Implementation of Discovery Learning Model in Improving Students' Activity on Social Studies Subject

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Abstract

During social studies subject, many VIIIth grade students of MTsN 2 Pamekasan still did not focus on learning, such as chatting with their seatmates, day dreaming, and often leaving the class. Therefore, the use of discovery learning model was very important to improve students' learning activity.This study aims to find out how to improve students' activity based on the indicators of active learning occuring through the process of experiencing, forming active learning events, and solving problems. This study used classroom action research with two cycles consisting of planning, implementing, observing, and reflecting. Data collection techniques used were observation, questionnaires, and documentation. From the results of the study can be concluded that the students more focused on listening to the teacher's explanation, more active during discussions, actively answer questions, actively ask questions when there is material that is not understood, and actively involved in solving problems about the material being studied. The increase in students' activity can be seen from the results of observations in cycle I that those who were active 24%, less active 44%, not active 32% while in cycle II the increase with the percentage of active students was 91% while those who were less active 9%.

Keywords: Discovery Learning, Active Learning, Social Studies Subject

Abstrak

Pada saat pembelajaran IPS berlangsung siswa kelas VIII MTsN 2 masih banyak yang tidak fokus dalam pembelajaran seperti halnya mengobrol dengan teman sebangkunya, melamun, dan sering izin keluar kelas. Oleh karena itu, penggunaan model *discovery learning* sangat penting untuk meningkatkan keaktifan belajar siswa. Penelitian ini bertujuan untuk mengetahui cara meningkatkan keaktifan siswa berdasarkan indikator keaktifan belajar yaitu aktif belajar yang terjadi dengan proses mengalami, aktif belajar dengan bentuk peristiwa belajar aktif, aktif belajar melalui proses mengatasi masalah dengan menggunakan model *discovery learning* kelas VIII. Penelitian ini menggunakan penelitian tindakan kelas dengan dua siklus; perencanaan, pelaksanaan, observasi, dan refleksi. Teknik pengumpulan data dengan observasi, angket, dan dokumentasi. Dari hasil penelitian dapat disimpulkan bahwa penerapan model *discovery learning* dapat meningkatkan keaktifan belajar siswa diantaranya fokus mendengarkan penjelasan guru, aktif menjawab pertanyaan, aktif bertanya ketika ada materi yang tidak dimengerti, aktif dalam kegiatan diskusi, aktif dalam memecahkan masalah tentang materi yang dipelajari, serta aktif mengutarakan ide guna menyelesaikan masalah. Peningkatan keaktifan siswa pada siklus I yaitu siswa yang aktif 24%, kurang aktif 44%, tidak aktif 32% sedangkan pada siklus II mengalami peningkatan dengan persentase siswa aktif 91% sedangkan pada siswa yang kurang aktif 9%.

Kata Kunci: Discovery Learning, Keaktifan Belajar, Pelajaran IPS

Introduction

To meet the demands of the 21st century, the Indonesian nation must prepare human resources who have competence and skills (Sofiah Al Azizani, 2021). The skills needed in education are thinking creatically, thinking creatively, communicating effectively and working collaboratively (Kementerian Pendidikan dan Kebudayaan, 2017). These skills need to be developed in the classroom. Therofore, learning is no longer centered on teachers but is centered on students and the role of teachers are only as facilitators and guides. Thus, students have many opportunities to develop such as expressing opinions, thinking critically, conveying ideas and so on.

Learning activity is an activity which led to the learning process such as observing, asking questions, presenting their views, doing the tasks, answering the teacher's question, cooperating with other students, and being responsible of a given task (Kuswati, 2016). In line with this, Wahyuningsih states that students' learning activity can be seen by participating in carrying out their learning assignments, participating in solving problems, asking friends or teachers if they do not understand the problems they face, trying to get information by looking for what is needed to solve problems, train theirselves in solving problems or questions, and assess their own abilities and the results achieved (Wahyuningsih, 2020). It is an important basic element in successful learning (Kanza et al., 2020). Furthermore, active learning needed by students to achieve maximal outcomes. If the students are passive or they just get the material from the teacher, it means they tend to forget it but if they learn actively, it means they can control their learning activities so they can offer opportunities to participate (Nefianti, 2021).

Based on observation on October 13 2022 at MTsN 2 Pamekasan that when learning Social Studies subject, many students seem to pay less attention to the teacher's explanation, they were busy with themselves such as chatting with their seatmates, often permission to leave class with the excuse of going to the bathroom, no concentrating on learning when the teacher holds a discussion, only a few students played an active role in giving their opinions, while most just followed along, even if the teacher asked a question, only a few students answered. In such conditions students cannot develop indicators of active learning, including listening to the tearcher's explanations, answering teacher questions, conducting group discussions, being able to express opinions, being confident in learning, being able to work together in groups, observing and listening to the presentation.

One of the learning models that can be used to increase the activity of student

learning is discovery learning. The term discovery learning can be interpreted as a learning method, where the students will work by themselves to seek any information about a certain topic, supported with the teacher's encouragement to obtain proper information (Feriyanti, 2018). It is a learning theory that is defined as a learning process that occurs when students are not presented with lessons in their final form but students manage their own learning. This strategy emphasizes discovering previously unknown concepts or principles. The teacher acts as a guide or facilitator which enables students to learn actively (Suryadi, 2021). Additionally. When applying the discovery learning model, in the classroom, the learning becomes students-centered learning, with the teacher as the guide to facilitate the students' discovery process (Sarimanah et al., 2019).

Method

This research used classroom action research by Kemmis and McTaggart model which includes four steps: 1) Planning, 2) Implementation, 3) Observation, 4) Reflection (Kemmis & McTaggart, 1988).

The researchers used CAR method because it was used to address problems that arose in the classroom in detail, starting from observation then the selection of a learning model that was appropriate to the problems. The data obtained from MTsN 2 Pamekasan 17 students of VIII[lth] grade, while the data instruments are observation of teaching learning process, observation of students' learning activity and questioner given to students in order to find out the extent of student learning activity during implementation of discovery learning model. The analysis data technique by matching the students' learning process with the activity learning indicators such as occuring through the process of experiencing, forming active learning events, and solving problems (sinar, 2018).

Results and Discussion

This research consisted of two cycles consisting of four stages, namely planning, implementation, observation and reflection.

1. Pre Action Stage

The pre-action stage is carried out before the implementation of the action, this aims to find out problems in social studies learning. This step consists of observing the teaching and learning process for 2 meetings. When social studies learning was taking place, it was seen that students were less active in carrying out the learning, many students still lacked concentration, joking around with their classmates, often taking permission to leave the classroom, and when the teacher was carrying out discussions,

only a few students played a role actively giving their opinions, when the teacher asks questions only a few students seem to answer.

Based on these problems, the researchers chose to use the discovery learning model because this model aims to increase the activity of students' learning based on series of learning activities in which students are required to participate actively in discovering their own understanding of a problem. The syntax are: (1) stimulation, (2) problem statement, (3) data collection, (4) data processing, (5) verification, and (6) generalization (drawing conclusions) (Muhayati et al., 2023).

2. Implementation stage of cycle I

a. Planning Stage

In this phase, the researchers prepare several things that will be used in the learning activity process.

1. Writing a lesson plan.

2. Preparing learning materials about the conditions of Indonesian society during the colonial period.

3. Preparing the student worksheet for student discussion materials.

4. Compiling observation sheets of teacher teaching activities.

5. Conducting an observation sheet of student learning activity based on the process of experiencing, forming active learning events, and solving problems.

6. Compiling a questionnaire that will be given to students in order to find out the extent of student learning activity during social studies learning.

b. Implementation of Actions

The implementation of cycle I actions was carried out in two meetings. The first meeting was on Wednesday, April 5 2023 and the second meeting was on Thursday, April 6 2023 with the material "Condition of Indonesian Society during the Colonial Period".

1) First Meeting of Cycle I

1. The researcher explained the outline of the material/topic about the condition of Indonesian society during the colonial period.

2. The students were presented with a video about the topic.

3. The researcher formed groups; each group consisting of 4-5 students.

4. The researcher explained the tasks/questions that students would do with their groups.

6. The students were asked to collect information/answers to questions from various learning sources, such as text book and browsing from internet.

7. The students were asked to discuss in groups to draw conclusions from the answers to the questions that have been formulated.

8. The researcher asked each group to verify the information/answers from every group member while the researcher observed the flow of student discussions and provided assistance if students encountered problems they did not understand.

9. The researcher asked each group to present the results of the discussion provided opportunities for other students to ask questions regarding things they did not understand.

10. The researcher asked students to record the results of the discussion.

11. The researcher confirmed and gave feedback on things presented by students.

12. The researcher gave students the opportunity to ask questions if there is something they don't understand.

2) Second Meeting of Cycle I

To determine the implementation of the discovery learning model during the teaching and learning process at the first meeting of cycle I, at the second meeting the researcher gave a questionnaire consisting of 20 questions to students to be answered correctly and thoroughly. This lesson began by explaining the implementation of the first cycle evaluation and giving questionnaires to students.

c. Observation

The researcher observed students' activities in carrying out learning using discovery learning model that aims to find out whether the teaching and learning activities have gone or not. The results of observations carried out during the implementation of the action then used to determine the level of success of research in cycle I.

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Table 1 Cycle I. Students' Learning Activeness Observation Sheet

No.	Indicators	Assessment Criteria	Active	Less Active	Not Active
1	Active learning happens with the experience process	Students are listening and focusing the teacher when she is teaching	7	10	
2		Students are writing the teacher explanation	6	11	
3		Students are brave to answer the teacher's or their friends' questions	3	5	9
4		Students are	2	4	11

		active to ask questions if there is the material doesn't understand			
5	Active learning in the form of the events of learning actively	Students are brave to present the result of discussion	8	9	
6		Students are active in helping their friends' difficulty	2	5	10
7		Students are able to explain the result of discussion	4	5	8
8		Students are active in group discussion activity	6	10	1
9	Learning activity occurs through the process of solving problems	Students actively involve in solving the problems of the topic that is learning	2	11	4
10		Students are able to express idea to solve the problem	1	4	12
	Total		**41**	**74**	**55**

Procentage:
Aktive: 41 x 100% = 24% Less active: 74 x 100%= 44%.
   170   170
Not active: 55 x 100%=32%
      170

The observation results show that in the first indicator, on active learning in the process of experiencing, there are 7 students who listen and pay attention to the teacher while explaining the material, 6 students who actively record explanations from the teacher, 3 students who are able to answer questions from the teacher o their friends, 2 students who have the courage to ask when there is material that is not understood. In the second indicator, namely active learning which is formed in active learning transactions/events, there are 8 students who are able to present the results of the discussion, 2 students who are active in helping other friends when something is not understood, 4 students who are able to explain the results of the discussion, 6 studentswho are active in group discussion activities.

From the results of observations, it was found that the percentage of students' active learning with the criteria of being active was 24%, less active 44%, and inactive 32%. This happened because in cycle I the researchers still could not fully reach and

condition all student activities, some students had not focused on paying attention to material explanations such as joking, chatting, and often asking permission to go to the bathroom and many more students who are confused by the learning activities implemented by researchers so that student activities in the teaching and learning process are not optimal.

The percentage of student learning activity at the end of cycle I showed that the most prominent category was less active with a gain of 44%.

d. Reflection

After the entire learning process in cycle I was completed, there were several shortcomings in the implementation which still had not reached the level of success expected by the researchers. In this reflection activity, it aims to be used as a reference by the researchers for carrying out further actions and correcting deficiencies in cycle I to increase students' learning activity. For this reason, researchers need to correct deficiencies in cycle I to increase student learning activity by improving the following:

1. The researcher could pay close attention to students during the learning process.

2. The researcher guided and provided direction to students to be active in the learning process.

3. The researcher must provide a good understanding of the flow of the learning model that would be applied.

4. During the learning process, if there were students who did not listen, it was necessary to have confirmation by the researcher.

3. Implementation Phase of Cycle II

a. Planning Stage

1. Writing a lesson plan.

2. Preparing learning materials about the growth and development of the national spirit.

3. Making student worksheet for student discussion material.

4. Preparing an observation sheet of the teacher's teaching activities.

5. Preparing an observation sheet on student learning activities.

6. Preparing a questionnaire that would be given to students to find out the extent to which the discovery learning model is implemented during social studies learning.

b. Implementation of Actions

The implementation of this cycle II action was carried out in two meetings. The first meeting was on Wednesday, 12 April 2023 and the second meeting was on Thursday, 13

April 2023 with the material "Growing and Developing the National Spirit".

1) First Meeting of Cycle II

1. The researcher explained the outline of the material/topic about the growth and development of the national spirit.

2. The students were presented with a video about the topic.

3. The researcher formed groups; each group consisting of 4-5 students.

4. The researcher explained the tasks/questions that students would do with their groups.

6. The students were asked to collect information/answers to questions from various learning sources, such as text book and browsing from internet.

7. The students were asked to discuss in groups to draw conclusions from the answers to the questions that have been formulated.

8. The researcher asked each group to verify the information/answers from every group member while the researcher observed the flow of student discussions and provided assistance if students encountered problems they did not understand.

9. The researcher asked each group to present the results of the discussion provided opportunities for other students to ask questions regarding things they did not understand.

10. The researcher asked students to record the results of the discussion.

11. The researcher confirmed and gave feedback on things presented by students.

12. The researcher gave students the opportunity to ask questions if there is something they don't understand.

2) Second Meeting of Cycle II

To find out the implementation of the discovery learning model during the teaching and learning process at the first meeting of cycle II, at this second meeting the researcher gave a questionnaire consisting of 20 questions to students to answer correctly and also thoroughly. This lesson begins by explaining the implementation of the first cycle evaluation and giving questionnaires to students.

c. Observation

The researcher observed students' activities in carrying out learning using discovery learning model that aims to find out whether the teaching and learning activities have gone or not. The results of observations carried out during the implementation of the action then used to determine the level of success of research in cycle I. The success rate of students in cycle II can be seen in the following table.

Table 2 Cycle II Student Activity Observation Sheet

No.	Indicators	Assessment Criteria	Active	Less Active	Not active
1	Active learning happens with the experience process	Students are listening and focusing the teacher when she is teaching	17		
2		Students are writing the teacher explanation	17		
3		Students are brave to answer the teacher's or their friends' questions	14	3	
4		Students are active to ask questions if there is the material doesn't understand yet	11	6	
5	Active learning in the form of the events of learning actively	Students are brave to present the result of discussion	17		
6		Students are active in helping their friends' difficulty	13	4	
7		Students are able to explain the result of discussion	17		
8		Students are active in group discussion activity	16	1	
9	Learning activity occur through the process of solving problems	Students actively involve in solving the problems of the topic that is learning	15	2	
10		Students are able to express idea to solve the problem	17		
	Total		**154**	**16**	**0**

Percentage:
Active: $\underline{154}$ x 100% = 91%. Less actice: $\underline{16}$ x 100%= 9%.
  170   170

The results of observations in cycle II showed that in the first indicator, namely active learning in the process of experiencing, there were 17 students who listened and paid attention to the teacher when explaining the material, 17 students took notes on the teacher's explanation, 14 students dared to answer questions from teachers and friends, 11 students dared to ask questions when there was material they did not understand

In the second indicator, namely active learning in the process of transactions/active learning events, there were 17 students who dared to present the results of the discussion, 13 students were active in helping and understanding other friends when someone had difficulties, 17 students were able to explain the results of the discussion, 16 students were

active ingroup discussion activities.while in the third indicator, learning activity occurs through the process of solving problems so that the problem solving process occurs, there are 15 students who are actively involved in solving problems regarding the material being studied, 17 students are able to express ideas to solve the problem appear.

After the implementation of cycle II and the results of observations carried out during teaching and learning activities, the percentage obtained in the criteria for student activity was 91% active and 9% less active. In cycle II, students were calmer in listening to the teacher's explanations and taking notes on material that was considered important, students were also more active in expressing opinions and conveying arguments, students were braver to ask questions when there was material they did not understand, students were braver to present their results discussion and being able to explain the results of the discussion so that the conditions in the class look active, the application of the discovery learning learning model is optimal, the presentation is more orderly, organized, and quite orderly, student activities in the learning process also take place according to what is expected.

The percentage gain in students' active learning in cycle II shows that the most prominent category is active with a gain of 91%. This shows that after carrying out the learning process using the discovery learning model and reflection in cycle I shows active learning students increased from cycle I to cycle II.

d. Reflection

At this stage the aim is to find out whether the actions taken have achieved the expected results or not. The results of this reflection can prove that there is an increase in student learning activity in cycle II.

Judging from the analysis and the percentage that has reached the target of student learning activity, namely 91%, therefore this research has been stopped and not continued to the next cycle.

During the implementation of the first cycle, student learning activity was not running well, as some students were still chatting, joking, and even often going in and out to ask for permission to go to the toilet. This causes no indicators of active learning to appear, the first indicator regarding active learning occurs with the process of experiencing, in the implementation of this first cycle students were still difficult to communicate well and even reluctant to ask questions and give their opinions. Many students were still confused about the indicator of learning activities that were applied. The second indicator learning is formed in active learning transactions/events, here it could be

seen that students were still less active in group discussion activities, afraid or not confident in presenting and explaining the results of the discussion. The third indicator of active learning is that active learning occurs through the process of solving problems so that a problem solving process occurs. In this third indicator, students have not fully demonstrated involvement in solving problems regarding the material being studied and alsostudents are still not confident in expressing ideas to solve problems. Obtaining the results of observations of student activity in cycle I also did not match what was expected where only 24% of students were active, 44% less active students, 32% non active students. Under these conditions, the action research continues into cycle II. In cycle II, the researcher analyzed the action based on the reflection results obtained in cycle I.

When the second cycle was carried out based on the results of reflection by improving previous learning students were seen to be more active in learning, which initially students did not focus on learning now began to focus as well as listen and pay attention to the teacher while explaining taking notes on material, actively asking questions when there were things not understood, daring to express opinions, confident in presenting the results of discussions, active in group discussion activities, actively participating in solving problems regarding the material being studied, and able to explain the results of discussions. This can be observed from the activity observation sheet in the implementation of cycle II, namely 91% of students are active, and 9% of students are less active.

The implementation of the discovery learning model can improve the VIIIth grade students' learning activity of MTsN 2 Pamekasan in social studies subject. This can be seen from an increase in the number of students' activity. Students' learning activity in this study refer to indicators of occuring through the process of experiencing, forming active learning events, and solving problems (sinar, 2018). The learning activity begins by watching video about the topic, trying to find out information well, answering the task given by collecting information from credible sources, discussing it in groups to draw conclusion, presented the result of the discussion. Those activities are based on discovery learning model syntax: stimulation, problem statement, data collection, data processing, verification, and generalization (drawing conclusions) (Muhayati et al., 2023).

Discovery learning model used in this study can improve the students' learning activity since the teacher does not present learning in their final form but students organize their own knowledge that they want to know and draw conclusion from the material discussed (Edo, 2022). It is supported by Suryadi that discovery learning is a learning

theory that is defined as a learning process that occurs when students are not presented with lessons in their final form but students manage their own learning. This strategy emphasizes discovering previously unknown concepts or principles. The teacher acts as a guide or facilitator which enables students to learn actively (Suryadi, 2021).

Conclusion

Based on the reseach results, in cycle I students still lacked focus in learning, so it can be concluded that the discovery learning model in social studies learning in class VIII cannot be implemented properly in accordance with indicators of learning activity. Then in cycle II by improving previous learning, there was an increase in students' learning activity. This can be seen from the implementation of cycle I to cycle II which experienced an increase in observation results, the percentage in cycle I showed that 24% of students were active, 44% of less active students, 32% of inactive students, while in cycle II the results were 91% of students active while 9% of students less active.This finding suggests that discovery learning model in social science subject can increase the students' learning activity.

Suggestion

Discovery learning model in social science effective for increase student's learning. the percentage in cycle I showed that 24% of students were active, 44% of less active students, 32% of inactive students, while in cycle II the results were 91% of students active while 9% of students less active, It' is prove effectivity Discovery learning model in social science.

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