

Improving Student Learning Outcomes Through Demonstration Methods in Heat Controlling Properties of Science Materials for Class VI MI Muhammadiyah Padangjaya Academic Year 2013/2014

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ABSTRACT

Learning is basically an activity that should be fun for students. Because they will get new knowledge that is useful for themselves. Therefore a teacher needs to be skilled in making the atmosphere of the learning process more meaningful and not boring in all subjects. This study aims to determine the steps of applying the demonstration method and student learning outcomes in science learning on heat-conducting properties of class VI MI Muhammadiyah Padangjaya students. The research was conducted in class VI, which consisted of 20 students, consisting of 8 female students and 12 male students. The design used in this research is using classroom action research (CAR) using two cycles. Methods of collecting observations, tests, and interviews. The instruments used were student activity observation sheets, student learning outcomes assessment sheets, and interview questions. The data was obtained using qualitative analysis and quantitative description. The demonstration method can improve science learning outcomes about heat conducting properties in class VI MI Muhammadiyah Padangjaya students. This can be proven by the results of the research showing that the passing rate of student learning outcomes increased from 69.25 % to 78.75%. The conclusion of this study is that the demonstration method can improve student learning outcomes in science learning on heat-conducting properties in class VI MI Muhammadiyah Padangjaya.

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1. INTRODUCTION

Learning is basically an activity that should be fun for students. Because they will get new knowledge that is useful for themselves. Therefore a teacher needs to be skilled in making the atmosphere of the learning process more meaningful and not boring in all subjects. However, the current condition is that there are not a few teachers who still have difficulty providing interesting material, they still use conventional learning models. This has an impact on students, they become less active in learning and student learning outcomes decrease even just to achieve KKM scores. Agus Suprijono (2012: 5) explained that learning outcomes are patterns of actions, values, notions, attitudes, appreciation, and skills. On the other hand, Hamalik (in Ekawarna, 2013: 70) argues that learning outcomes are changes in behavior in students, which are observed and measured in the form of changes in knowledge, attitudes, and skills. Learning outcomes are closely related to the form of numbers, letters, or words that are good, moderate, poor, and so on. In the national education system, the formulation of educational objectives focuses on the classification of Bloom's learning outcomes which include cognitive,

affective, and psychomotor aspects. Based on this explanation, it can be said that learning outcomes are an assessment in the form of cognitive, affective, and psychomotor learners. Furthermore, talking about learning, especially science, there are many concepts that must be understood, because they affect students to understand the concept as a whole as explained (Yusuf, Nadziroh, & Tyas, 2021). Elementary school science subjects are subjects that cover quite a wide range of material. Teachers are required to complete student learning completeness targets, especially in the upper classes so planning and implementation and learning are needed using appropriate methods, media, or teaching aids and learning strategies. Meanwhile, Samatowa (2011: 3) has the view that science is a subject that discusses natural phenomena which are arranged systematically based on the results of experiments and observations made by humans. The science learning process in the classroom focuses on synchronizing students' prior knowledge with the material to be studied. This happens when science learning is able to improve students' thinking processes to understand a material concept so that students are able to apply it to everyday life. And actually, science learning itself has the goal of helping students master a number of facts and science concepts that can develop and instill a scientific attitude. In order for learning to be more meaningful, teachers need to apply learning methods that are appropriate to the material to be taught, teachers must be creative in learning by implementing learning methods and combining learning methods, materials, learning resources, learning environment, and curriculum in order to achieve educational targets and goals in elementary school. One method that can be applied is the demonstration method. This method aims to make the classroom atmosphere more enjoyable, making it easier for students to understand the material in learning. The demonstration method is a teaching method by demonstrating items, events, rules and sequences of doing an activity, either directly or through the use of teaching media relevant to the subject matter or material being presented (Wina Sanjaya, 2012: 85). On the other hand Abdul Majid (2013: 197) has the argument that the demonstration method is a method of presenting lessons by demonstrating and demonstrating to students about a particular process, situation, or object, either real or just an imitation.

It can be concluded that the selection of teaching methods is essential to make students learn meaningfully. If you apply the teaching method incorrectly, the impact will be fatal. The lack of student interest in learning science was also experienced by students of class VI MI Muhammadiyah Padangjaya semester 1 of the 2013/2014 academic year. This can be seen in teaching and learning activities, most students are less enthusiastic in learning, causing unsatisfactory student learning outcomes because the class average only reaches 61.50.

Based on the description above, the formulation of the research problem is how to improve student learning outcomes through demonstration methods on heat conducting properties science material for class VI MI Muhammadiyah Padangjaya academic year 2013/2014?

2. RESEARCH METHODS

In conducting this research, researchers used a qualitative research method of class action research. Creswell (in Fauzy, et al, 2022: 13) suggests that qualitative research is an approach to exploring and understanding the meaning of individuals or groups related to social or human problems. This means that qualitative research studies the culture of a group and identifies how the behavior patterns of the population have evolved over time. Observing community behavior and involvement in these activities is one of the key elements of data collection. Furthermore, Kemmis (in Wijaya and Syahrums, 2013) explained that action research is a form of self-reflective research conducted by participants in social situations (including education) to improve their own practice. In doing so, a comprehensive understanding of the practices and situations in which they are carried out will be obtained. The focus of this study was to find out how to improve student learning outcomes through demonstration methods on heat conducting properties science material for class VI MI Muhammadiyah Padangjaya. Data collection is carried out through observation, tests, and interviews, while data analysis will be carried out interactively and continuously until the required data has been obtained. Activities in data analysis include data reduction, data presentation, and drawing conclusions or verification.

3. RESULTS AND DISCUSSION

This section contains an explanation of the research results of each cycle and is followed by a discussion from planning to reflection.

1. Cycle 1

Cycle 1 activities were carried out on Monday, September 2, 2013. The first stage is planning, implementation of improvements, observation, and reflection. From the results of observations in cycle 1 it was found that the learning process was going well, this can be seen from the enthusiasm of students in participating in learning activities. The students already have the courage to ask questions and can discuss effectively even if only a small part, then the teacher can also apply interesting learning. Data obtained that students who achieve learning mastery have not reached 75%. So from that the results of cycle one obtained that there were some students who could not understand the material. This can be seen from the test answers, not all of which were

answered correctly, only a small number of students dared to ask the teacher, and there was an increase in learning motivation through the method demonstration. In terms of quantity of the 20 research subjects, 14 students got more than 70 or 70% and had a cumulative average of 69.25%. Even though there was an increase in student interest and learning outcomes, they still did not reach the expected target of 75%.

2. Cycle 2

Cycle 2 activities were carried out on Monday, September 9, 2013. The first stage is planning, implementation of improvements, observation, and reflection. Based on the reflection results in cycle 2, the data is obtained. First, in general, the implementation of cycle 2 improvements ran smoothly and went well. From the point of view of teachers who have been able to apply the learning series well, the results of practice questions and assignments for each individual have increased which can be seen from around 20 students who scored above 70 have reached 18 students, the average student has reached 78.75, which means it is already more both from the achievements in cycle 1, finally based on interviews, students feel that learning science using the demonstration method becomes more fun and meaningful so that students are more active in learning.

3. CONCLUSION

Based on the results of the research and discussion, several conclusions can be drawn as follows:

- 1) The use of demonstration methods in science learning, especially materials that conduct heat can increase student interest and learning outcomes. This can be seen from the research data after conducting 2 research cycles which show that each individual has increased from around 20 students who scored above 70 and have reached 18 students, the average student has reached 78.75, which means that it is already better than the achievements in the second cycle. 1 which is only 69.25%.
- 2) Based on the results of interviews with students, it was shown that they became very enthusiastic about learning science when using the demonstration method, this made the learning center not focused on the teacher but on the students themselves, they understood the material more easily than when the teacher used conventional methods.

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