UTILIZING USED GOODS INTO CRAFTS THROUGH STM (Science Technology Society) LEARNING

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ABSTRACT

This research is based on the reality in elementary schools, namely creativity in students and the learning process using the STM (Science Technology Society) learning method where this approach is very suitable for learning activities that are suitable for use in recycled craft materials. The approach used for this research is qualitative in the form of classroom action experiments. Through the STM (Science Technology Society) Learning Method, the researcher designed a one-time learning plan. The purpose of this study was to find out or process student creativity in student learning outcomes. This research was conducted at SD Negeri Mranti, Purworejo Regency, with a total of 29 students in grade V. What distinguished this research was the advantages of the STM approach, which is easy and skilled in identifying the causes or effects of using technology, students can see that science is a tool capable of solving problems.

Keywords: Used Goods, Crafts, STM Learning

INTRODUCTION

The term learning has actually been around for a long time and is widely known by the public. Even in this era, almost everyone knows the term learning. But what learning actually is, it seems that each person has different assumptions, so there is a need for an understanding of the meaning of learning. Since humans existed, basically humans have carried out learning activities. Therefore, it is no exaggeration to say that this activity has existed since the existence of humans. Judging from the era and daily behavior, learning is also not just about sitting at a desk to study. Why do humans carry out learning activities, the answer is because learning is one of human needs. There are even experts who say that humans are learning creatures, so in fact there is potential to be taught within them. At this time, learning is something that cannot be separated from human life. Almost all the time, humans carry out a lot of learning processes. But what exactly is learning, many experts provide limitations.

Learning has a number of characteristics that cannot be distinguished from other non-learning activities. Therefore, not all activities that are similar to learning can be called learning. In addition, there are many factors that can affect the learning process itself, these factors can affect the results of individual learning, so that each individual must know what these factors are so that later the results of the learning
process will be far more optimal. In the teaching process, elements of the learning process play an

important or vital role. Teaching is the process of guiding learning activities, and teaching activities are only meaningful when student learning activities occur. Therefore, it is very important for every teacher to understand as well as possible about the student learning process, so that he can provide guidance and provide an appropriate and harmonious learning environment for students.

In addition to the term learning, there is another term, namely learning, basically learning has taken place in everyday life, but there are still few people who understand what learning means, because learning has several characteristics that cannot be equated with other activities. according to these characteristics it cannot be said as a learning. Not only does learning have determining factors for the process, learning also has factors that influence the process of learning itself, every individual involved in the learning process must know what these factors are, but in fact many individuals do not know the factors -what factors can influence the learning process.

In the learning process, several other terms are known, such as learning models, learning approaches, learning methods, learning tactics, and several other terms related to the learning process. The various kinds of terms above must be understood by a teacher, because without being known by the teacher, the learning process will also be hampered and will not be in accordance with the desired goals. One of the starting points is choosing the right learning approach, before choosing a learning approach, a teacher must know the meaning of the learning approach itself and what is included in the learning approach. However, this paper will only discuss the understanding of learning in general and according to experts, the characteristics of learning, the notion of learning, and learning approaches.

This approach provides an understanding of the relationship between science and technology and society, trains the sensitivity of students' assessments of environmental impacts as a result of the development of science and technology. This approach can stimulate an understanding of the science behind the problem, and its impact on society. Students can become aware of various motives in deciding an action to overcome environmental problems. STM interprets science learning as learning related to students' lives as everyday people so that learning needs to be developed. By applying various innovative approaches such as the STM approach to improve the quality of curiosity, inventiveness, critical thinking, persistence, and openness. According to S Silvinia (2010) the steps for the STM approach are as follows: 1) Invitation, the teacher can provide examples of news facts that exist in the community and then observe them or news from the opinions of students that are appropriate to their lesson; 2) Observation. Students
give their actions and master, review new problems for these students. Students can find and find solutions to these problems by reading books, discussions, interviews and direct observation; 3) Completion of research. Students analyze the occurrence of phenomena and discuss how to solve problems; 4) Application Stage. Students have the opportunity to use the concepts that have been obtained. By using STM steps in learning science, students are able to analyze what they learn with what is in their environment, students can also involve science as a tool to solve everyday problems. In the learning process that is received, students can receive it well and catch the lessons given quickly, students also ask lots of questions and are active in learning so that student achievement can be improved.

Waste is basically a material that is wasted from a source resulting from human activities or natural processes that has no economic value, can even have a negative value because handling it, either to dispose of it or to clean it up, requires quite a large amount of money. Waste and its management are now an urgent matter because if proper handling is not carried out, it will cause unexpected things that can pollute the environment (Sunarsih, 2018).

The purpose of this research is to improve student learning outcomes, especially in thinking patterns and utilizing science as a tool to increase their creativity by exploring the condition of the surrounding environment, whereby the existence of waste or used goods can be turned into goods that have artistic value and a selling price. The aim of this STM approach is to form individuals who are literate in science and technology." Besides that, individuals will also have concern for the problems of society and the environment. With the knowledge of science, technology, and the environment, students are expected to be able to make important decisions and take actions about problems that occur in society. In the learning process it is hoped that students will be able to overcome the problems that will be faced in a global constellation. namely ~ to become democratic and responsible citizens and peace-loving citizens of the world." The knowledge gained in school can be utilized and applied in society which is bridged by the Science Technology Society.

Efforts to achieve quality education can be carried out through collaboration between government, private and community elements. Community involvement is not only in the form of physical assistance (capital) but also in the form of social capital (social capital) (Yolanda Stepy, Firman Firman, 2020). The learning theory used to support the STM approach is constructivism learning theory. According to NPEW Laksmi (2013) "By applying various innovative approaches such as the STM approach to improve the quality of curiosity, inventiveness, critical thinking, perseverance, and openness". According to S Silvinia (2010) the steps for the STM approach are as follows: 1) Invitation, the teacher can provide examples of news facts that exist in the community and then observe them or news from the opinions of students that are appropriate to their lesson; 2) Observation. Students give their actions and master, review new problems for these students. Students can find and find solutions to these
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METHOD

This research was conducted in class V SD Mranti, Purworejo Regency. Register for the implementation of this study using science learning with the support of STM learning. The research lasts for one week, two meetings from 5 to 10 December 2022. Class V as research resources. The subjects of this study were 11 male students and 18 female students. In the implementation of PTK the planning and action stages consist of the main steps, namely: identifying problems, analyzing and formulating problems, planning class actions, carrying out class actions (planning, implementing, observing, analyzing and reflecting), collecting data and analyzing data about processes and results and their follow up; Finally, write a report. These steps are sequential steps; meaning that the first step must be done first before the second step is carried out, and so on.

The research instrument that the researcher uses is the lesson plan study instrument and the learning supervision instrument. Data was collected using exploration, supervision results, questions and answers with teachers and students' work in making crafts from used goods. The data analysis

used is using a qualitative pattern, namely by recording discussions during the class action.

RESULTS AND DISCUSSION

In general, learning can be said as a process of changing behavior as a result of the interaction of individuals with their environment in meeting their needs. Reber (1988) in Rifqi Festiawan (2020:72) defines learning in two senses. First, learning as a process of acquiring knowledge and second, learning as a relatively lasting change in the ability to react as a result of reinforced training.

The results of the research say that the implementation of STM in science learning results in student creativity in solving problems. The ideas that are assigned in the learning activities are purely from the students themselves. The success of an education is not only measured from cognitive achievement, but more importantly from an affective and behavioral perspective. Mutual respect and respect in social interactions both at school and outside of school need attention. Therefore, social skills really need to be taught in schools. Social skills include the main goals of education to improve school
readiness such as the ability to respect others, work cooperatively, express emotions and feelings in a good way, listen to others, follow rules and procedures, sit attentively, and to work independently.

Conclusion

The STM approach is effectively used to improve student achievement so that the STM approach is used in science subjects. This can be seen from the increased student achievement of learning outcomes and creativity. Because by using the STM approach, more active and varied learning conditions can be created by developing a sense of concern for the development of science and technology. By using the STM approach, students build their own knowledge, find steps to find solutions to problems that occur related to technology. Teachers are expected to make the STM approach an alternative for teaching natural sciences and other subjects.

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