

INCREASING THE INTEREST IN LEARNING SCIENCE STUDENTS IN THE LIFE CYCLE MATERIALS OF LIVING THINGS THROUGH VISUAL AUDIO MEDIA

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Abstract

This research includes 2 cycles in each cycle and includes 4 stages, namely planning (planning), implementation (action), observation (observation), and reflection (reflecting). This research was conducted on students in class IV C for the 2022/2023 academic year, odd semester, with a total of 31 students for 2 months, namely November 2022 to January 2023. Data was collected through an ability test in Natural Science learning outcomes on the material Life Cycle of Living Things, by interviewing, observation, documentation and field notes. The results of the pre-action research showed that the criteria for completeness were the average student interest in learning in class IV C when the pre-cycle showed a score of 45.35%, where the categorization of interest in learning was included in the low category. Cycle I, the average learning interest of students in class IV C shows a figure of 55.68%, which in the categorization of interest in learning is included in the medium category. Cycle II gets a score of 89.5% which in the categorization of interest in learning is included in the high category. So it can be concluded that using the demonstration method can improve student learning outcomes in the life cycle material of living things in class IV C students of Pinang Ranti 01 Public Elementary School, East Jakarta, odd semester of the 2022-2023 academic year, getting an average score of 66.

Keywords: Audio Visual Media, Classroom Action Research, Interest in Learning, Life Cycle of Living Things

1 INTRODUCTION

Education is a human effort in preparing for the future. This involves families, schools and communities. Learning is an integral part of education, where the teacher acts as a facilitator in creating an atmosphere that allows students to learn well. IPA is an important subject in developing science and technology. Teachers need to create creative learning so that students like the subject. Efforts to improve science learning must use appropriate methods and create a conducive learning environment. The problems faced are the low interest of students in learning and the lack of interesting learning media. From the results of research in the pre-cycle shows that the average student interest in Class IV C, namely the number 45.35% where the categorization of interest in learning is included in the low category. Values below 50 indicate 46.46%, while values above 50 indicate 54.13%.

Therefore, classroom action research was carried out using audio-visual media to increase student learning interest in the Life Cycle of Living Things material in class IV C SD Negeri Pinang Ranti 01 East Jakarta for the 2022/2023 school year.

Based on the limitations of these problems, the problem in this research can be formulated, namely: How to Increase Interest in Learning Natural Science in the Life Cycle of Living Things through Audio Visual Media in Class IV C Students in Odd Semester 2022/2023 Academic Year SD Negeri Pinang Ranti 01 East Jakarta .

The aim of the research is to increase students' interest in learning about the Life Cycle of Living Things with audio-visual media in class IV C in the odd semester of the 2022/2023 academic year.

2 RESEARCH METHODS

This research is a classroom action research conducted in class IV C in the even semester of the 2022/2023 academic year. The research subjects were students of class IV C at SDN Pinang Ranti 01, East Jakarta. The research was conducted in August-December 2022. The research method used was Classroom Action Research (PTK) based on the Kemmis and Mc. Taggart. Classroom action research is a form of collective reflection carried out by participants in social situations to improve the reasoning and fairness of these practices to the situations in which these practices are carried out.

This research method uses the Kemmis and Taggart model. This study consisted of 2 cycles with each cycle consisting of 4 steps, namely planning, process/activity, observation, and reflection. Each cycle is carried out to improve and improve the implementation of actions in accordance with the evaluation of the results of previous studies. Data collection was carried out through observation using observation sheets of teacher and student activities. In addition, the interest in learning sheet is also used to test students' interest in learning Natural Sciences subject matter.

The research procedure begins with planning, in which the researcher designs the actions to be taken, prepares a learning implementation plan (RPP), prepares student worksheets (LKS), teaching resources and materials, as well as learning media related to animal life cycle material. Furthermore, the implementation of the action is carried out in accordance with the RPP that has been prepared.

After implementation, observations were made of teacher and student activities using observation sheets. The collected data is then analyzed and evaluated at the reflection stage. Reflection is carried out by researchers to improve the implementation of actions in the next cycle. This study used Pinang Ranti 01 Public Elementary School.

3 RESULT AND DISCUSSION

Pre-Cycle

The pre-cycle activities in this study had the objective of obtaining information about the initial score of students' interest in learning in class IV C before taking action. Pre-cycle observation was carried out to obtain an initial score for class IV C students, where researchers observed students during learning activities.

Based on the results of observations, most of the students were seen playing alone when the teacher explained the subject matter. Some students play with their stationery, while others play with their classmates. In addition, the focus of students during teaching and learning activities is only brief. Students' lack of interest in learning science can have a negative impact on their learning outcomes. Therefore, an effective action is needed to overcome this problem.

In addition to making observations, researchers also gave tests of learning interest and learning achievement tests to students. The goal is to get a score of student interest in learning. The results showed that the average interest in learning in class IV C during the pre-cycle showed a figure of 45.35% which in the categorization of interest in learning was included in the low category. Based on the categorization in table 1.

Table1. Criteria for Student Learning Interests

No	Interval	Criteria
1	97.8 – 120.3	Very high
2	75.2 – 97.7	Height
3	52.6 – 75.1	Currently
4	30- 52.5	Low

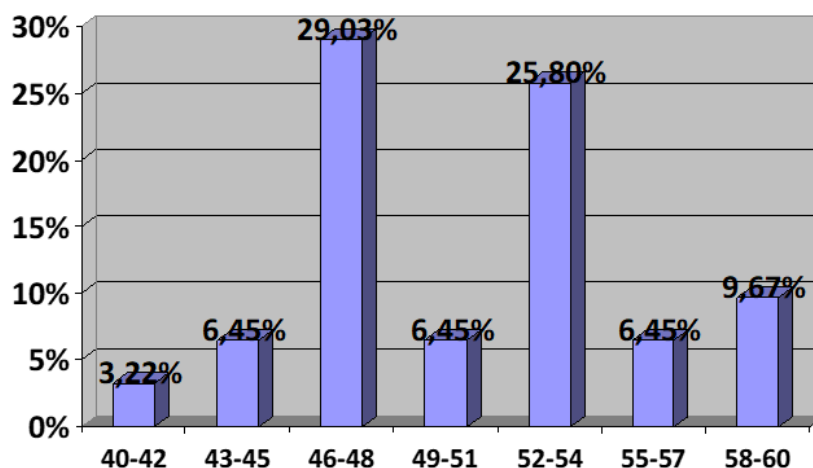


Figure 1. Students' interest in pre-cycle.

In the pre-cycle test scores for student acquisition were then distributed using Sturges' calculations and the results of the frequency distribution were: at intervals of 40 - 42 the relative frequency was 3.22%, then at intervals of 43 - 45 the relative frequency was 6.45%, then at intervals 46 - 48 the relative frequency is 29.03%, then at intervals 49 - 51 it is 6.45%, at intervals 52 - 54 it is 25.80%, at intervals 55 - 57 it is 6.45%, and at intervals 58 - 60 of 9.67%.

Cycle I

The steps of this research include planning, action, observation, and reflection. The planning stage in cycle I includes: The teacher and the researcher develop a learning implementation plan (RPP) which will use the audio-visual method, the researcher prepares the research needs of cycle I, such as student observation sheets, interest in learning questionnaires, interview guide sheets, and learning media, researchers conduct a simulation of the audio-visual method for class IV C teachers and provide the information needed during the implementation of the audio-visual method. The implementation of the actions in cycle I was carried out in one meeting with an allotted time of 120 minutes.

Some of the activities carried out at the meeting included: The teacher used a learning video from YouTube about cockroaches and mosquitoes as teaching material. Students were asked to pay attention to the explanation about the metamorphosis of cockroaches and mosquitoes in the video. Students are welcome to ask questions if something is not understood. After studying the teaching materials, students are asked to work on LKS and make conclusions from that day's learning. Students were asked to fill out a learning interest questionnaire. The lesson ended with a prayer and information about learning activities at the next meeting.

Student observation is carried out to observe teacher and student activities in the classroom. The results of the first cycle of observation can be concluded that of the three indicators of student interest in participating in teaching and learning activities is still relatively low. To see a description of students' interest in learning in Natural Sciences, the researcher analyzed the results of filling out a questionnaire of students' interest in learning in Natural Sciences by calculating the total score of each item (scoring). Learning interest in cycle I is described in graphical form below. It can be seen clearly how the high and low range of students' interest in learning Natural Sciences at the beginning of the study.

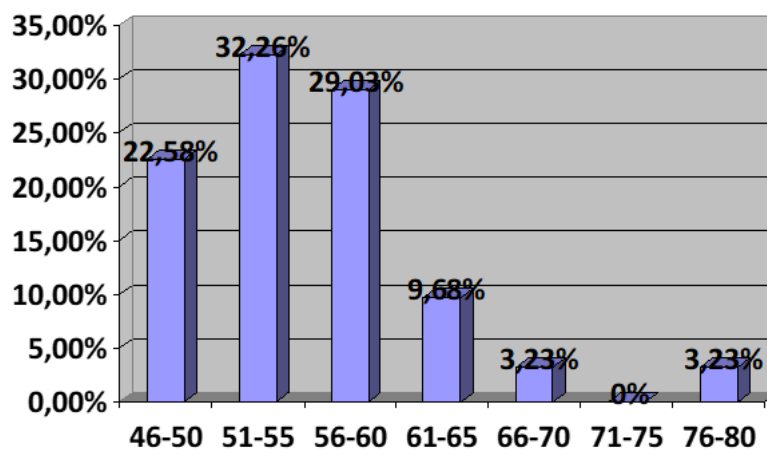


Figure 2. Student interest in cycle I.

In cycle I, student acquisition test scores were then distributed using Sturges's calculations and the results of the frequency distribution were: at intervals of 46 - 50 the relative frequency was 22.58%, then at intervals of 51 - 55 the relative frequency was 32.26%, then at intervals 56 - 60 the relative frequency is 29.03%, then at intervals 61 - 65 it is 9.68%, at intervals 66 - 70 it is 3.23%, at intervals 71 - 75 it is 0%, and at intervals 76 - 80 by 3.23%.

During the teaching and learning activities, the researcher also observed the implementation of the learning carried out by the teacher. Teacher preparation before learning, preparation of assignments, questions and learning materials.

After the meeting in cycle I, the researcher and teacher reflected on the implementation of the actions in cycle I. This reflection aimed to find out the deficiencies found in the implementation of cycle I and was used as a guideline for implementation in cycle II. Some things to note are:

- 1) There are still many students who are not familiar with face-to-face learning methods directly
- 2) Elementary school children tend to prefer listening to reading. When in class, students are accustomed to listening and carrying out instructions from what the teacher says, not from what is written on the blackboard. Meanwhile, many learning instructions are in the form of writing. This is very likely to make children confused. Because cycle I was not successful, the research continued to cycle II.

Cycle II

Planning in cycle II based on the reflection results of cycle I includes: The teacher and the researcher develop a learning implementation plan (RPP) with improvements to the deficiencies found in the first cycle. Researchers prepared research needs for cycle II, including observation sheets on the implementation of the audio-visual method by teachers, observation sheets of students' learning interests, interest in learning questionnaires, interview guide sheets, and learning media. The implementation of the actions in cycle II was carried out in one meeting with an allotted time of 120 minutes.

Some of the activities carried out at the meeting included: The material taught was still the same, namely Natural Sciences with material on the life cycle of butterflies and frogs.

The teacher provides links to interactive teaching materials from YouTube videos about butterflies and frogs. Students are asked to pay attention to the explanation of the metamorphosis of butterflies and frogs in the video. After studying the teaching materials, students are asked to work on LKS. Students are asked to make conclusions from that day's learning. The teacher asks students to fill in the learning interest questionnaire that has been distributed before. The lesson ended with a prayer and information about learning activities at the next meeting. Student observations were made to determine student

learning behavior. Based on the results of the second cycle of observation, it can be seen that students' learning attitudes have increased and learning conditions have become more conducive.

To see an overview of students' interest in learning Natural Sciences subjects, the researcher analyzed the results of filling in the student interest questionnaire in Natural Sciences by calculating the total score for each item (Scoring). Then tabulating was done, namely tabulating the answer data that had been given in tabular form, to make it easier to analyze the results of student answers. Interest in learning in cycle II experienced a very positive increase. The increase in learning interest is illustrated in the graph below. Interest in learning increases as students become more accustomed to learning using the audio-visual method.

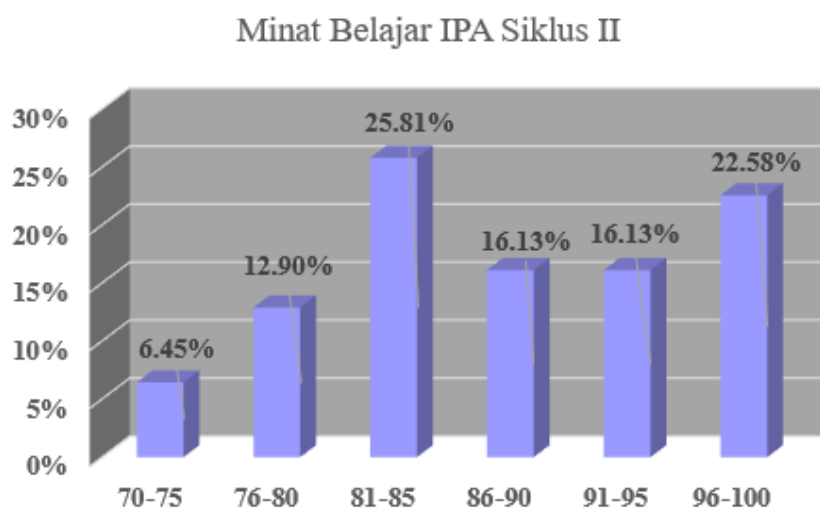


Figure 3. Student interest in cycle II.

In cycle II the student acquisition test scores were then distributed using Sturges's calculations and the results of the frequency distribution were: at intervals of 70 - 75 the relative frequency was 6.45%, then at intervals of 76 - 80 the relative frequency was 12.90%, then at intervals 81 - 85 relative frequency of 25.81%, then at intervals of 86 - 90 at 16.13%, at intervals of 91 - 95 at 16.13%, and at intervals of 96 - 100 at 22.58%.

From the research that has been done, the results of observing students' learning attitudes are as follows:

Table 2. Average Observation Results of Student Interests

	Cycle I	Cycle II
Attention in KBM	26.61	79.83
Participation in KBM	26.68	67.89
Happy feelings towards KBM	33.33	94.46

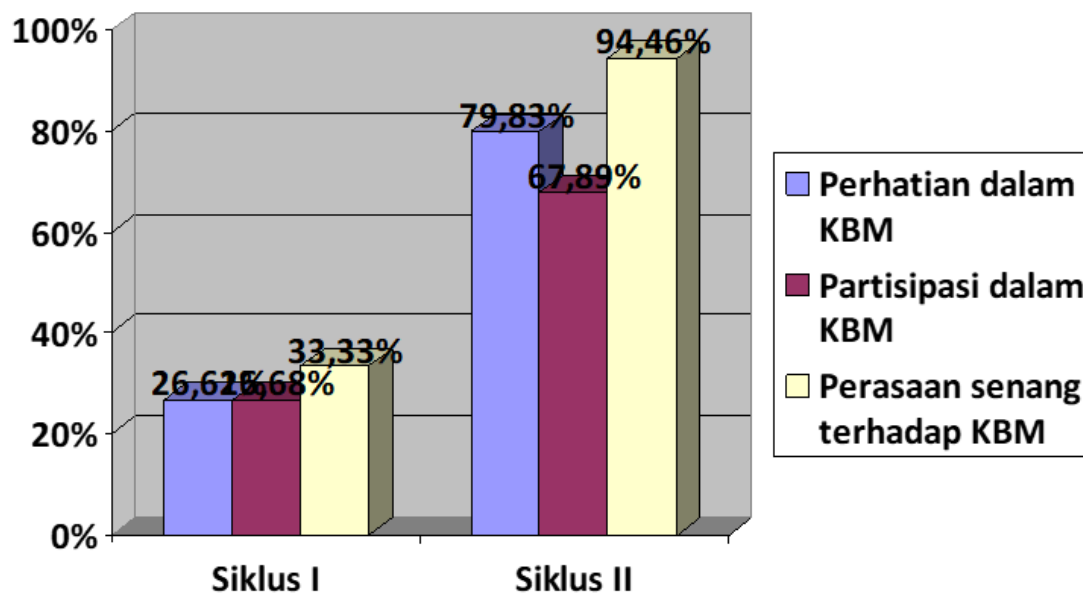


Figure 4. Graph of Average Observation Results of Learning Attitudes Cycle I and Cycle II.

In cycle I, the three indicators of interest in learning experienced a significant increase after using the audio-visual method. Attention to teaching and learning activities in cycle I averaged 26.61% then increased in cycle II to 79.83%. Participation in teaching and learning activities in cycle I was 26.68% then increased to 67.89% in cycle II. The feeling of pleasure towards teaching and learning activities in the first cycle was 33.33%, in the second cycle it increased to 94.46%.

The results of the study showed that there was an effect of the application of audio-visual media on students' interest in learning Natural Sciences. Assessment of the success of applying the success indicators of classroom action is if 80% of students' interest in learning is in the high category. The application of audio-visual media can increase interest in learning Natural Sciences for class IV C students at SDN Pinang Ranti 01.

This research is in line with Anita Esti Utami (2013), with the title Use of Audio Visual Media to Improve the Ability to Describe the Life Cycle of Animals in Grade IV Students at SD Negeri 01 Gerdu Karangpandan Academic Year 2012/2013 in cycle I obtained 76.92% classical completeness, and in cycle II obtained 92.31% classical completeness. The results showed that the percentage of classical completeness at the end of the cycle was 88% with an average score of 83.6. If these results are compared with the results of other relevant studies, the results of this study are included in a good average because the results are almost the same so that it can be said that the application of audio-visual media in learning is appropriate in learning Natural Sciences. This happens because students are very enthusiastic in participating in learning in a way that is different from usual so that it attracts students' interest to take learning seriously. Based on the data and discussion above, it can be concluded that the use of audio-visual media can increase the motivation and learning outcomes of class IV C students at SD Negeri Pinang Ranti 01.

3 CONCLUSION

Based on the discussion of research results in chapter IV, it can be concluded that in learning Natural Sciences the Life Cycle of Living Things with Audio Visual Media can improve student learning outcomes in class IV C SDN Pinang Ranti 01 East Jakarta. This can be seen from the significant increase in the second cycle compared to the first cycle on three indicators of student learning attitudes, namely attention to learning activities, participation in learning activities, and feelings of pleasure towards learning activities. The use of audio-visual media can be an effective strategy in increasing student learning interest. By utilizing audio-visual media, teachers can create learning that is more interesting, interactive, and motivates students to be actively involved in the learning process.

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