



Improving Student Understanding Through Cooperative Learning in Social Studies Subject

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Abstract. This study aimed to investigate: (1) efforts to improve learning activeness and outcomes of Grade VII C students of SMP Negeri 2 Ngemplak in the Social Studies subject using the cooperative learning model of Student Teams Achievement Division (STAD), and (2) the improvement in their learning activeness and outcomes in the Social Studies subject using the cooperative learning model of STAD.

This was a classroom action research (CAR) study. The research subjects used were Grade VII C students of SMP Negeri 2 Ngemplak in the even semester of the 2018/2019 academic year, with a total of 32 students. The study was conducted in two cycles each of which consisted of two meetings. The data were collected using observation sheets, tests, and documentation. The data analysis techniques were qualitative and quantitative descriptive techniques. Related to the criteria for the research success, students' learning activeness was considered improving if on average 70% in one class were active in learning activities. As for students' learning outcomes, a minimum of 75% achieved a Minimum Mastery Criterion (MMC) of 75.

The results of the study were as follows. (1) Efforts to improve learning activeness and outcomes of students using the STAD learning model were carried out with the following steps: dividing groups, determining initial scores, building groups, exposing materials, studying in groups, working on quizzes, calculating individual and group scores, recognizing group achievements and returning quiz results by emphasizing group discussions, individual skills and working on quizzes. (2) The use of this learning model improved the learning activeness and outcomes of Grade VII C students in the Social Studies subject at SMP Negeri 2 Ngemplak.

Keywords: Student Teams Achievement Division (STAD) · Learnin Activeness · Learning Outcomes

1 Introduction

Education is an important aspect in a country to produce good quality human resource that becomes a role to develop our country, Indonesia. To produce qualified future generation, it is needed to have a good quality of education which means education that is able to develop all the potential owns by individual. That is why the quality of the country is

based on the quality of the education. The World Bank shows that the quality of education is still low to Indonesia's chief world bank representative. Rodrigo Chaves state the low quality of education is reflected in the low rank of Indonesia. Sri Mulyani, the minister of finance, state that the funding for education reaches Rp. 444 trillion or it is about 20% of APBN 2018. However, the problem of education cannot be solved from the financial side only, but the quality of education and students' learning activities.

Innovative and creative changes are continuously improved to develop the quality of education. Curriculum 2013 is expected to grow students' competency covering three aspects namely affective, cognitive, and skills. It influences the characteristics of process standard. Based on the guideline of the minister of education and culture number 22 year 2016 about primary and secondary education process standard, it requires to establish discovery learning or inquiry learning. It is needed to encourage students' capability in producing contextual product, then it is suggested to use learning approach that produce project based learning. Scientific, discovery, inquiry, and project based learning are focused on students' center whereas teachers are having roles as the facilitators to support learning ideas. This type of learning is covered in curriculum 2013 to develop learning quality. However, there are still some obstacles during practice, so the goal of education has not been achieved yet.

Based on the result of observation and interview conducted by the interviewer and the teacher in class VII C of junior high school 2 Ngemplak, there were some problems found during the learning process. The main problem was students' low active participation during learning social science in class. [1] state a good quality of learning can be obtained from students and teachers interaction that produce changes on students' behavior in learning materials. Learning occurred in the class should be able to support students to achieve their basic and core competences [2]. A good learning is the one that has been set with learning model and media to support. Based on the opinion, it can be concluded that one of learning achievement indicators is a learning model that can be used to raise students' interaction during class. One of learning model that fulfill the criteria is cooperative learning.

[3] defines cooperative learning as a learning that can be done by groups whereas students are grouped in 4 or 5 to understand the learning concepts given by teachers. Collaborative learning is a set of learning activities conducted by students in specific groups to achieve learning goals. There are four aspects in cooperative learning namely participants, rules, learning ways, and learning goals. [4] demonstrate that cooperative learning is a learning model used to produce students oriented learning, furthermore it is utilized to solve problems found by teachers by activate students interactions which cannot cooperate with other students. There are some cooperative learning models proposed by [3] namely STAD (*Student Team Achievement Division*), TGT (*Team Game Tournament*), TAI (*Team Assisted Individualization*), dan CIRC (*Cooperative Integrated Reading and Composition*). Simplest cooperative learning model is *Student Teams Achievement Divisions* (STAD) which is the better model for teachers to learn using cooperative learning [3]. [4] demonstrates that *Student Teams Achievement Divisions* (STAD is one of cooperative learning that emphasize students' interactions in order to motivate and help each other to master the materials.

National Council for social Studies (NCSS) cited in [5] defines social science as a study of social and humanities integrated to achieve the goal of citizenship. Social science in school is a study that integrated from anthropology, archeology, economy, geography, history, philosophy, politics, psychology, religion, and sociology that existed in humanities knowledge included mathematic and other knowledge as the aspects of the social science study. Other than that, [5] shows that social science study emphasizing on students' skills in solving complex problems. Social science education encourages students to think critically to solve social problems so that it can solve problems in small and big environment namely community. Moreover, [6] shows that social science study arranged systematically as a means to improve students' understanding and behavior.

Social science students in curriculum 2013 is a means to improve students' competencies especially related to students' active participation that is impactful to the result of the students' learning. Learning model is the most influential indicator during learning process, since the success of the teaching and learning process depends on the learning model.

2 Learning Methodology

The type of this research was Classroom Action Research (CAR). This research was collaboratively conducted by the researcher and the social science teacher at State Juior High School 2 Ngemplak. The subjects of this study were 32 students of class VII C of State Juior High School 2 Ngemplak in the 2018/2019 academic year, totaling who were learning social scinece subjects. Meanwhile, the object of this research was the learning outcomes of class VII C students through the application of the STAD Type Cooperative Learning Model to improve learning outcomes. The data analysis technique used was qualitative and quantitative data analysis techniques, whereas the data obtained from field notes were analyzed and described and the data obtained from observation sheets and tests were produced in the form of a percentage that increase during learning activity and learning outcomes.

Furthermore, the methods and instruments used for data collection were observation, tests, and documentation. Observation activities were used to observe the learning activities of class VII C students during the social studies subjects. The test activity was carried out to determine the social science learning outcomes of class VII C students. Then the documentation was compiled by analyzing the supporting documents of the research. The instruments in this study were observation sheets to measure the students' learning activity, tests to measure the students' learning outcomes, and field notes to record all the activities.

This study consisted of initial observations, cycle I, and cycle II. Each cycle consisted of two meetings. In each cycle there were 4 steps, namely planning, implementing actions, observing, and implementing the Student Team Achievement Divisions (STAD). It was the type of cooperative learning model that can be determined improving the learning activity if 70% of students are actively involved, and 75% of the total number of students have met the minimum mastery criteria of social studies subjects, that is 75.

3 Result and Discussion

A. Cycle I

The first cycle was conducted in two meetings. The first meeting was conducted on Tuesday, April 9th 2019 while the second meeting was conducted at April 11th 2019 along to the material “Masuknya Kebudayaan Hindu Budha di Indonesia.”

The results of observations of students in general in the first cycle are that students are still not familiar with this kind of learning model where group cohesiveness is needed but has the same individual obligations, there are still groups where only a few members are actively involved like the usual discussion learning model. When the quiz was given there were still some students who worked on it by discussing so that it was not in accordance with the rules of this learning model where students were required to work individually which would affect the group’s score.

The results of observations in the first cycle that were carried out during the learning process, the teachers lack of explanation during learning model that the students still looked confused to follow the learning steps.

In addition, in the first cycle the motivation given by the teacher to students was lack, whether it was positive motivation such as affirmation given in giving opinions and asking questions or negative motivation such as warm reminder when students acted inappropriately during the learning process. The percentage of student activity that reflects student activity can be seen in the following percentage:

Table 1. Summary of Student Learning Activities Cycle I

No	Indicator	Cycle I
1.	Students pay attention during learning	75,7%
2.	Students read learning recourse	68,7%
3.	Students owns their arguments	67,9%
4.	Students ask questions to respond the materials which is still confusing	65,6%
5.	Students give suggestions to students or teachers	48,4%
6.	Students contribute to the group discussion	72,6%
7.	Students pay attention to the materials given by teachers	57,0%
8.	Students do individual test	50,7%
9.	Students actively discuss in group	58,5%
10.	Students are able to recall the materials given by teachers	52,3%
11.	Students are able to make decision in group discussion	60,1%
12.	Students are confident to respond teachers’ questions orally	55,4%
13.	Students are active to follow the learning activity	66,4%
Students’ learning activity		61,48%

Based on the Table 1, the implementation of the Student Teams Achievement Division (STAD) in social science subjects in class VII C of state junior high school 2 Ngeplak cycles I revealed 75.7% and 68,7% for visual activities, 67.9%, 65.6% and 48.4% for oral activities, 72.6% and 57% for listening activities, 50.7% for writing activities, 58.5% and 52.3% for mental activities, and 60.1% and 55.4%, 66.4% for vigorous activities. The data shows that there are only two aspects have percentage above 70%, which at least shows that students were actively involved. The data shows that there are only two aspects have percentage above 70%, which at least shows that students were actively involved. The two aspects are visual activity aspect 1 (75.7%) and listening activity aspect 6 (72.6%), which means that not all aspects have percentage above 70%. While the other four aspects observed consisting of 11 aspects have percentage below 70%. The percentage of learning activity in the first cycle was still lacking because the only two aspects of the two aspects reached 70% percentage. The percentage of student learning activity in the first cycle was 61.48% which overall also showed that it was below 70% as the research success criteria.

Student activities during learning are also reflected in student learning outcomes. Student learning outcomes in the first cycle were measured using a post-test. The following are the learning outcomes of class VII C students in cycle I.

Based on the Table 2, it can be seen that the result of students' social science learning outcomes of class VII C State Junior High School 2 Ngeplak in cycle I. Social science learning outcomes show the percentage of post-test scores with 50% percentage or only 16 students who get scores above the minimum mastery criteria with average value 74.81%. Social science learning outcomes in cycle 1 were still low because students who had scores above the minimum mastery criteria were less than 75% out of 32 total students. This percentage is still less than the standard set by the school, namely at least 75% of students in each class have scores above the minimum mastery criteria. Apart from being seen from the percentage, learning outcomes were still relatively low, it can be seen from the average value which still shows below 75 or below the minimum mastery criteria.

Table 2. Summary of Social Studies Learning Outcomes Cycle I

category	Post-Test	
	Frequency	%
Score ≥ 75	16	50%
Score < 75	16	50%
Total	32	100%
Average	74,81	

B. *Cycle II*

The second cycle was conducted in two meetings. The first meeting was held on Thursday, May 11th 2019 and the second meeting was on Tuesday, May 14th 2019 discussing the material “Masuknya Kebudayaan Islam di Indonesia”.

Based on the results of observations, the students in cycle II were the students that already familiar with the learning model used, whereas group coordination yet still has individual obligations at the same time. Most of the members were actively involved in the discussion, only a few people are not actively involved. When quizzes were given, students worked individually, this was due to motivation in the form of warning given by the teacher. Surprisingly, students competed to be actively involved during learning, especially in providing questions and opinions. This occurred due to the motivation given by the teacher in the form of adding scores for students who ask questions or give opinions.

The observations in cycle II revealed that the teacher gave detailed explanation of the learning model that would be used in learning so that students seemed to be able to follow the learning steps better. In addition, in the second cycle the motivation given by the teacher to the students was getting better, this was evidenced by the students who looked more active during learning. The percentage of student activities that reflected student activity could be seen in the following percentages:

Based on the Table 3, it is known that the active participation of class VII C students in social science in cycle II has percentage 78.1% and 72.6% visual activities, 70.3%, 72.6% and 65.6% oral activities, respectively. Listening activities 75% and 65.6%, writing activities 63.3%, mental activities 64.8%, 68.8%, and 68.7% emotional activities 64.8% and 73.4%. The data show that in every aspect shows above 70% or from all aspects there are 7 aspects that show percentage of 70%. The percentage of student activity in cycle II shows in the figure is 75%, which means that the level of active learning of students has shown good grades or has met the criteria for research success.

Student activities during learning are also reflected in student learning outcomes. Student learning outcomes in cycle II were measured using a post-test. The following are the learning outcomes of class VII C students in cycle II:

Based on the Table 4, it can be seen the result of the social science learning outcomes in the class VII C of State Junior High School 2 Ngemplak in cycle II. Social science learning outcomes showed a post-test with percentage 91%, which means that there were 29 students scored above the minimum mastery criteria with an average score 83.53. Social science learning outcomes in cycle II were already classified as good because students who had scores above the minimum mastery criteria had exceeded 75% out of 32 total students. This percentage is in accordance with the standards set by State Junior High School 2 Ngemplak, whereas at least 75% of students in each class have scores above the minimum mastery criteria. Apart from being seen from the percentage, learning outcomes were classified as good, it can be seen from the average value which shows above 75 or above the minimum mastery criteria.

Table 3. Summary of Student Learning Activities Cycle II

No.	Observed aspects	cycle II
1.	Students pay attention during learning	78,1%
2.	Students read learning recourse	72,6%
3.	Students owns their arguments	70,3%
4.	Students ask questions to respond the materials which is still confusing	72,6%
5.	Students give suggestions to students or teachers	65,6%
6.	Students contribute to the group discussion	75%
7.	Students pay attention to the materials given by teachers	65,6%
8.	Students do individual test	63,3%
9.	Students actively discuss in group	64,8%
10	Students are able to recall the materials given by teachers	68,8%
11.	Students are able to make decision in group discussion	68,7%
12.	Students are confident to respond teachers' questions orally	64,8%
13.	Students are active to follow the learning activity	73,4%
Students' learning activity		75%

The research in cycle II was categorized to have been successful, this is because the data obtained had met the criteria that have been previously set with the following details: student learning activity after the implementation of the Student Teams Achievement Division (STAD) type cooperative learning model in social science class VII C of state junior high school 2 Ngemplak in cycle I explained each aspect observed. Based on the table above, it was known that the active participation of class VII C students in social science subjects in cycle II has percentage 78.1% and 72.6% for visual activity, 70.3%, 72.6% and 65.6% for oral activities, 75% and 65.6% for listening activities, 63.3% for writing activities, 64.8%, 70.8% and 68.7% for mental activities, 64 .8% and 73.4% for emotional activities. The data show that in each aspect there are aspects that show percentage above 70% or from all aspects there are 7 aspects that show a percentage 70%, meaning that the level of student learning activity has shown good grades.

The results of the research Implementation of the STAD type of cooperative learning model by the theory according to [4], the STAD type is a type of collaborative learning that emphasizes activities and interactions in the classroom both between teachers and students, students and students to motivate each other and help each other in mastering the learning material. In this case, it can be seen that the Student Teams Achievement Division (STAD) type of cooperative learning model requires students to be active, so that through the steps in learning with this model can increase student activity in learning. The success of the research carried out was in line with [7] which explains that in terms of the process, learning is said to be successful and of high quality if entirely or at least 70% of students were actively involved, both physically, mentally, and socially in the learning process.

Table 4. Summary of Social Studies Learning Outcomes Cycle II

Category	Post-Test	
	Frequency	%
Score \geq 75	29	91%
Score < 75	3	9%
TOTAL	32	100%
Average	83,53	

The results of the research Implementation of the Student Teams Achievement Division (STAD) type of cooperative learning model in accordance with the theory according to [4] the Student Teams Achievement Division (STAD) type is a type of cooperative learning that emphasizes activities and interactions in the classroom both between teachers and students and students to students to achieve maximum learning outcomes. In this case, it can be seen that the Student Teams Achievement Division (STAD) type of cooperative learning is a learning model that aims to improve student learning outcomes. Based on the results of the study, the average student learning outcomes increased from cycle I to cycle II, which was 8.72 or 28.5%. In cycle II, students who had scores above the minimum mastery score have exceeded the minimum score 75% of the total number of students. This is in accordance with the theory by [7] explaining that in terms of achievement it can be said to be successful if there is an improvement and at least 75% of students in one class reach the minimum mastery criteria. The student's score in cycle II successfully achieve average score 83.53, this indicates that the score has reached the minimum mastery criteria that is 75. This is in accordance with the criteria set by the school for social science subjects.

4 Conclusion

Improving the learning activity and social science learning outcomes for class VII C State Junior High School 2 Ngemplak using the STAD cooperative learning model were carried out through the following learning steps: group division, determining initial scores, grouping, presenting materials, group study, taking quizzes, calculating individual and group scores, recognizing group achievements, and returning quiz results, emphasizing group discussion, individual skills, and taking quizzes.

Active learning and social studies learning outcomes of students had increased. The percentage of student learning activity in the first cycle was 61.48% and increased in the second cycle with the percentage of student learning activeness was 75.0%. Student learning outcomes based on the average student learning outcomes in the first cycle 74.81 with a mastery percentage 63% and increased in the second cycle with average learning outcome of 83.53 with mastery percentage 91%.

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