

IMPROVED ACTIVITIES AND LEARNING OUTCOMES OF GRADE V STUDENTS ON IPA LEARNING THROUGH PROJECT BASED LEARNING MODELS IN ELEMENTARY SCHOOL

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ABSTRACT

This study was motivated by the low activity and student learning outcomes in science teaching class V SDN 28 Jorong Nan Tigo Pesisir Selatan District. The purpose of this study was to describe the increase in activity and learning outcomes fifth grade students of SDN 28 Jorong Nan Tigo Pesisir Selatan District, using the model Project Based Learning. This type of research is classroom action research (PTK). This study was conducted in two cycles. The data source is a fifth grade students of SDN 28 Jorong Nan Tigo Pesisir Selatan District amounted to 18 people. The instrument used is the observation sheet student activities, teacher observation sheet activities and achievement test. Based on the analysis of activities and student learning outcomes, student activity observation Score average first cycle of 58.32%, an increase in cycle II became 78.88% and student learning outcomes in the first cycle with an average of 61.11% completeness increased in the second cycle amounting to 78.05%. It can be said, learning science by using Project Based Learning model of increasing the activity and student learning outcomes. From the research, it is recommended that teachers can use the model of Project Based Learning in an effort to increase the activity and student learning outcomes in learning science.

Keywords : Activity, Science Learning Outcomes, Project Based Learning Model

INTRODUCTION

Education is a conscious and planned effort to build fully qualified human beings as desired. Education can be pursued through the learning process. The learning process is at the core of overall education. One of the problems facing Indonesian



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education is the weak problem of the learning process. Planting educational values is very important to be planted from an early age. Starting from the age of 5-6 years in Kindegarten (TK) and 7-12 in elementary School (SD). Elementary School is the beginning of the children's process of learning education. In this process is the formation of child characteristics that will be the seeds in the process of growth of identity. The identity of a child is either dependent on the teacher's role. Teachers play an important role in learning that teachers can help students in having knowledge, training physical skills, and embedding value and confidence in students. Looking at the importance of natural sciences (IPA), students are expected to be able to master and understand this subject through the study gained in every level of education that path. For that, teachers must be able to improve learning quality in order to increase student learning activities. Learning activities are the most important of learning outcomes, because without any learning activity one can be said to learn.

Based on the observation that has been done in class V SDN 28 Jorong Nan Tigo South Coastal District The number of students in this class V is 18 people, consisting of 7 male students and 11 female students. While observation is seen a lack of student activity in learning. It is still seen that many students do not follow the lesson well. Judging by the 18 students who do student activity in asking only 3 people (16.66%), besides only 5 people (27.77%) Students who are able to experiment well, and further researchers see from the student's activities in concluding material from 18 students only 7 people (38.88%) Which is able to conclude the material so that student learning results in understanding the material only 5 people (27.77%) The material is given by the teacher.

The lack of learning outcomes and presentation of the students ' submission is caused by several factors including: less varied learning process that teachers apply, teachers are more likely to use a method of discourse that impressed monotonous. Although teachers have used image media while teaching students it is still less attention. It is seen that the teacher always displays the same image as the image in the student's package book. In addition, the images shown by the teacher also explain the material by interspersed with light questions on the students. After learning is completed, then teachers give training to students. Students work on the exercises the



teacher has to do in the learning process, but the students do not do it because they do not understand it, and when the teacher is off the students often ask/emulate his friend's answers.

One effort to increase the student's activity and learning outcomes with the Project Based Learning model. The Project Based Learning Learning model is a learning model that asks or trains students to experiment through the creation of a project about a theory that students already learn and the Project Based Learning model makes Experiments became the main activities that must be in the model, so it is hoped that the use of models affects learning outcomes. This learning Model of Project Based Learning aims to train students in creating a project. Projects are made in groups in which the students will work together to produce a work or project in accordance with the theories described and able to address the problems arising.

METHOD

The type of research used is class action research (PTK). According to Wardhani (2010) Explaining class action research is a study conducted by teachers in its class with the aim of improving learning practices. The study carried out two cycles, of which each cycle consisted of 2 meetings and a third examination. This research will be conducted at SDN 28 Jorong Nan Tigo South Coastal district in the even semester. The research Data is collected using the observation sheet of student activity, the observation sheet of the teacher's activity, and the study result test and the final test cycle. For each of them will be described as follows: (1) In this observation sheet, the Observer observes every activity performed by the teacher as the learning activity progresses. Ranging from aperconception, core activities, classroom management, to closing activities. In this unit of 10 minutes, the observer will observe whether the teacher has taught according to the pre-built RPP. The activity sheet is a checktable ($\sqrt{1}$), (2) The observation sheet for students in the form of a checktable ($\sqrt{1}$) contains indicators of assessment of the activity of students. Tests are given to students in the form of objective tests and essays. This test is needed to measure students ' ability to gain quality in the learning process. This study results test sheet is performed at the end of the I cycle and at the end of cycle II.



RESULTS AND DISCUSSION

Planning is done according to the steps that have been set that starts from arranging the material until it compiles the final test of the cycle. Furthermore, this implementation is done according to the plan, which one cycle consists of 2 times the meeting. The initial activity is done by preparing students to be better prepared to attend the lesson and to provide a picture of the problem to solve by students. Core activities are performed according to the steps of the Project Based Learning method. The final activity is to review students ' understanding and implement judgment. Observations were conducted to determine the attitudes and behavior of students in the learning process and teacher activity in the classroom. Further reflections are done to see if the observation results require follow-up or not.

The teacher's percentage in managing learning has an average percentage of 63% with sufficient categories. At the meeting I percentage of teachers were 52% with less categories. Meanwhile, at the II meeting with a percentage of 74% with good category. This is because the teacher has not carried out the whole process of activity in learning. The number of students who asked as many as 7 people, the students who presented the experiment 12 people, and students who concluded the material 12 people. If the total number of students who were asked was 38.80%, conduct an experiment of 66.66%, while concluding the material by 66.66%. At the second meeting the number of students who did the activity asked increased from 7 people to 10 people, conducted an increased trial of 12 people to 14 people, and who concluded the material increased from 12 people to 13 people. If the total number of students who ask questions is 55.55%, conduct an experiment of 72.21%, and conclude the material by 70.00%. The student learning results at UH Cycle I appear classifying the average student test result is 61.11 and there are 8 students who complete learning or 44.44% students. This suggests that the classification of learning has not been achieved as it is targeted at 65.

From the results of the reflection cycle I gained the conclusion that learning has not run effectively. The problem occurs because researchers have not been skilled in controlling the class, so that students who are not yet focused on learning, students have difficulty in formulating the problem, collecting data to solve problems and formulating Conclusion. Based on the weaknesses gained in the I cycle it is planned to repair the



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action to be planned in the II cycle, namely: (1) in the use of Project Based Learning model The teacher too quickly explained to the students the project steps implemented so that students do not understand the lesson, (2) teachers are less skilled at raising students ' activity to ask questions and answers, (3) teachers are less skilled in managing time in class, and (4) teachers do not provide sanctions to students who are in learning.

Data observation results teacher cycle II activity, the teacher's percentage in managing learning has an average of 80% with excellent categories. At meeting I percentage activity teacher 77.77% with good category. Meanwhile, at the meeting II the teacher percentage of 81.48% with the category is very good. It is said that the learning activities conducted by the teacher belong to very good.

Number of students who ask as many as 7 people, students who experiment 12 people, and students who conclude material 12 people. If the total number of students who were asked was 38.88%, conduct an experiment of 66.66%, while concluding the material by 66.66%. At the second meeting the number of students who did the activity asked increased from 7 people to 10 people, conducted an increased trial of 12 people to 14 people, and who concluded the material increased from 12 people to 13 people. If the total number of students who ask questions is 94.43%, conduct an experiment of 72.21%, and conclude the material by 70.00%.

Based on the picture that SCIENCE learning using Project Based Learning model that implemented can increase student learning activity. It is accordingly said by the Buck Institute For Education (Hosnan: 320) that: "A model of systematic learning involving students in learning science and skills through the process of investigation into real problems and Carefully designed work or task creation ". From the median increase in percentages to each of the successful indicators of a defined student learning activity. The average student learning activity for indicator I, II, III, is categorized a lot on the I cycle. This is because learning using the Project Based Learning model is new to students.

In cycle II, the average student learning activity is already in the category of many. Researchers give students the opportunity to ask questions, and motivate students to experiment with teachers and work on the tasks given by the teacher with the



activation of students doing the question, doing and concluding learning materials

means that they have demonstrated learning activities in the learning process.

CONCLUSIONS

Based on the results of the research obtained, it can be concluded as follows: The percentage of Project based Learning models can increase the student activity in the question of increased cycle I by 61.1% increased to 94.43% in cycle II, the percentage of students ' activity in conducting experiments occurred an increase of cycle I of 52.77% increased to 72.21% in cycle II, and the percentage of student activity in concluding subject matter increased cycle I occurred increase 61.1% increased to 70.00% in cycle II, as well as a percentage on the student's cognitive learning outcomes at Cycle I with an average of 61.11% increased to 78.05% in cycle II in the V class of SDN 28 Jorong Nan Tigo South Coastal district. In connection with the results of the research obtained, it is advisable in the implementation of learning using the Project Based Learning model, as follows: (1) For schools, as a reference material and to make a positive contribution to the progress of the school that is reflected and increased potential skills of teachers in managing learning and improving the process and learning outcomes of students. (2) For researchers, to be able to use Project Based Learning model in the learning process in SD. (3) For teachers, as a guideline and implementation of learning using a Project Based Learning model can be one alternative variation in the learning process. (4)For students, I n order to create a pleasant learning atmosphere so that it will be eager in learning.

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