

Increasing Student Learning Interest Through the Application of Problem-Based Learning Models in Class V Science Lessons

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1. Abstract

The research was conducted to determine the increase in students' interest in learning with the problem-based learning model. This study aims to calculate the results of students' interest in learning science subjects. The research was conducted in 2 cycles, which were carried out in stages with a simple quantitative research method. Data collection uses questionnaires and documentation both photos and videos. The results of the research before using the problem-based learning model found a percentage of 48.2%, where this percentage is included in the less category. After the implementation of cycle 2 by applying the problem-based learning model, the percentage results obtained were 73.73% with good information. The data processing was obtained by distributing questionnaires to 15 students with details of 9 male students and 6 female students.

Keywords: interest in learning, problem-based learning, learning models

2. Introduction

Times are developing rapidly, as well as education that is developing along with the times. Education in Indonesia requires up-to-date teachers who continue

to hone their teaching skills. The teacher in the classroom has an important role as a facilitator, and mentor, providing motivation for students, as well as managing the learning process in the classroom so that it is comfortable, safe, and in favor of the learning ecosystem and in favor of students.

Learning is a process in teaching and learning activities with efforts to influence each other to achieve learning objectives. Learning is a series of events designed to form interactions in the teaching and learning process. According to Djameluddin and Wardana (2019:13), Learning is a process of student interaction with educators and learning resources in a learning environment.

Learning is an activity that aims to find new information. This is in line with Setiawati's opinion (2018: 32) that learning is seeking new information or knowledge from something that already exists in nature. In addition, learning will cause changes in people who learn. However, according to Arif, et al in Setiawati (2018: 32) these changes are not only in the form of knowledge, but also in the form of skills, skills, attitudes, understanding, self-esteem, interests, character, and adjustment. So, the changes that occur involve changes in behavior and interest in learning because of a goal to be achieved.

Interest according to Soraya in Reski (2021: 2485) is a tendency to pay great attention to something with a feeling of happiness when doing it. In line with the opinion of Matondang (2018: 26) that interest is human involvement and interest in a particular field of study and feels happy with something he gets. Interest arises in the individual by itself. So that students who have a high interest in learning will happily carry out the process of teaching and learning activities. In addition, high learning interest in students will help them achieve learning objectives.

According to P Andi (2019: 208) that interest in learning is the driving force in humans to carry out learning activities to increase knowledge, skills, and experience. Students with a desire to increase their knowledge, skills, and experience can increase their learning objectives to the maximum. Students' high interest in learning grows accompanied by the learning model used by the teacher. The learning model plays an important role in increasing the activeness of students in the classroom. One of the learning methods that can increase the activeness of students in the classroom is the problem-based learning model (PBL).

The problem-based learning (PBL) learning model according to Bungel in Saputro (2021: 283-284) that this learning has its characteristics that can be distinguished from other learning models, which are student-centered or student-

centered so that students are actively involved in learning activities. In line with Trianto's opinion in Amaliyah (2022) that the problem-based learning model can accommodate student involvement in learning and explore skills in obtaining references so that problems can be resolved. This interest in learning can be encouraged by a learning model that involves student activity.

Based on the results of observations in class V SDN Ngabean, especially in science subjects, the lack of interest in learning in this subject can be seen when there are students who are not actively involved in learning activities. In addition, this learning process still uses a teacher-centered learning model. In this regard, the researcher is interested in conducting research with the title "Increasing Interest in Learning Through the Problem-Based Learning Model for Class V Science Subjects at SDN Ngabean Yogyakarta". The reason researchers took this title is because there is still a lack of interest in learning students in this lesson. So it is necessary to collect data to find out whether there is an increase in learning interest after implementing the problem-based learning model.

Some researchers have not paid attention to and have not used the problem-based learning model, such as "an analysis to see how students' learning interests when learning mathematics in class X IIS SMA Negeri 1 Jelimpo classically and

based on gender". Researchers are still focusing on interest only, paying little attention to the learning model. Therefore this study focuses on students' learning interests by using the problem-based learning model. It is intended that the use of problem-based learning models is able to increase student learning interest in science subjects.

3. Methods

3.1 Participants and Context

The subjects in this study were fifth-grade students. Then the object of this study was to increase student interest in learning through the problem-based learning model in science subjects. This research was conducted in May 2023. The data collection method used was quantitative. The quantitative data collection method is research based on numbers and calculations. The results of this data collection method can be presented in the form of tables, graphs, and so on. In line with the opinion (Priadana and Sunarsi, 2021: 20) that quantitative data collection is data generated in the form of numbers obtained from the field, or it can also be called qualitative data which is expressed in the form of numbers obtained by changing the value of qualitative data be a quantitative data value. Likewise, the opinion expressed by (Paramita., et al, 2021: 113) is that all the data used has a quantitative nature, namely data that is measured on a numerical scale or numbers.

3.2. Materials

Data collection techniques were obtained from questionnaires and documentation. Questionnaire collection technique According to (Hasibuan, 2021: 247) that the questionnaire is a data collection technique that is carried out by providing several questions or written statements to respondents. Gottschalk (Nilamsari, 2014: 178) also states that documents (documentation) in a broader sense are any evidentiary processes based on any type of source, whether written, oral, pictorial, or archaeological. According to Fuad & Sapto (Yusra., et al, 2021: 18) documentation is a source of secondary data needed in classroom action research.

3.3. Data Collection and Analysis

Data collection was carried out through questionnaires and documentation. The following is an explanation of the data collection carried out, including:

a. Questionnaire

Data collection with a questionnaire is done by making a list of questions that refer to aspects of student interest in learning. This questionnaire was distributed to students to determine the increase in students' interest in learning science subjects.

b. Documentation

Documentation is done by taking photos and videos during the lesson.

3.4. Limitations to the Study

The limitation of the problem in this classroom action research is the lack of interest in learning with students and the use of interesting and student-centered learning models.

4. Results and Discussion

Based on the results of the analysis that was carried out by the researcher, several findings were obtained, namely the number of students who took part in research activities totaling 15 people, with details of male students totaling 9 people and female students totaling 6 people. This study is guided by aspects or indicators of interest in learning, feeling of pleasure, interest, attention, and involvement. In line with the opinion of Lestari and Mokhammad (Friantini and Winata, 2019: 7) that indicators of student interest in learning are 1) feelings of pleasure, 2) interest in learning, 3) showing attention while studying, 4) involvement in learning.

Tabel 1. Indicator number

Number	Indicator	Question Number	Total
1.	Feelings of pleasure	1, 2, 3, 4, 5	5
2.	Interest	6, 7, 8, 9, 10	5
3.	Attention	11, 12, 13, 14, 15	5
4.	Involvement	16, 17, 18, 19, 20	5
Total Number of Question			20

Scoring student answers using a Likert scale scoring. According to (Friantini and Winata, 2019: 7) the Likert scale is used to measure people's attitudes and

opinions about a phenomenon. According to Sugiyono (2014: 58) by using a minimum score of 1 and a maximum score of 4, it will be known with certainty that the respondent's answer leads to an answer that agrees or disagrees. So it is hoped that the results of the answers can be more relevant.

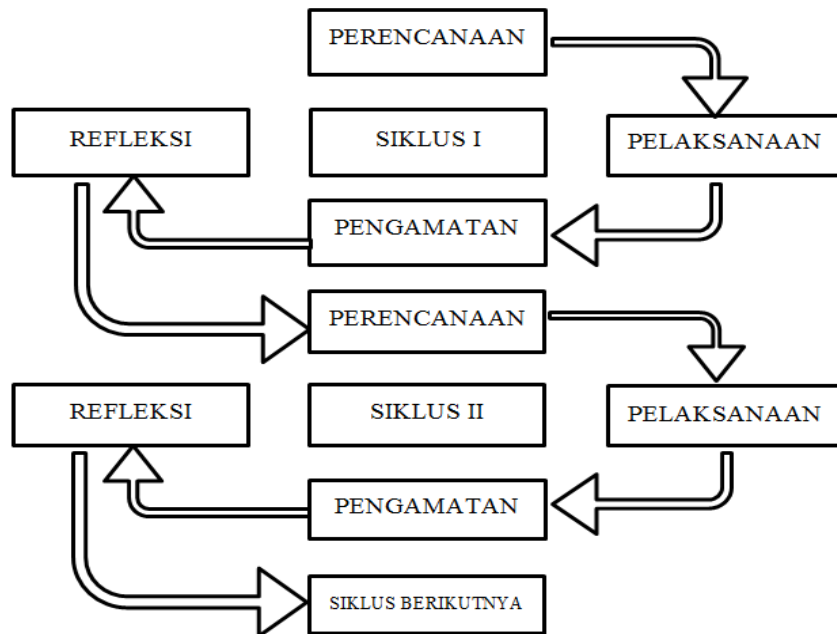
Tabel 2. Likert scale score

Number	Answer	Skor
1.	Disagree (D)	1
2.	Not Agree (NA)	2
3.	Agree (A)	3
4.	Totally Agree (TA)	4

(Source: Sugiyono, 2014:58)

The author carried out 2 cycles of classroom action research. This implementation was carried out to determine the increase in student interest in learning. Cycle 1 students have not been introduced to the problem-based learning model, students learn classically. Then in cycle 2 students are introduced to the problem-based learning model. This model is used to help increase students' interest in learning science subjects.

Gambar 1. class action research cycle



Source: <https://www.detikpendidikan.id/2020/12/model-dan-jenis-jenis-ptk.html>

This class action research cycle was carried out in 2 cycles. Cycle 1, the average percentage of students' learning interest is still low. Student learning interest in cycle 1 was 48.2%, then student learning interest in cycle 2 was 73.73%. From the results of the calculation of students' interest in learning increased 15.53%. (Muhammad, et al., 2022) states that this percentage is obtained from the formula for calculating the percentage of interest, namely:

$$P = \frac{F}{N}$$

Information:

P = percentage number

F = total number of respondents' answers

N = total number of students

Note: Learning Mastery Level Criteria

Figures 86%-100% = Very good

Figures 71% -85% = Good

Figures 56%-70% = Enough

Figures 41% -55% = Less

Figures <40% = Very Less

5. Conclusion

Based on the results of the class action research, the researcher obtained the results of the research in cycle 1 with a percentage of 48.2% with a description of Enough, then the researcher conducted research on cycle 2 with a percentage of 73.73% with a description of Good. It is proven that the implementation of learning using the problem-based learning model is able to increase students' interest in learning in class V science subjects.

In addition, teachers are able to apply this PBL learning model during teaching and learning activities. Teachers can use this model to interest students in learning, discussing, and expressing opinions. So that learning can be fun and two-way communication can be established.

6. References

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