Analysis of Effect Application of Stad-Type Cooperative Learning Model on Learning Outcomes at Elementary School

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ABSTRACT

This study aims to determine the Influence of Cooperative Learning Model Student Team Achievement Division (STAD) Toward Learning Outcomes IPS Class V SDN 63 Gedong Tataan Pesawaran District Subdistrict. This research is using research design pretest-posttest group design. The independent variable in this study is a cooperative learning model STAD while the dependent variable is the result of learning. The data collection technique used is the test, and documentation. The data analysis technique consists of three stages, namely, stage description of the data, the test phase of requirements analysis and hypothesis testing phase. Step description of the data include data distribution learning outcomes. Test requirements analysis phase includes tests of normality and homogeneity. While the hypothesis testing phase using T-test analysis results of data analysis showed > ie 5.37 > 1.68 to 0.05 level significant, this proves that rejected or accepted, which means there is influence between STAD cooperative learning on the results of social studies class V SDN 63 Gedong Tataan District of Gedong Tataan Pesawaran District.

Keywords: Cooperative Learning, Learning Outcome, STAD-Type Cooperative Learning

INTRODUCTION

Education functions to encourage change so that the life of a society can improve its quality and meaning. Hence, quality human resources are determined by good quality education at the basic, middle and high levels. This is the key in the effort to educate the life of the nation (Subandi, et al., 2019). In Law no. 20 of 2003 concerning National Education System since its embryonic period until finally this curriculum has been known as the Competency-Based Curriculum (KBK). It is stated that “Competency-Based Curriculum sets concrete goals for the learning process and outcomes in the competency unit that must be achieved in the form of; knowledge, experience, attitudes and skills; actual both individual and social. A good system of the
Learning process cannot guarantee the quality of interaction between students and lecturers, which is caused by differences in the competence of lecturers in controlling and mastering in choosing the appropriate method, exchange in the classroom and assessment of the learning process (Sari, et al., 2021). It is important for all Indonesian education leaders because serving education must directly contribute to children's development and academic staff must be equipped with quality and production facilities and concepts and teaching methods (Aslan, 2021). While the other problem faced by students for a number of reasons contradicting each other like skills less base, less training, lack of motivation, and social status (Sari, et al., 2021). Education is also expected to be a driving force for the current generation in welcoming future changes and progress.

The learning that we expect is not just hearing, obtaining or absorbing the information conveyed by the teacher. Learning must touch the interests of students fundamentally have certain skills (Aunurahman, 2014). Because the failure of teachers and students as a major factor causing the challenges of learning and teachers, education personnel, quality of facilities and infrastructure and quality of management (Putra, et al., 2020; Kristiawan, et al., 2021). Hence it need some learning model to handle and solve those problems. One of the current learning models that has received a lot of responses but has not been implemented optimally in the world of education is the cooperative learning model. The cooperative learning model is not the same as just learning in groups. There are basic elements of cooperative learning that distinguish it from the division of groups that are carried out at random. The correct implementation of the cooperative model procedure will enable educators to manage the class more effectively (Anita Lie, 2014), beside the utilization of application virtual learning that can reduce quality loss education even without physical interaction directly in the classroom during learning process (Dewi, et al., 2022).

According to Hamzah (2014:303) Innovative learning is learning related to the STAD model. Innovative learning is a learning process that is designed in such a way, so that it is different from learning in general that is done by teachers (conventional). (Mohammad Jauhar, 2011:161). Thus, in using the STAD model, it is necessary to take the following steps: (1) Form a heterogeneous (mixed according to achievement, gender, ethnicity, etc.). (2) The teacher presents the lesson. . (3) The teacher gives assignments to the group to be done by group members. (4) The teacher gives quizzes or questions to all students. When answering quizzes, students are not allowed to help each other. (5) Giving evaluation. Prior to the implementation of the STAD type cooperative learning model, the results of the social studies learning class V SDN 63 Gedong Tataan can be seen.
Table 1. Range of Grade V Odd Semester Exams at SDN 63 Gedong Tataan

| No. | Value | Criteria   | Category | Number of Presentations |
|-----|-------|------------|----------|-------------------------|
| 1.  | <51   | Less at all|          | 2                       |
| 2.  | 51-<56| Less       |          | 1                       |
| 3.  | 56-<66| Enough     |          | 7                       |
| 4.  | 66-<75| Good       |          | 7                       |
| 5.  | ≥76   | good       |          | 5                       |
|     | Total |            |          | 22                      |

Social studies subjects have been known. The results of the mid-semester exam scores tend to decrease as indicated by the number of students who have not reached the minimum completeness criteria (KKM) where the determination of the KKM that has been set is 65 in Social Sciences (IPS) lessons at SDN 63 Gedong Tataan.

Based on the background of the problems described above, the following problems can be identified: (1) The learning process of Social Sciences in class V SDN 63 Gedong Tata is less active and interactive. This means that in the learning process students are not centered on their learning so that in student learning activities there needs to be interaction and communication with the teacher and their friends. (2) The model used by the teacher in learning tends to be monotonous, namely lectures and depends on the teacher. (3) It has not been achieved. student learning outcomes in accordance with the objectives of the pursuit. So the limitation of the problem as the scope of this research, namely the Effect of the Implementation of the STAD Social Studies Learning Outcomes for class V SDN 63 Gedong Tataan Kec. Gedong Tata. The problem of this research is "Does the application of the STAD affect the social studies learning outcomes for class V SDN 63 Gedong Tataan Kec. Gedong Tataan?"

The benefits of this research are as follows: (1). For the author, as a very valuable science that becomes the author's reference in knowing social knowledge and adding insight, knowledge, experience, and skills, especially those related to using the Student Team Achievement Division (STAD) type cooperative learning model. (2). For researchers, as a form of scientific work that can be used as reference material by academics in carrying out their scientific work assignments.

**Literature Review**

Learning models are one of the monumental ones in this field. They transform knowledge about learning-learning into specific "learning models" that designed by the teacher to achieve certain goals. (Miftahul Huda, 2014:75). So what is meant by a learning model is a plan or pattern that can be used to form a curriculum, design instructional materials, and guide the process in the classroom. Or made learning module that can be presented in an attractive format according to the target user,
Cooperative learning is learning that is not the same as just learning in groups, there are elements in cooperative learning that distinguish it from group divisions that are carried out at random. (Anita Lie, 2014:29) Student Team Achievement Division (STAD), is a cooperative learning strategy in which several small groups of students with different levels of academic ability work together to complete learning objectives. Not academically, students are also grouped variously based on gender, race, and ethnicity. (Miftahul Huda, 2014:201).

Meanwhile, according to (Slavin, 2009: 8), in the STAD type cooperative learning model, students will sit together in groups of four to five people to master the material presented by the teacher. A teacher delivers a lesson such as reading a map, then gives students time to work with the map, and answer questions related to the problem with their team members. After getting a chance to study with their team, students take a quiz on reading maps individually. Quiz scores of all students are recorded. All teams that score high on average receive special awards, such as attractive certificates or pasting photos of team members in the classroom. Learning is an activity that a person does intentionally in a conscious state to acquire a new concept, understanding, or knowledge so that it allows someone to experience it. relatively permanent changes in behavior both in thinking, feeling, and in acting. (Ahmad Susanto, 2013:4).

In the learning process, for example, developing an atmosphere of equality through transparent, tolerant dialogue in learning activities. (Aunurahman, 2014:3). So the conclusion of learning is a process or development of changes in attitudes and behavior from bad to good, and from not knowing to knowing In line with what was stated above regarding the understanding of learning according to experts, then It can be synthesized that learning is indeed a behavioral process carried out by individuals to bring about a change, either in whole or in part, accompanied by changes in attitudes, knowledge, habits, skills and thinking power to a better direction.

In the opinion of expert Ahmad Susanto (2013:5), in simple terms, what is meant by student learning outcomes is the ability obtained by children after going through learning activities. Because learning itself is a process of someone trying to obtain a form of behavior change that is relatively permanent. In learning activities or instructional activities, teachers usually settle on learning goals. Children who are successful in learning are those who succeed in achieving learning goals or instructional goals.

The learning outcomes achieved by students are the result of interactions between various influencing factors, both internal and external factors. In detail, a description of the internal and external factors, as follows: a. Internal factors are factors from within the students themselves, covering two aspects, namely physiological aspects (physical ones) and psychological aspects (spiritual ones). Factors that come from outside the students that affect learning outcomes are family, school, and...
community. Family conditions also greatly affect student learning outcomes. Identify factors that influence learning outcomes in schools.

(Ahmad Susanto, 2014:137). Stated that Social Sciences is a science that examines various disciplines of social science and humanities as well as basic human activities that are packaged scientifically in order to provide insight in deep understanding to students, especially at the elementary and secondary levels. (Ahmad Susanto, 2014:144), suggests that the main purpose of social studies learning in elementary schools is to develop the potential of students to be sensitive to social problems that occur in society, have a positive attitude towards repairing all inequalities that occur, and be skilled in overcoming any problems that occur in everyday life that befall themselves and society.

The scope of social studies subject matter in elementary schools or madrasah ibtidaiyah listed in the curriculum, according to the Ministry of National Education (2006), is as follows: (1). People, places and environment. (2). Time, sustainability and change. (3) Social and cultural systems. (4) Economic behavior and welfare.

In researching the relationships between the two variables, the authors use the STAD model which is expected to influence student learning outcomes in learning activities. In the learning process using the STAD model is expected to improve student achievement outcomes, namely domains, cognitive, affective and psychomotor.

**Figure 1 Research Framework**

| STAD learning model | Social studies learning outcomes |
|---------------------|---------------------------------|
| 1. Class presentation | 1. Cognitif                     |
| 2. Team/Group        | 2. afectif                      |
| 3. Quiz/evaluation   | 3. Psychomotor                  |
| 4. Team award        |                                 |

Research framework that is relevant to research with this development is research conducted by Ika Nuryanti entitled "Improving Social Science learning outcomes using the STAD learning model for fourth grade students at SDN 2 Sukamaju Telukbetung Bandar Lampung".

Based on the framework above, it can be stated that the research hypothesis is: \( t_{hit} > t_{table} \) that is 5.37 > 1.68 then Ha is accepted \( H_o \) and is rejected. \( t_{arithmetic} < t_{table} \) that is 5.37 < 1.68 then Ha is rejected \( H_o \) and is accepted.

**METHODS**

This research was conducted in class VB SDN 63 Gedong Tataan which is located in the Gedong Tataan sub-district, Pesawaran Regency. The place of this research was
chosen because starting from a preliminary study, researchers found problems regarding learning outcomes in Social Sciences that were less than optimal. The time of the study was carried out for four weeks at SDN 63 Gedong Tataan, Gedong Tataan District, Pesawaran Regency.

According to Sugiyono (2011: 7), the research method is a scientific way to obtain data with certain purposes and uses. Conducting research using the method is very important because without the method the direction of the research becomes less clear, therefore in this study the research method used is descriptive quantitative method because the final score of the variable is formed by numbers and the analysis used is statistical analysis. which is obtained.

The study used a One-Group Pretest-Posttest Design. Pretest before participating in learning using the STAD learning model and posttest after participating in learning using the STAD learning model. Based on the research design of One Group Pretest-Posttest, to see the effect of applying the STAD learning model on social studies learning outcomes is to look at the difference between the posttest and pretest scores ($O_{2} - O_{1}$).

Population is a generalization area consisting of: objects/subjects that have certain qualities and characteristics that are determined by the researcher to be studied and then conclusions are drawn. (Sugiyono, 2015) The population in this study were 42 fifth grade students at SDN 63 Gedong Tataan, Gedong Tataan District, Pesawaran Regency. The sample is part of the number of characteristics possessed by the population (Sugiyono, 2015: 118). The samples taken in this study were class V – B with a total sample of 22 students. The sampling technique used in this study was random sampling, namely random sampling of the class.

According to Arikunto (2013: 192) Research instruments are tools or facilities used in data collection so that the work is easier and the results are better, in the sense of being more accurate, complete, and systematic so that it is easier to process. Collecting data in this study is to use documentation and tests. 1) Documentation is carried out to determine the initial condition of the subject under study. The document method in this study was carried out by researchers by asking for data on student learning outcomes in social studies subjects in the form of a book listing the odd semester MID scores. According to Arikunto (2013: 274) in conducting documentation, researchers investigate written objects such as books, magazines, documents, regulations, minutes of meetings, diaries, and so on. Documentation aims to reveal the facts that occurred when the action was carried out.

A test is a series of questions or exercises and other tools used to measure skills, intelligence knowledge, abilities or talents possessed by individuals or groups (Arikunto, 2013:266). This test is used to measure students' understanding of social studies subjects. The tests used in this research are pretest and posttest. The test used was a multiple choice written form. Pretest is used to measure students' abilities before being given social studies learning with the STAD learning model. posttest is used to
measure students' abilities after being given social studies learning with the STAD learning model.

The research instrument used is test data collection. This instrument in the form of a test can be used to measure basic abilities and achievements. To overcome the bias (bias) of the results obtained by the test, it is recommended: (1) give the tester the opportunity to practice (the person who carries out the test). (2) using more than one test, then the results are compared. (3) complete the test instrument with a manual (implementation manual) as complete and clear as possible.

Test instrument test researchers in analyzing the results of testing the instrument using validity and reliability: Validity is a measure that shows the levels of validity and validity of an instrument. A valid or valid instrument has high validity. Conversely, an instrument that is less valid means it has low validity. Internal validity can be found using the product moment correlation as follows:

$$r_{xy} = \frac{N \sum xy - (\sum x)(\sum y)}{\sqrt{(N \sum x^2 - (\sum x)^2) (N \sum y^2 - (\sum y)^2)}}$$

Reliability Measurements that have high reliability are called reliable measurements. Although reliability has various other names such as trustworthiness, reliability, stability, consistency, but the main idea contained is the extent to which the results of a measurement can be trusted. Reliability states a sample in which accuracy and precision measure what is being measured to determine the reliability of the test items. According to Arikunto (2012:117) using the KR-21 formula as follows:

$$r_{11}(1 - \frac{M(nM)}{n\bar{s}^2_t})$$

Hypothesis Testing For the hypothesis in this study using a T-test. Testing all items of the instrument in one variable can be done by looking for the distinguishing power of the score of each item from the group that gives high answers and low answers. The analysis in this study is to determine the distinguishing power, and to find out item validity. The t-test formula

$$t_{hit} = \frac{\bar{x}_1 - \bar{x}_2}{s_{gab} \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$
RESEARCH RESULTS AND DISCUSSION

Data Analysis Results Instrument Trial For testing before being used in research, trials were conducted to calculate the level of difficulty of the questions, differentiating power, validity, and reliability of the questions.

Table 2. Classification of the level of difficulty of the test

| No. | level of the instrument | Item | Number of items | Percentage |
|-----|-------------------------|------|-----------------|------------|
| 1.  | Difficult               | -    | -               |            |
| 2.  | Medium                  | 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25 | 25 | 100% |
| 3.  | Easy                    | -    | -               |            |

Table 3. Classification of Discriminatory Items Test Results

| No. | Classification of Differentiating Power | of Items | Number of items | Percentage |
|-----|----------------------------------------|----------|-----------------|------------|
| 1   | Very good                              | -        | -               |            |
| 2   | Good                                   | 2,6,12   | 3               | 12%        |
| 3   | Enough                                 | 4,20,21,22,23 | 5   | 20%        |
| 4   | Poor                                   | 1,3,5,6,7,8,9,10,11,13,14,15,16,17,18,19,25,26 | 68 | %          |

Based on the table above, it can be seen that there are 20 items with different power classifications. Number of item classifications The test results with very good power are 2 items, and 4 items are said to be good, and 6 items are said to be sufficient, 10 items are classified as the worst level.

Results of Data Analysis. Before testing the hypothesis, it is necessary to test the prerequisite hypothesis, namely the normality test. Discussion Learning is a process or self-development of an effort that is carried out and developed with the capabilities possessed to obtain a comprehensive change in behavior and also as a result of one's own experience.
Learning is a process or self-development of a business carried out and developed with the capabilities possessed to obtain a change in overall behavior and also as a result of one's own experience. Based on the evaluation results that have been carried out previously, it can be seen from the difference in the value of learning outcomes before using STAD learning and after using STAD. The number of students who scored above the KKM was more in the evaluation after the STAD learning was carried out. This is because students are more active in learning by using STAD learning.

Based on the results of hypothesis testing that has been carried out to determine the effect of STAD learning on learning outcomes, it is known that $t_{count} > t_{table}$ is $5.37 > 1.68$. This proves that STAD learning affects the learning outcomes of class VB students at SDN 63 Gedong Tataan, Pesawaran Regency.

Interpretation of the results of data analysis/hypothesis testing: (1) If $t_{hits} \geq t_{table}$, then $H_{a_n}$ effect of implementing the STAD type cooperative model on the learning outcomes of Social Studies subjects for Class V SDN 63 Gedong Tataan, Gedong Tataan District, Pesawaran Regency. (2) If $t_{hits} \leq t_{table}$, then $H_{a}$, this means that there is no effect of the application of the STAD type cooperative model on the learning outcomes of Social Studies subjects Class V SDN 63 Gedong Tataan, Gedong Tataan District, Pesawaran Regency.

It was concluded in this study that there was an effect on learning outcomes, namely students who were taught using the STAD showed a better improvement compared to students who were taught using the learning model commonly used by teachers so far. This means that the application of the STAD in learning makes a better contribution. For students learning with the STAD very helpful for students to collaborate with other students. This is because the implementation of cooperative learning model procedures correctly will allow teachers to manage the class more actively and effectively. In addition, students will become more active in learning because they will always interact with other friends in doing assignments and in conducting experiments that are very necessary in social studies learning.

**CONCLUSIONS**

Based on the analysis of hypothesis testing, it is known that $t_{count} > t_{table}$ is $5.37 > 1.68$. So, it can be concluded that there is an influence between STAD learning on social studies learning outcomes for class VB students at SDN 63 Gedong Tataan, Gedong Tataan District, Pesawaran Regency.

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