions, accepting opinions) has been completed on average (good and very good categories) of 78.13%, while in the ability the average presentation that has been completed (very good and good categories) is 76.84%. From the results of this study it can be concluded that *the application of problem-based learning models can increase student learning activity*.

After going through the stages in cycles 1 and 2, the learning outcomes obtained by students show that in cycle 1 it can be seen that classically the learning completeness has increased, namely 68.75%, compared to the learning outcomes before the cycle, but it still has not reached the set classical completeness of 85% and mean value 78,41. While the results of the evaluation of student learning cycle 2 can be seen that classically the learning completeness has been achieved because it is more than 85%, namely 87.50% and the average value is 82.91. From the results of this study it can be concluded that the application of a problems in social studies subjects can improve student achievement.

Conclusion

Based on data from observations/observations, it can be seen that in participating in learning with a problem-based learning model, students are gradually able to increase their activeness in discussions

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and improve their problem-solving skills. The deficiencies in the previous cycle have been improved so that the achievements in the next cycle have increased. The achievement of results in cycle 2 shows that the application of problem-based learning models can create a learning atmosphere that makes students more active, and increases student achievement in Social Sciences (IPS) subjects.

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