

THE EFFECT OF COOPERATIVE LEARNING STRATEGY STAD MODEL IN LEARNING HIGH SCHOOL PHYSICS

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ABSTRACT

This study aims to analyze and determine the effect of the STAD type cooperative learning strategy model on preschool physics education. On the one hand, surveys are conducted in the online library research process, and on the other hand, information is collected by browsing through magazines, books and based on the research conducted. The results show the effectiveness of the STAD cooperative learning strategy in high school physics education could improve students' cooperative abilities and interactive abilities between students. Teachers can actively activate and develop students' unique skills. Another effect is the achievement of academic achievement increases compared to before.

Keywords: Cooperative Learning, STAD Model, Learning, Strategy

INTRODUCTION

Learning is a deliberate effort by educators and teachers for the purpose of transferring knowledge, using methods of organizing and creating a learning domain system in different ways and different ways to enable students to more optimally engage in learning activities. There are different types of education in the student's field of study, one of which is pre-secondary physics education.

Permendikbud 2014 No. Curriculum 2013 SMA. 59/Madrasah Aliyah report: Predict natural phenomena. This requires expert knowledge of observations, as evidenced by investigations through scientific procedural activities that predict natural phenomena. Physics learning gives a deep impression on students. This is because many students have difficulty in understanding physics. This is a classic problem and teachers need to put more effort into transferring knowledge, especially physical materials to students. The use of new strategies adds a more effective way to overcome this challenge because the teacher is the center of the entire learning process. Thus, educators need to educate their students to understand all school physical materials and understand teaching methods that convey knowledge (Andrian et al., 2020).

One of the strategies that teachers can try to solve students' problems is by practicing Cooperative Learning. The collaborative learning model is a concept that helps connect the lessons taught by the teacher to the real world of students and can pressure students to connect the knowledge they are taught. For Slavin (1995), collaborative learning or collaborative learning means that students work together as a group by performing group tasks in order to achieve a common goal. According to Lee (Isjoni 2007:16), collaborative learning is a step in the teaching and learning process where students are given the opportunity to collaborate with other learners by being given meaningful tasks. Collaborative learning has many changes, including the STAD type collaborative learning

model. This collaborative teaching and learning process is suitable for teachers who are just starting to use collaborative learning. Group learning illustrates a very simple collaborative learning model. The teacher simply divides students into heterogeneous groups. Then, after the teacher presents the lesson, students are divided into groups to ensure that everyone in the group understands the lesson. At the end of the training, the teacher distributes awards to the best groups to motivate other groups (Supriyadi et al., 2018).

Cooperative groups are established with the aim that students are given the opportunity to play a role in their educational reflection... We can work well together. STAD collaborative learning is ideal for mutual cooperation where students explore learning and work together to achieve satisfactory learning outcomes. STAD is ideal when the audience needs experimentation and practice. Students are highly responsible for the success of their studies. An important step in STAD-style collaborative learning is to improve students' conceptual skills through class presentations, group conversations, quizzes, progress notes and rewards.

METHODS

The method is a way that is implemented to solve the problem of the object under study. According to generation "research methods in this study are techniques that are analyzed based on a qualitative approach". The use of this method is in accordance with the main objective of the study to describe and analyze the effect of STAD type cooperative learning strategy in physics. The qualitative approach to this research is concerned with the process aspect and not with the results. In other words, descriptive analysis research will raise problems, focus on problems, and after the research is completed, the research results can be processed and analyzed and concluded. Data collection in this method that can be used is by reviewing and finding many magazines, books and documents related to (relevant) data sources or other information related to the research.

RESULT & DISCUSSION

A learning activity must be carried out comfortably so that students can easily understand and understand the material presented. Teachers as educators in a learning activity are required to be able to create this atmosphere through various learning strategies so that students do not feel bored. Moreover, in physics learning in high school, students tend to choose to be busy on their own such as daydreaming, chatting with their classmates, disturbing their friends, leaving the class, and some even choose to sleep while learning is taking place.

In this study, the strategy used by the teacher was the Cooperative Learning Model STAD strategy which was felt to make students feel interested in the teaching and learning process and easily understand the material provided by the teacher. By using this strategy, students are divided into groups of about 4 or 5 members per group. After the groups are made, the teacher gives a problem (task) to each group to discuss and solve.

Based on research that has been conducted through various literature sources, and various studies from various researchers, the effect of the Cooperative Learning Model STAD strategy carried out in high school learning can be seen as follows:

1. Students are trained to work together

The creation of groups will train students' cooperation with each other, because if cooperation is not realized, the group will not achieve the goals to be achieved.

2. Students are trained to interact and communicate well

In a group, of course, interaction and communication with each other will occur when collaborating in solving the problems given. Therefore, students' interaction and communication skills will improve over time.

3. Students are trained to actively discuss

The main purpose of creating groups is to train students in conducting discussions. In a forum or group, there will definitely be differences of opinion between group members, and the existence of these differences will require students to discuss these differences so that they become mutually agreed upon results.

4. Students are trained to avoid individuality and expect to win for themselves.

Students will feel the need for others to be able to complete the task. Each student in a group needs each other to avoid mistakes during problem solving (Sucinta, 2016).

CONCLUSION

Based on research using different literature sources and different studies by different researchers. The impact of collaborative learning strategies such as STAD on high school physics learning can allow students to work together in groups, and allow students to interact and group together. Well, students can be trained to actively discuss, and students can be trained to avoid individuals and want to win. Another effect is that students' learning outcomes improve, much better than before. Cooperative learning is a suitable cooperative learning model for teachers who are just starting to use cooperative learning. Teachers can group students into heterogeneous groups. Then the teacher presents the lesson and students form groups so that the whole group can master the lesson. STAD style cooperative learning works very well with a cooperative attitude where students engage in learning and work together to achieve academic excellence. STAD is particularly suitable for use when the subject has to be experimental/practical. Students take great responsibility for their learning outcomes. The key to the teaching and learning process with STAD collaborative can improve the mastery of concepts by students in presentations, discussions, quizzes, improvement notes.

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