THE EFFECT OF COOPERATIVE LEARNING MODELS OF STAD TYPE ON CLASS V SCIENCE LEARNING LEARNING SD

*Gingga Prananda[1] and Hadiyanto[2]

[1]Graduate Program of Primary Education
Faculty of Education Science, Padang State University, Indonesia
[2] Education Administration , FIP, Padang State University, Indonesia
Email: gingga.prananda@yahoo.com

ABSTRACT

This study aims to implement cooperative learning model STAD in science teaching fifth grade students of SDN 43 river meadow weaning. This research is an experimental research. The sampling technique used purposive sampling. Instruments in this research is to test student learning outcomes while data analysis techniques using t-test. Based on the results obtained by the average value of the experimental class is 80 and 69.82 in the control class, as seen from the results of the data analysis has been done obtained t (3.286)> t table (1.674), then the hypothesis is accepted. The results of this study are the result of using a model to learn science Student Teams Achievement Division fifth grade students on the cognitive aspects of SDN 43 Sungai Padang Wean.

Keywords: **Student Teams Achievement Division and Learning Outcomes.**

INTRODUCTION

Education is a necessary activity in human life, because whenever and wherever in the world there are educational. Education is essentially a man's attempt to humanize itself. Education is a fundamental need for human beings, with their education, the quality of human life will be better (Hermon and Dalim, 2006). For learners learning is a process of interaction between various potential students. Such as (physical, non-physical, emotional, and intellectual). Likewise, student interaction with teachers, students and other students, and the environment with the concepts and facts. The

interaction of various stimuli with responses directed to generate change. The learning process is a most important activity in school education.

Natural Sciences (IPA) is part of the Science or Science that originally comes from the English 'science', scince word itself comes from the Latin 'scienta' which means I know (Riananda, 2016), Science also from the English natural science, briefly often called science. Natural natural means, in touch with nature, or to do with nature. Science means knowledge, so the Natural Sciences literally be called a study of this nature, the study of the events that occur in nature (Sukaesih, 2015). The 21st century is marked by the rapid development of science and technology in the areas of life in society, especially information and communications (Yuliati, 2017), Learning science is expected to become a vehicle for students to learn about themselves and the natural surroundings. Subjects of Natural Sciences (IPA) is one of the principal subjects in the curriculum in Indonesia, including at the primary school level. Science subjects is a subject that is considered very difficult by most learners, ranging from primary school level to high school. The assumption most of the students who claim that science lessons proved difficult because the true daily test results of the acquisition of school (UH).

Based on the observation that the authors conducted on learning science, obtain a picture, the teacher was explaining the material by using the conventional method, which is where the learning process focused only on the teachers themselves, during the learning process teachers are not using instructional media as props, resulting in No students were bored and less enthusiasm in learning, and when the learning occurred many students do not pay attention and respond to what the teacher, they are often out of the classroom and also the students who spoke with a friend neighbor.

From the results of observation can be concluded students' difficulties Understand the material presented teachers. Students just thinking abstractly about what the teacher. And during the learning process so that students feel bored students who spoke with a friend neighbor. The fact it happened because teachers still use conventional methods and therefore contributes to the cognitive processes of students and teachers also do not use the media during the learning process continues.

In the application of skills in the process of learning activities students are expected to have the ability to comprehensively as cognitive, affective, and psychomotor (Ratna, 2015; Hermon and Dalim, 2005), The invention is based on the need for efforts to improve learning activities. In science learning there are many possible learning model that can be used such as cooperative learning Student Teams Achievement Division. Cooperative learning is an instructional form groups and then conduct learning activities together in each group to achieve a goal, with cooperative learning students are expected to help each other, give each argument, and discussion to solve a problem. Furthermore, the pattern of these interactions will increase student learning outcomes (Hermon, 2015; Esminarto, 2016). STAD is one type of cooperative learning model that consists of heterogeneous study groups of 4-5 students, discussions in completing tasks and understand the lesson materials (Sukaesih, 2015, STAD cooperative learning model implementation is very requires determination, innovation and patience of teachers in designing learning so that students really be interested to participate in learning (Sunilawati, 2013). STAD model is a model that assigns students to form a team of four or five members of the blended learning into performance levels, gender, and ethnicity. The teacher presents a lesson, and then students work together in their team to ensure that all team members have mastered the lesson (Tiantong, 2013), STAD cooperative learning can help students understand concepts that are difficult subjects and foster cooperation skills, critical thinking, and develop students' social attitude (Muldayanti, 2013).

METHOD

Research will be conducted classified research experiment. Experimental research is a scientific investigation which requires researchers to manipulate and control one or more independent variables and the dependent variable to observe, to see the difference in accordance with the manipulation of the independent variables. The design study of two classes, namely the experimental class and control class. Experimental class is a class consisting of several students, who are given learning material with cooperative learning model STAD while the control class is a class that consists of several students who are given specific learning materials but do not use

cooperative learning model STAD. Population is a generalization region consisting of the objects or subjects that are of a certain quantity and characteristics set by the researchers. So we can say that the population is all objects that have similar properties. The population in this study were all fifth grade students of the first semester at SDN 43 Sungai Padang Wean (Sugiyono, 2009).

RESULTS AND DISCUSSION

From the calculation results in a t-test the difference between two mean-looking that (1.674), t_{hitung} (3,286) $> t_{tabel}$ (H0rejected), which means that the 95% confidence level. So we can conclude that there are differences between the students' learning outcomes IPA implementation of cooperative learning model Achrevment Student Teams Division (STAD) with conventional learning in class V SDN 43 Sungai Wean. Based on the analysis of final test results obtained on average students learn science the experimental class is higher than the control class that is 80 while the control class 69.82. This is due to the difference in the treatment given to the two classes of samples. Given the experimental class learning by using learning model Student Teams Achievement Division, According to (Arisman, 2015) STAD (Student Teams Achievement Division) apply one design cooperative learning. STAD is a cooperative learning model that consists of 4-5 students work together and help each other in mastering the subject matter. and according to (Ronawati, 2016) by implementing STAD cooperative model can make students more active in learning activities. For daring to speak, dares to ask and answer questions. Thus all group members understand the material being studied. Thus, it can be said that the learning model Student Teams Achievement Division is able to enhance the activity of students in learning.

After holding the final test on Saturday dated December 2, 2018 in the class VA are used as the experimental class at 8:30 to 09:30 am, with about as many as 20 items objective by KKM is 80, about which the least is answered correctly by students of class VA that is a matter number 6, which is located on the indicator. 4.1.2. Describes the use of objects or materials in everyday life, it happens because many students confuse the functions of objects that are nearby on the indicator 4.1.2. Describes the use

of objects or materials in everyday life, and cause students who completed the class VA are used as experimental class that as many as 17 people, while students who did not complete as many as 10 people.

In the control group the learning process takes place Conventionally, in which steps in the process using conventional learning models that teach the teaching methods lecture and question and answer, the teacher provides practice questions end to the student to see the results of student learning in teaching by using conventional learning models. After holding the final test on Saturday dated December 2, 2018 in the class VB is used as the control class at 10:30 to 11:30 am, with about as many as 20 items objectively, with the chief engineer of 80, about which the least is answered correctly by students of class VB ie question 17, which is located on the indicator 4.2.3. Identifying the factors that cause changes in the body, it happens because of insufficient time learning to deliver course material to students on the indicator 4.2.3. Identifying the factors that cause changes in the body, and cause students who completed the VB classes that serve as the control class as many as 8 people while students who did not complete as many as 20 people.

Presentation material on the type of cooperative learning Student Teams Achievement Division focused on the goal of learning materials and study groups. Before delivering the subject matter teachers to motivate curiosity of students to explore the prerequisite knowledge of students. The event aims to recall the prerequisite knowledge to foster understanding in the students themselves. From the expert opinion can be concluded that cooperative learning STAD their group work, students are required to work with one another in the execution of the task group, so it is expected that children who do not understand will be assisted by his friend who does know about the material taught that day, because in the formation of groups of students are grouped heterogeneously. To determine the extent to which the development has achieved results in the study, it should be evaluated. To determine the progress achieved there should be a criterion (benchmark), which refers to the intended purpose so that it can be seen how much influence the teaching and learning strategies to students' success. Student learning outcomes are the changes that happen to students, both involving cognitive, affective and psychomotor as from learning (Susanto, 2014).

To declare that a learning process can be said to be successful, every teacher has their views in line with his philosophy. But to make the perception we should be guided by the applicable curriculum at this time has been enhanced, such that a process of learning about an otherwise successful learning materials, especially when learning objectives can be achieved. The purpose of education by bloom, divided into three domains / domain of intellectual abilities (intellectual behaviors), namely cognitive, affective and psychomotor.nBased on expert opinion can be concluded that the types of learning outcomes are, namely: cognitive domains consisting of six aspects, namely the knowledge or memory, comprehension, application, analysis, synthesis, and evaluation. Affective consisting of five aspects, yaknik reception, response, assessment, organization, and to characterize the value. Psychomotor consisting of six aspects namely, reflexes, basic movements, perceptual ability, physical ability, skilled movements, and non-discursive communication.

CONCLUSION

Based on the results of the discussion on this research, it can be concluded that: The average value obtained from the students of class V SDN 43 Sungai Wean Padang taught learning model Student Teams Achievement Division (STAD) is 80 while the average value of students with learning conventional is 69.82. There is a very significant difference to the learning outcomes of students who take the science of learning by applying the learning model Student Teams Achievement Division with students who follow the conventional learning with t_{hitung} greater than based on these findings, it can be disimpulakan that the application of learning models t_{tabel}*Student Teams Achievement Division*rather than a result of learning that applying conventional teaching.

REFERENCES

Arisman A. 2015. Prosiding Seminar Nasional Fisika Tentang Pembelajaran Kooperatif Tipe STAD Dengan Motode Paraktikum Dalam Pembelajaran IPA.

Arikunto, S. 2012. Dasar-dasar Evaluasi Pendidikan. Jakarta: Bumi Akasara.

Esminarto, S, & Anam, K. 2016. Implementasi Model STAD dalam Meningkatkan Hasil Belajar Siwa. BRILIANT: Jurnal Riset Dan Konseptual, 1(November), 16–23.

Hermon, D and Y. Dalim. 2005. Penggunaan Media Audio Visual untuk Meningkatkan Kreatifitas Belajar. Jurnal Pembelajaran. 28 (3) 266-276

Hermon, D and Y. Dalim. 2006. Penerapan Kuliah Lapangan untuk Meningkatkan Hasil Belajar Mahasiswa. Forum Pendidikan. 28 (3) 156-161

Hermon, D. 2015. Arahan Kebijakan Keberlanjutan Pendidikan 10 Tahun Pasca Bencana Tsunami di Kabupaten Aceh Jaya Provinsi Aceh. Seminar Nasional Geografi. Master Program of Geography Education. Universitas Negeri Padang

Muldayanti, N. D. 2013. Muldayanti, N. D. (2013). Pembelajaran Biologi Model Stad Dan TGT Ditinjau Dari Keingintahuan Dan Minat Belajar Siswa. JPII, 1(1), 12–17. https://doi.org/10.15294/jpii.v4i2.4179

Ratna, M. (2015). Pengaruh Metode Ctl dan Kemampuan Berpikir Logis Terhadap Hasil Belajar IPA Siswa Kelas IV Sekolah Dasar Negeri 114 Palembang Muttia. Jurnal Pendidikan Dasar, 6, 254–265.

Ronawati. 2016. Penerapan Model Pembelajaran Kooperatif Tipe STAD Untuk Meningkatkan Hasil Belajar Siswa Pada Mata Pelajaran IPA Di Kelas IV SDN 3

Tiantong, M., & Teemuangsai, S. 2013. Student team achievement divisions (STAD) technique through the moodle to enhance learning achievement. International Education Studies, 6 (4), 85–92. https://doi.org/10.5539/ies.v6n4p85

Yuliati, Y. 2017. Literasi Sains dalam Pembelajaran Ipa. Jurnal Cakrawala Pendas, 3(2), 21–28.