The Implementation of Cooperative Learning (Numbered Head Together) to Boost Students' Learning Outcome in Social Studies Subject

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Abstract: The objective of this study is to enhance students' learning outcome through the implementation of cooperative learning method (NHT) in social studies at fourth grade of primary school. The procedure of this study consists of four steps: plan, design implementation, observation/evaluation and reflection. This study is undertaken in two cycles consisting two meetings respectively. Natural resources and the map of them are the material discussed in the first and second meeting of the first cycle, while the utilization of natural resources and effort to conserve them is the second cycles' material. The study found that there has been an improvement in students learning result after each cycle is conducted. In the first cycle, 19 or 63.33% of students with 69.66 score on average has achieved KKM (a minimum required standard score) while the second cycle showed that the KKM had been gained by 26 or 86.66% of students with 88.6 scores on average. Besides, both teacher and activities designed saw an improvement when both cycles had been held. Therefore, it is assumed that the implementation of cooperative learning (NHT) is able to boost students' learning outcome in social studies subject at fourth grade of elementary school level.

Keywords:

1. Introduction

The goal of social studies in primary school level, showed in the 1994 curriculum, indicates that the implementation of social studies is not only to focus on broadening individuals' social understanding, but also to enhance creative thinking of students, a skill needed to face the reality life, and to help students develop their social competency. One of the characteristics of education which undeniable is that the incapability of teachers in developing students' potential. A majority of teachers’ activity in the class is presenting knowledge which needs to be memorized by the students. This phenomenon is a habitual act in social studies learning at primary school. Besides, social studies learning at this level is still familiar with conventional learning method. Suwarnan uncovered that there is a perception amongst students that social-studies is an unchallenging subject and even is considered as the secondary lessons compared to others. Also, Suwarnan argued that social-studies learning environment at the school is still incapable of addressing a meaningful value for students. This also occurred in social-studies learning at Elementary School 13 Pousia Kendari. An interview result of one of the teachers being in charge of fourth-grade class revealed that exam result of the first semester in 2012 study program showing that there were 23 or 56.09% of students not achieving the required minimum score (70).

Faced by a demand to fix the problem, a strategic effort is required to undertake, so that students' learning atmosphere is more conducive and enjoyable, which in turn, might develop student's potential and make the learning activities more meaningful. One of the methods which can be used to realize such goal is the implementation of cooperative learning with Numbered Head Together type.
Cooperative learning is one type of peer mediated-instruction that involves small and heterogeneous groups of students working together in a non-competitive manner to maximize their own and other’s learning. There are five essential components to make cooperative learning group successful. These all are positive development, individual accountability, face-to-face positive interaction, social skills, and group processing. Numbered Head Together is a kind of cooperative learning methods designed to intervene and influence students’ interaction pattern and as well to be an alternative learning strategy for conventional class. This method first developed by Spenser Kagen in 1993 has a purpose to involve more students in analyzing materials in one study program and to check their understanding over those materials. Ibrahim revealed three aims of learning cooperative with NHT type. They are (1) structural academic result, whose purpose is to enhance student’s performance on academic task; (2) the recognition of diversity, aiming at helping students be open-minded and accept their friends from different background; (3) the development of social competence, having a purpose of developing student’s social skills.

The implementation of Numbered Head Together refers to a concept of Kagan having three learning steps, they are study group formation, problem discussion, and answer share between the groups. Triyatno meanwhile developed these steps into four phases. Firstly, numbering, in this phase, students are divided into 3-5 groups and each students’ head is numbered by 1-5. Secondly, addressing question, teachers pose some questions to students. The question can be varied or more specific. It is written in question format. For example, how many teeth that adolescent has? Also, it can be made in instruction form. Assure everyone understands five cities in Sumatera, for instance. Thirdly, thinking together, students assimilate their answers and ascertain that each member of their group knows the answer of the question. And finally, answering, as a particular number mentioned raise their hand and then try to answer questions posed by some students.

2. Method

This study is classroom action research. The procedure of research development began with making a plan. Then it is followed by action realization, observation and evaluation while reflection is in the final stage. This study was carried out at fourth grade of primary school 13 Poasia in the first semester of 2012/2013 study program. The number of students observed was 30 with different background. Factors studied are student, teacher, and learning result. Kinds of data collected are the data of the implementation of learning activities and the data of study result. The data collection techniques are interview, observation, documentation, and test. Data analysis methods meanwhile are the analysis of learning implantation and learning result of students. The criterion of success in this study is that the learning process is a success if 90% of learning scenario is implemented. Also, the learning outcome is complete if 80% of students already achieve the minimum required standard score (70).

3. Findings and Discussion

3.1. Cycle One

After research activity consisting of planning, implementing, observing, and evaluation is undertaken, the study shows that the number of students has achieved minimum required score (KKM) was 19 or 63.33% students. The researcher with some teachers collaborated to reflect the learning process in cycle I and then found that first cycle has not reached yet the research standard stated. This occurred as there was still limitation done either by the teacher or the learners. At the first meeting of cycle one, learning activity did meet the proposed class atmosphere. Students were confused with learning steps to be held as the instruction given was not clear enough. Besides, students were less enthusiastic in following the class due to less motivation is given by the teacher prior learning process. Furthermore, it has been observed that many students were not serious in the class. They were often seen leaving their groups in the discussion section, and they were more individual and less respect for their peers. This was mainly because teachers were not capable of controlling the class. Besides,
students still thought that the assessment given was not collective. At the second meeting, similar study activities were still implemented. Learning problems occurring previously were no longer to be identified. Students were more motivated in following the class and confidence with learning stages to be carried out. A tendency of students to leave their group discussion was not found, yet they were still less serious to solve the problem they encountered. In dealing with some projects given, the learners were still individual and tended to ignore their friends in the group.

Considering this learning atmosphere, there should be a workable solution to overcome the problems faced. Some measures proposed were that (1) learning instruction and steps to be taken should be more clear; (2) skills of class management that teacher have should be improved; (3) A direct role of the teachers in directing students when discussing some problems should be more active; (4) an assessment in which students are measured collectively ought to be told; and (5) teachers were required to utilize learning medium assisting students to understand the material and encourage their curiosity.

3.2. Cycle Two

The similar research activity in cycle two was also held with some improvement in learning process. After the evaluation was held, the number of students passing the so-called KKM was 26 or 86.66%. The learning student's outcome can be shown in table 1.2.

Reflection in cycle two showed the satisfying result for the researcher. Students more understood the learning activity to be conducted. During the class, students were serious and compact in finishing the project given. Based on the student's learning test, it could be indicated that the standard of this study in which 80% students should pass the KKM, has been achieved. Thus, the study was halted in the cycle two.

| Table 1. Cycle 2 |
|------------------|
| Sum                      | 2660 |
| Average Score           | 88.66 |
| Classical Learning Completeness | 86.66% |

The learning activity is held in two cycles. Each cycle consists of two meetings. Learning scenario refers to the cooperative method with Numbered Head Together type owning four stages of learning activities: Numbering, Questioning, Head Together, and Answering. At the first meeting of cycle one, kinds of natural resources were discussed. Based on their intellectual ability, students were classified into six groups. Apperception by directing students to assess object closely related to the lesson in their daily activities was held by the teacher before entering learning process. Also, students were always guided to hold a discussion, pose some questions, and answer the question given. During the class, there were some students less interested in following the lecture. Also, they were confused with learning activity undertaken, tended to be more individual, and often left their chair to distract other students in another group.

At the second meeting of the first cycle, the map of natural resources was discussed. Learning activities conducted was as similar as that in the first meeting. Some problems occurring in the prior meeting can be overcome a little bit. Learners were no longer to play during teacher instruction, and they focused on finishing their project given. To measure the level of student's comprehension of the subject in cycle one, evaluation was held. Student's learning outcome saw that only 19 or 63.33% students achieved the so-called KKM with 69.99 on average. The succeeding indicator of this study is that 80% students can achieve the KKM. Due to the outcome of the study not reaching the standard, then the study continued to the next step.
The benefits of natural resources were studied in the first meeting of cycle two. In this time, students were not divided according to their intellectual ability, yet they were classified based on students’ learning outcome in cycle one. Class management was improved, instruction made was more clear, guidance in discussion section was optimized, and learning design was no longer making students seating on the chair, but students were required to come in front of the class when delivering or answering questions.

The effort to conserve the nature was materials discussed in the second meeting of cycle two. Learning activities carried out was as similar to learning in the previous meeting. In this section, there was a significant improvement in the learning process. Students were more serious, active in posing question, and confident to answering. To assess student's progression, an evaluation was conducted. The result revealed that 26 or 86.66% students already achieved the so-called KKM. This means the proportion of student's completeness increased dramatically by 23.33 %. This finding suits with a study by Brush reporting that students performed better on a standardized test and were more positive to the subject when they worked in cooperative groups than those working individually. Furthermore, Hooper argued that students demonstrated increasing achievement and efficiency as well as better attitudes toward both the computer lesson and grouping. In addition, Kagan said when teachers use NHT, lower performing students participate actively in the class, and their higher-achieving peers continue to discuss academic content. Also, Maheady described that Numbered Head Together is an efficient and effective instructional technique to increase student responding and to improve achievement.

4. Conclusion

According to the aforementioned discussion, the result of research applying cooperative learning with Numbered Head Together type in teaching the social subject at fourth grade of the primary level was that there was an improvement on student's learning outcome in each cycle. In cycle one, 63.33% students passed the requirement score with 69.66 on average while this rose to 86.66% with 86.66 on average in cycle two. Also, teachers' performance during the study saw a positive trend, which leads the students to have a positive respond to the instructional design. Thus, this indicates that the implementation of cooperative learning (Numbered Head Together) is highly likely to improve the result of student’s learning in social studies at fourth grade of primary school.

5. References

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