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Increasing Motivation to Learn Science through a Scientific Approach to Students of SDS Muhammadiyah 02 Medan

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ABSTRACT

This study aims to increase the motivation to learn science in SDS Muhammadiyah 02 Medan students. This research is a class action research, with the subject of class II students at SDS Muhammadiyah 02 Medan, totaling 20 people. This research procedure consists of four stages, namely planning, implementation, observation and reflection. The data will be taken later through the process of observation and questionnaires. Data were analyzed with qualitative descriptions. In the results of the research later it can be seen that the process of students' motivation in learning science has increased. Where there were 15 students who were in good and very good criteria in the process of motivation to learn science at SDS Muhammadiyah 02 Medan.

Keywords: learning motivation, Scientific Approach, Elementary School Student

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1. INTRODUCTION

Natural Sciences (IPA) is part of science or science which originally came from the English "science" (Trianto, 2012: 100). The word "science" itself comes from the Latin word "scientia" which means I know. According to Wahyuna, IPA is a collection of knowledge that is systematically arranged, and in general its use is limited to natural phenomena (Trianto, 2012: 136). Based on the statement above, it can be concluded that science is a collection of systematic theories, its application in general is limited by natural phenomena, born and developed through scientific methods, namely observation and experimentation and demands a scientific attitude such as curiosity, openness and honesty.

In science subjects, educators are required to be able to design and carry out learning that is more focused on mastering science. A good learning design will affect students' motivation in carrying out learning so that it has an impact on achieving learning objectives. Teachers as educators have a very important role in the success of student learning. Motivation for good learning outcomes is not only influenced by the abilities of the students themselves but is influenced by the teacher's ability to attract interest and motivate students in doing their learning.

Based on the results of observations at SDS Muhammadiyah 02 Medan on science learning, the researchers found that the problems faced were the lack of motivation and the low student learning process due to the less varied learning approaches used. One suitable approach to use in science learning is the scientific approach.

The scientific approach is a learning process designed in such a way that students actively construct concepts, laws or principles through the stages of observing, formulating problems proposing or formulating hypotheses, collecting data with various techniques, analyzing data drawing conclusions and communicating concepts, laws or principles that Hosnan found (2014; 34). The scientific approach is a student-centered learning approach. This approach involves science process skills in constructing laws, or principles.

Research using a scientific approach has been conducted by Alamsyah (2016), Ambasari (2016), Rahayu et al (2017) and Faqih (2019). Based on the results of research from previous researchers, it is known that learning through a scientific approach can increase student motivation in learning so that it

gets very satisfying results. With guidelines on the results of previous studies, the researchers conducted this research using a scientific approach.

The difference between this research and other research is that this research was conducted at SDS Muhammadiyah 02 Medan which focused on student learning motivation. This was done by researchers based on the problems found during observation. The purpose of this study is to further increase students' motivation in learning science through a scientific approach to students at SDS Muhammadiyah 02 Medan.

2. RESEARCH METHOD

This research is a classroom action research (PTK) which consists of four stages, namely planning, action, observation and reflection. At the planning stage, researchers and colleagues prepare everything that will be used at the action stage, such as lesson plans, questionnaires and student worksheets (LKS). Then the third stage is observation that goes directly to the field, namely SDS Muhammadiyah 02 Medan. The reflection stage where the researcher collects and analyzes the data obtained during field observations.

This research took place during June 2023. The research subjects were class II students at SDS Muhammadiyah 02 Medan, totaling 20 people. Data collection techniques were carried out by means of observation, questionnaires and worksheets. Data were analyzed by descriptive qualitative. Qualitative descriptive is used to analyze the results of observations, questionnaires and the results of student worksheets in the learning process. Analysis of the percentage of learning activities in the form of observation sheets containing items of student learning activities arranged based on activity indicators according to Paul Diedrich (Sadirman, 2011). Learning through a scientific approach is said to be very effective in increasing motivation to study science very well.

3. RESULTS AND DISCUSSION

The results of a class action research conducted in July 2023 on SDS Muhammadiyah 02 Medan students regarding increasing motivation to learn science through a scientific approach. This classroom action research was carried out in four stages, namely the planning, implementation, observation and reflection stages. At the planning stage the researcher can prepare what material will be given to students. The material that will be taught is about force and motion. Researchers also prepared learning tools in the form of lesson plans, which used a scientific approach based on science learning problems, student motivation questionnaires and student worksheets prepared by researchers.

At the implementation stage, the researcher carries out learning based on the lesson plans that have been prepared beforehand. Starting the lesson by greeting, giving ice breaking to students, followed by preparing material to be given to students. Students study the material provided by the teacher by conducting experiments on the material presented, namely practicing in front of the class related to style and motion. Experiments that have been made by students are analyzed and written in the form of short reports and presented in front of the class again. At the end of the activity the teacher evaluates by giving questions in the form of a questionnaire to students which must be filled out by each student.

The observation and observation stages were carried out during the learning process. During the research, the researcher and his colleagues observed learning activities using a scientific approach. Observations were made based on the observation sheet that had been prepared beforehand.

At the reflection stage it was found that there were 5 students who did not experience an increase in their motivation to learn science. This is because students are less active in science learning delivered by the teacher, and students also do not understand the learning material. However, at the reflection stage it was also found that 15 students experienced increased motivation to learn science with a scientific approach, where students could be active in learning, could understand learning and could participate in groups and could practice science learning in front of the class.

The success of this research is supported by very relevant research conducted by previous researchers, namely by: Alamsyah (2016) entitled "The application of a scientific approach can increase creativity and learning outcomes. Ambarsari (2016) shows that a scientific approach can improve communication skills and improve learning achievement. By Rahayu et al (2017) shows that a scientific approach can increase learning activities, learning outcomes and learning motivation. As well as

research conducted by Faqih (2019) shows that a scientific approach can increase activity and learning outcomes. And Adi Neneng (2021) shows that motivation and science learning activities through a scientific approach can improve student learning outcomes. So it can be concluded that learning through a scientific approach can increase activity, motivation, creativity. Skills, achievement and student learning outcomes.

Based on the results of the research, it is known that class II students at SDS Muhammadiyah 02 Medan have good learning motivation, although there are 5 students who have not experienced an increase in learning outcomes. This is in accordance with the opinion put forward by Sardiman (2011: 84) that learning outcomes will be optimal, if there is motivation. The more precise the motivation given, the more successful the lesson will be. So the role of motivation is very necessary in student learning activities.

4. CONCLUSION

Based on the results of this study, it can be concluded that learning through a scientific approach can improve the learning outcomes of class II students at SDS Muhammadiyah 02 Medan. And there were 15 students who experienced an increase and 5 students who did not experience an increase in science learning motivation.

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