

# *Effect of Cooperative Learning Model Student Teams Achievement Divisions (STAD) Assisted Audio Visual Media Sphere of Competence Attitude Seventh Grade Students of SMP Negeri 32 Padang Subjects IPA*

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**Abstract** - The current education curriculum in Indonesia is the 2013 curriculum. The 2013 curriculum is an effort to make participants active in the learning process. One effort that can be done is learning centered on students by forming teams (study groups). However, based on the findings of the problem at the Padang Public Middle School 32, that there are still many students who are not active in the learning process. Students do not have an attitude of confidence, so they do not dare to ask questions or provide answers. Considering the problem, researchers have a solution that can be applied in learning, namely the Cooperative Student Teams Achievement Divisions (STAD) type learning model which will be combined with Audio Visual media. The purpose of this study was to determine the effect of the Cooperative Type STAD learning model assisted by Audio Visual media on the competencies of the realm of students' attitudes. This research is a quasi-experimental study. The research sample was class VII3 as the experimental class and class VII4 as the control class. Data analysis techniques used the Mann Whitney U test using SPSS software. This finding shows that the influence of the Cooperative Type STAD learning model assisted by Audio Visual media has a significant influence on the competency of the students' attitude in learning science, with sig. Value (0.012) <0.05.

**Keywords** - STAD, Audio Visual, Attitude.

## **I. INTRODUCTION**

Realizing entrepreneurial human resources is the main goal of education. Nowadays, human beings really prioritize education as something that must be achieved to develop their potential. In accordance with RI Law No. 20 of 2003 concerning the National Education System Chapter 1 Article 1 explains that education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential, society, nation, and country. Trianto (2012: 3) said that the function of National Education based on Pancasila and the 1945 Constitution of the Republic of Indonesia was to develop capabilities and

shape dignified national character and civilization in order to educate the nation's life. The form of the education function is implemented in the application of the Education Curriculum.

Currently the ongoing education curriculum in Indonesia is the 2013 curriculum. According to the Ministry of Education and Culture (2013) the 2013 curriculum is a student-centered learning effort, making active learning and from its own learning patterns into group learners (team-based). The application of the 2013 curriculum aims to improve the quality of education in Indonesia. However,

after the researcher made observations at school, students were not active in the learning process.

Based on observations made by researchers at Padang State Middle School 32, the researchers found that the school had implemented the 2013 Curriculum since 2017. However for science subjects, the 2013 curriculum was applied at the beginning of the 2018 semester. Then related to the science learning process in the classroom, The researcher found that the teacher had applied learning with a scientific approach, using lecture methods, discussion methods and picture media.

The problems that occur to students are read on the questionnaire, which is as many as 78% of students are not actively asking questions and giving ideas during discussions. 70% of students are not confident about their abilities. In addition, during learning there are still students who do not focus on learning.

Based on the problems faced by the students above, efforts need to be made to overcome them, namely by optimizing the application of the active learning model. Lumpkin, et al. (2015: 123-127) explained that active learning is very effective to attract the attention of students in the learning process because it can change the conditions of passive learning to be active. Furthermore, the results of Lufri's study, et al. (2018) regarding active learning that the application of active learning can have a positive effect on the competency of knowledge, attitudes and skills.

One of the active learning methods that can be used as a solution to this problem is the cooperative learning model of Student Teams Achievement Division (STAD). Slavin (2016: 143) explains that the cooperative model Student Teams Achievement Divisions (STAD) is one of the simplest and very good learning models used for teachers in introducing active learning models. Pulungan (2018: 111-116) also explains that the STAD type cooperative learning model is simpler and easier in its implementation. The results of other studies also explained that STAD is able to build cooperation between students, help each other, motivate, and trust each other, and can train students to talk like dare to ask and express opinions (Nikmah et al., 2013: 3) (Riyadi et al. 2015: 37).

The application of cooperative learning type Student Teams Achievement Division (STAD) can also be combined with audio visual media. This is in line with the results of Brame's research (2016: 5) that learning using audio visuals can make students active in following learning and student learning outcomes increase. In addition,

Achrudin, et al. (2013: 99-101) stated that the STAD type cooperative learning model accompanied by video can improve students' social activities.

Based on the exposure of the problems faced by students, as well as some of the results of the research above, the researcher intends to conduct research on "The Effect of Cooperative Learning Model Student Teams Achievement Divisions (STAD) assisted by Audio Visual media on the realm of students' attitude in class VII SMP Negeri 32 Padang Science Subject ". The hope is that the results of this study can contribute positively in overcoming problems in students that occur in the learning process.

## **II. RESEARCH METHODS**

This type of research is an experiment. The experimental research used was quasi-experimental (quasi-experimental). In this study students were divided into 2 classes namely the experimental class and the control class. The experimental class uses the Cooperative Learning Model Student Teams Achievement Division (STAD) learning model assisted by Audio Visual media while the control class is not treated.

The population in this study were students of class VII Padang 32nd Middle School who were enrolled in the 2018/2019 Academic Year. The researcher took samples through a purposive sampling technique. Samples were taken using purposive sampling technique by considering several criteria. The criterion is that the class is taught by the same subject teacher and has the same variance value. Meanwhile, to determine the control and experiment classes, researchers used the Randomized Posttest Only Control Design system.

The research instrument used was the attitude observation sheet, which was equipped with an assessment rubric to facilitate the observer in giving assessment to students. The observation sheet has also been validated by the supervisor and Natural Sciences (IPA) teacher.

Processing data using SPSS software. This is used to process data in the form of statistics in the form of homogeneity tests, normality tests and hypothesis testing.

Data analysis techniques are carried out through hypothesis testing. The statistical test used is the Mann-Whitney U-Test because the data used is ordinal data. The hypothesis testing criteria using the Mann-Whitney U-Test are as follows.

H0 is accepted if the value is sig. > 0.05.

H0 is rejected if the value is sig. <0.05.

### Description:

$H_0$  : there is no effect of example non example method implementation in scientific approach and discovery learning model on grade VII students' Natural Science (IPA) affective competence in junior high school 18 Padang.

$H_1$  : there is an effect of example non example method implementation in scientific approach and discovery learning model on grade VII students' Natural Science (IPA) affective competence in junior high school 18 Padang.

## III. FINDING AND DISCUSSION

### 1. Finding

Competency data on students' attitudes is obtained from observations made by teachers and 2 colleagues as observers using attitude observation sheets. Observations are made when the learning process takes place. Competency data on student attitudes can be seen in Table 1 below..

Table 1. Average Value, Maximum Score, and minimum score of the experimental class and the Student Competence Attitude control class

| Class        | average | xmax | xmin |
|--------------|---------|------|------|
| Experimental | 81.47   | 90   | 63   |
| Control      | 76.17   | 86   | 63   |

Based on Table 1 above, it is known that the average score of attitude competencies in the experimental class is higher than in the experimental class which is 81.47, while the control class is 76.17. Meanwhile, the highest score in the experimental class 90 and the control class 86, the minimum value in the experimental class of the control class is 63.

Statistically, the difference in the average skill attitudes of students in the material of Environmental Pollution and Climate Change is seen in Figure 1

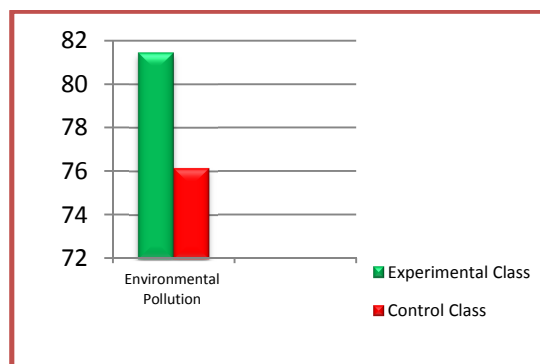


Figure 1. The average competency value of students' attitudes to Environmental Pollution and Climate Change in the sample class

Next, hypothesis testing is done using the Mann-Whitney U-Test because of ordinal data. The results of hypothesis testing can be seen in Table 2 below.

Table 2. Hypothesis Testing Results

| NO | Class       | Value Avera ge | Sig. | $\alpha$ | Conclu sion    |
|----|-------------|----------------|------|----------|----------------|
| 1  | Experi ment | 81.47          | 0.01 | 0.05     | H0 is rejected |
| 2  | Control     | 76.17          |      |          |                |

Based on Table 2 above, it is known that the significant value of the hypothesis testing is 0.01. This means the value of sig < 0.05, so that  $H_0$  is rejected. Therefore, it can be concluded that there is the influence of the Cooperative Learning Model Student Teams Achievement Division (STAD) assisted by Audio Visual media on the realm of competency in the seventh grade students of Padang State Junior High School 32 Padang Science Subject.

### 2. Discussion

Based on the results of the study, it is known that the attitude competency average value in the experimental class is higher than in the control class. The value of the experimental class (81.47), while the control class is (76.17). The increase in students' attitude values is influenced by the learning model and media used, especially in group learning activities (Cooperative type STAD), as explained by (Nikmah et al., 2013: 3); (Riyadi et al., 2015: 37 ) that the cooperative STAD model is able to build cooperation between students, help each other, motivate, and trust each other, and can train students to talk like dare to ask questions and express opinions.

The results of hypothesis testing also indicate that H0 is rejected, so H1 is accepted. This means that the influence of the Cooperative Learning Type Student Teams Achievement Division (STAD) model is assisted by Audio Visual media on the realm of competency in the seventh grade students of Padang State Middle School 32, Science Subject. This is caused by the Cooperative Learning Model Student Teams Achievement Division (STAD) assisted by Audio Visual media that is very dance to the attention of students in the learning process.

This is caused by the Cooperative Learning Model Student Teams Achievement Division (STAD) assisted by Audio Visual media that is very dance to the attention of students in the learning process. In line with Eminarto's research, et al. (2016: 18) STAD type cooperative learning includes active learning that emphasizes activities and interactions between students so that they motivate each other and help each other understand the learning material to obtain satisfactory values. Khansir and Alipour (2015: 17) also conducted research using the cooperative learning model of the Student Teams Achievement Divisions (STAD) type, which showed that group learning systems were more effective than individual learning. In this study, students in the control class still used conventional learning. The application of cooperative learning type Student Teams Achievement Division (STAD) can also be combined with audio visual media. This is in line with the results of Brame's research (2016: 5) that learning using audio visuals can make students active in following learning and student learning outcomes increase. In addition, Achrudin, et al. (2013: 99-101) stated that the STAD type cooperative learning model accompanied by video can improve students' social activities.

Achrudin, et al. (2013: 97) stated that learning using a cooperative model type Student Teams Achievement Divisions (STAD) assisted by audio-visual media can improve student learning outcomes and can change students' behavior to be active in socializing with their friends.

According to Nurhalifa, et al. (2017: 49) states that audio visual media is very suitable to be applied to science learning in schools. Science subjects are subjects that systematically find out about nature. Science is also a subject that involves many activities of students in their learning. One of them is by involving many critical thinking, practicum, solving problems from real life, and making scientific conclusions. According to him audio-visual media will have a positive impact on students' learning competencies in the realm of knowledge, attitudes

and skills, if applied together with the cooperative learning model of Student Teams Achievement Division (STAD) in science learning.

#### **IV. CONCLUSIONS, IMPLICATIONS AND SUGGESTIONS**

##### **1. Conclusion**

Based on the results of the study, it can be concluded that there is an effect of the use of the Student Teams Achievement Divisions (STAD) Cooperative learning model assisted by Audio Visual media on the competency of the attitude attitude of grade VII students of Natural Sciences in State Junior High School 32 Natural Sciences.

##### **2. Implication**

There are significant results in the realm of student competencies in the learning process. students become more active in the learning process so that student-centered learning can be done well.

##### **3. Suggestion**

Based on the conclusions and implications above, the suggestion for further research is that the observation process carried out should be in groups, not individuals so that observers are easier to observe the indicators of learners' affective competence.

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