
IMPROVEMENT OF STUDENT' LEARNING MOTIVATION OF NATURAL SCIENCES (IPA) THROUGH COOPERATIVE LEARNING MODEL TYPE STUDENT TEAM ACHIEVEMENT DIVISION (STAD) IN SMPN 4 PADANGSIDIMPUAN

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Abstract

Problem in this study is the low learning outcomes and extrinsic motivation of students in learning Natural Sciences on the material coordination system in humans, as well as the learning model used by teachers in the form of lectures, discussion and demonstrations so that the goal of learning can not be achieved. The aim of this research was to know the result of student' extrinsic motivation to learn Natural Sciences can be increased through a cooperative learning model of type Student Team Achievement Ddivision (STAD) on the material coordination system in humans in class VIII-E SMP Negeri 4 Padangsidimpuan. Type of this research was classroom action research which was adapted from the research model of Kurt Lewin. Stages that ocured in each cycle includes: planning, execution, observation, reflection. The subjects were students of class VIII-E SMP Negeri 4 Padangsidimpuan with 35 students in first semester, the object of research was the students' motivation through Cooperative Learning Model Student Team Achievement Division (STAD)) on the material motioncoordination system in humans. Techniques and data collection tool that was used in the form of tests, questionnaires and observation sheets. Learning results obtained by the students has not increased, about 25, 71% and in the case of extrinsic motivation of students still have not risen 59.92%. Then proceed to the second cycle were also associated with learning outcomes and extrinsic motivation of students, in this cycle has increased student learning outcomes, approximately 74.28% and extrinsic motivation of students also increased, about 71, 31%. In the second cycle has increased from the first cycle and met the criteria for the achievement of the indicators of research, this study only up to the second cycle. Through cooperative learning model type Student Team Achievement Division (STAD) in SMP Negeri 4 Padangsidimpuan can increase extrinsic motivation and student learning outcomes.

Keywords: Motivation, Cooperative Learning Model Student Team Achievement Division (STAD) and coordination system in humans

A. INTRODUCTION

Motivation is the impulse contained in a person to try to establish behavioral changes that better meet their needs or force that drives someone to do something to achieve tujuan.motivasi can be interpreted in the form of stimulation, encouragement, or a power plant that appears on certain behavior. Motivation is internal and external conditions that influence the rise direction as well as the persistence of an activity or behavior (Wena, 2012). Lack of encouragement in students to learn the circumstances in the home, student activities after school are not focused and playmates students and

delivery of content by teachers always monotonous and learning tend to be centered on the teacher, the students only passively accept what is given by the teacher . With lectures, question and answer, and demonstration implemented by the teacher during the learning process takes place to make the students bored and tired in receiving each lesson delivered pelajaran especially in natural science (IPA).

STAD is a model of cooperative learning where students learn by using a small group whose members heterogeneous using activity sheet or device to complete the material pembelajaran pembelajaran then help each other and or discussions (Nurhadi,2003). Cooperative learning models of type Student Team Achievement Division consists of the word student means a student or pupil, team means a team or group, which means achievement achievement and division is the division. Then the cooperative learning model of the type of student team achievement division is a model that divides students into groups of 4 to 5 students are heterogeneous. Cooperative learning model of the type of student team achievement division needs a simple model once the model is the same as the conventional model of cooperative learning models just the type of student team achievement division awarded at the end of student learning.

Motion system in humans is one learning material directly related to the activities of daily life , motion systems are also tools that can move the body , body movement involving bone and muscle . Bone and muscle is closely related locomotor . Bones can not serve as a means of motion when it is not driven by the muscle . Because the bones can not move on its own without the help of muscles , the spine is a means of passive motion . While the locomotor muscles are inactive because of their role as a driver of bone .

Based on the results of motivation questionnaire given to students in grade VIII-E SMP N 4 Padangsidempuan that 74.3% students 'motivation is low, and 25.7% students' motivation was, not one student who obtained a high motivation to learn. And interviews on 18 April 2012 in SMP Negeri 4 Padangsidempuan with biology teacher stated that students' motivation to subject integrated natural science students is still low. It is influenced by a model of learning that I apply in the classroom seems to have not been able to motivate student learning. The learning method is a method often I carried lectures, discussion, and demonstration. Although the school has a laboratory but very rarely in use depends on the subject matter to be conveyed. students are less active in receiving instruction, student learning outcomes as a result of the biology is very low there that have not reached the minimum criteria for completeness (KKM) established school with a value of 75. This is caused students are still raw in the learning process, student responses and lack of pembelajaran media so that students can not understand each

material. As well as from the results of diagnostic tests showed that students' motivation on the material motion system of human value is still low.

B. METODE

This type of research is the Classroom Action Research (Classroom Action Research - Car) aims to improve the quality of the process and students' motivation to learn science related to the increase in student motivation.

This study is held on odd semester class VIII SMP Negeri 4 Padangsidempuan Jln . Sutan Soripada Mulia district. North Padangsidempuan Padangsidempuan City. The subjects were students of class VIII - E SMP STATE 4 Padangsidempuan totaling 35 students. While the object of research is the motivation of student learning through Cooperative Learning Model Student Team Achievement Division (STAD)) on the material motion system in humans.

The procedure of this study using two cycles consisting of several cycles in which each cycle has four phases include: stage of planning, the implementation phase of an act, the stage of observation, stage of reflection.

The research instruments used are: tests to obtain data about student learning outcomes through model of cooperative learning type Student Team Achievement Division (STAD) , the material motion system in humans , a questionnaire to obtain data on students' motivation during the learning process takes place on the material system motion in humans , the observation is used in the collection of data on students' activity during the learning process and the implementation of cooperative learning model of type student Team Achievement Division (STAD).

C. RESULT

Based on the research results obtained from the data of learning outcomes, student motivation and student learning activity observation on the material motion system in humans. The results obtained are as follows:

In the first cycle by the graph of student learning outcomes can be seen that the students who did not complete on the material motion system in humans is 27 students with a percentage of 77.14 % , while the students who completed the material motion system in humans is 8 students with a percentage of 22.85 % , motivation studying Natural Sciences (IPA) students have not reached an indicator of success of 70 % , the amount of value that is achieved by 1573 with a percentage of 59.52 % , and for the observations made in the first cycle obtained observation result of 52.71 % , then this proves that the activity of students in the first cycle has not yet reached a predetermined indicators , namely 70 % , since $52.71\% < 70\%$. From the results of the first cycle that

has been carried out there are still weaknesses , and has not reached indicators and KKM completeness, it is necessary to fix carried second cycle with four stages are the same as in the second cycle.

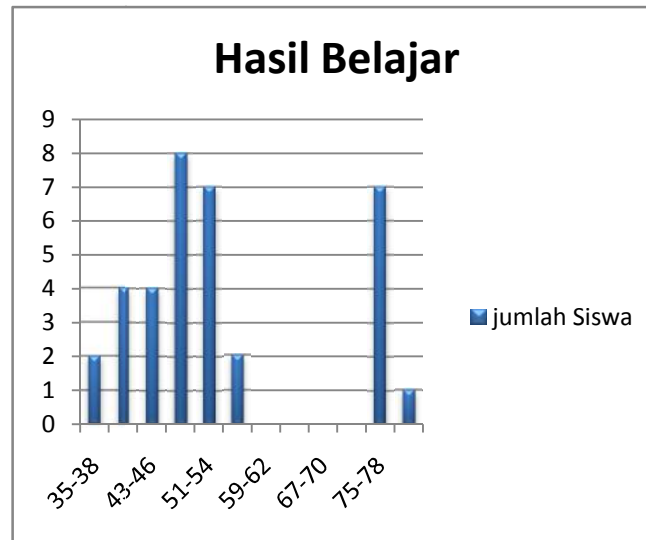


Figure 1. Graph Learning Outcomes Acquisition Cycle I

After performing the second cycle results obtained through the data result of learning, motivation to learn and observe student learning activities that can be seen on the graph that students who study results completed 26 students with a percentage of 74.28%, while the students who study results have not been completed or has not reached the criteria completeness maximum of 75 total 9 students with a percentage of 25.71% .It is proved that in the second cycle has reached a predetermined indicators of success of 70%. For the students 'motivation can be seen that the motivation to study Natural Sciences (IPA) in 1872 with a student number 71. The percentage of 31% in the second cycle students' motivation has increased to reach the indicators of success of 70%. Based on observations of students in the second cycle obtained by the percentage of student activity amounted to 78.42%, then this proves that the activity of students in the second cycle has met predetermined achievement indicators, namely 70%, since 78.42% 70%.

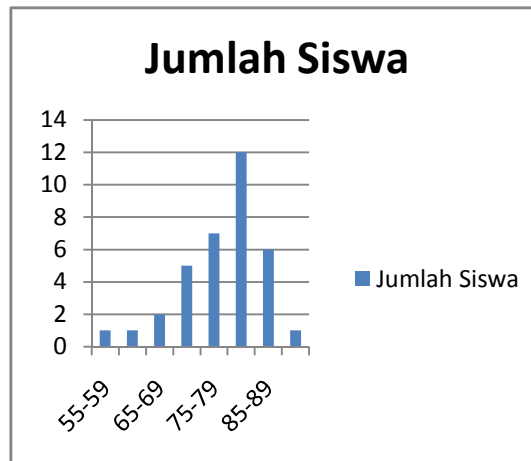


Figure 2. Graph Learning Outcomes Acquisition Cycle I

After doing research based on existing problems in the introduction and exposure of research results, the following described pembahasan research results that include models of cooperative learning type Student Team Achievement Divisio (STAD), and peningkatan student learning activities , peningkatan students' motivation in classes VIII - E SMP N.4 Padangsidempuan . Student learning outcomes experienced peningkatan ie from 22,85 % menjadi 74,28 % , or the students' motivation was increased from the first cycle to the second cycle ie with a percentage of 59.92 % in 1573 and 1872 with a percentage of 71.31 % . Based on the observation sheet learning activities of students in the first cycle in the category enough with the percentage of 52.72 % , whereas the observation sheet second cycle student learning activities included in either category with a percentage of 78.42 % .

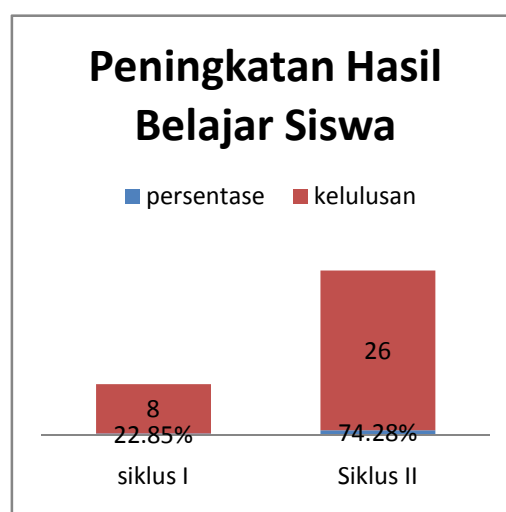


Figure 3. Graphics Increasing Student Results Each Cycle

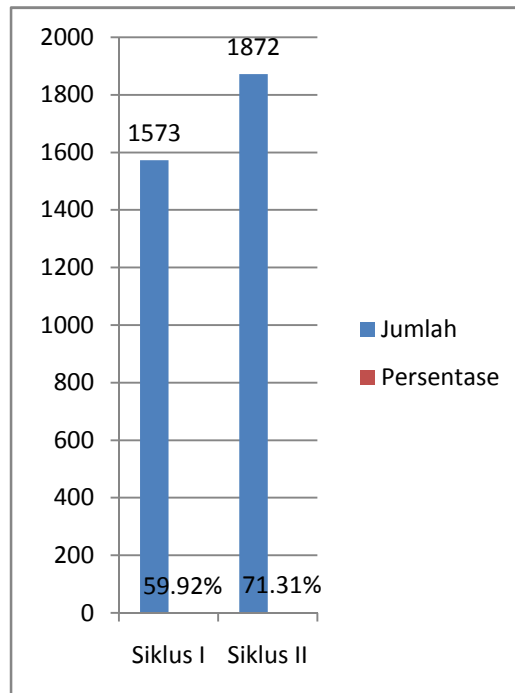


Figure 4. Graph Increasing Student Motivation Every Cycle

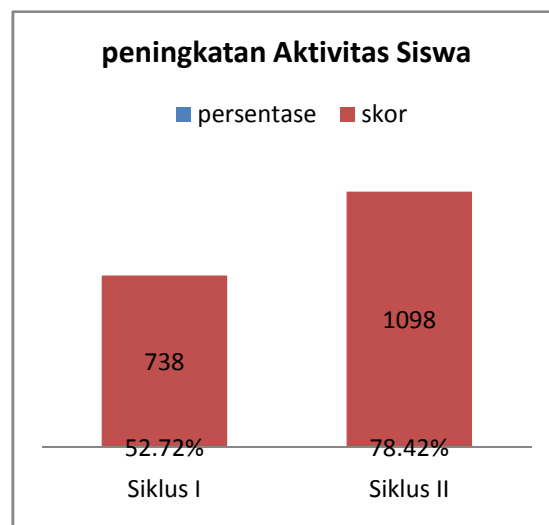


Figure 5. Graph Increasing Student Activities Each Cycle

D. CONCLUSION

Based on the results of research and discussion , it can be concluded that:

1. There is an increase in learning outcomes Natural Sciences students through cooperative learning models of type Student Team Achievement Division (STAD) on the material motion system in humans in classes VIII - E SMP Negeri 4 Padangsidempuan . Increasing learning outcomes Natural Sciences (IPA) seen from

the students' achievement test in the first cycle obtained percentage 22.85 % and the second cycle was obtained with the percentage of 74.28 %.

2. There is an increase in motivation to learn Natural Sciences students through cooperative learning models of type Student Team Achievement Division (STAD) on the material motion system in humans in classes VIII - E SMP Negeri 4 Padangsidempuan . Based sheet motivation questionnaire that has been given to the students there is an increase from the first cycle to the second cycle ie with a percentage of 59.92 % in 1573 and 1872 with a percentage of 71.31 % .

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