Application of Cooperative Learning Type of Numbered Heads Together (NHT) to Increase Interest and Learning Outcomes in Economic Activities

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Abstract. This research is motivated by the low interest and learning outcomes of students in social studies learning material on economic activities. To overcome this, the researchers conducted research by applying NHT type cooperative learning. The purpose of this research is to increase students’ interest and learning outcomes in social studies learning material on economic activities. The method used in this research is Classroom Action Research (CAR). This research was conducted on students in grades IV-A which was carried out in two cycles, where each cycle consisted of four stages, namely planning, action, observation, and reflection. The instruments used are teacher performance observation sheets, teacher interview sheets, learning interest observation sheets, learning interest questionnaires, and social studies learning outcomes test sheets. Students’ interest in learning is based on observations and questionnaires, the initial conditions are 39.5%, the first cycle is 75.5% and the second cycle is 87.1%. The increase in learning interest from the initial condition to the first cycle was 36%, while the increase from the first cycle to the second cycle was 11.6%, the total increase was 47.6%. These results show significant increases. Student learning outcomes, the initial conditions showed 35% of students who completed, in the first cycle increased to 70% and the second cycle to 95%. The increase in learning outcomes from the initial conditions to the first cycle was 35%, while the increase from the first cycle to the second cycle was 25%, the total increase was 60%. Thus, it can be concluded that the application of cooperative learning of the NHT type in social studies subjects for economic activities can increase the interest and learning outcomes of grade IV-A students at SDN Cilembu, Pamulihan District, Sumedang Regency.

Keywords: Numbered Heads Together, Interest and Learning Outcomes.

INTRODUCTION ~ Education is one of the most important factors in efforts to improve the quality of human resources. Through education, a person can gain a variety of learning both in knowledge, attitudes, and skills. Education is a provision to achieve the future that has been aspired. In an effort to improve and develop education, the Indonesian government has made various efforts to achieve this goal. One of the efforts made is to prepare competent educators. Teachers as educators in the world of formal education play an important role for the progress of education. Teachers are one of the keys to the success of their students, especially related to the learning process at school.

The learning process is an important component in the process of transferring knowledge in schools. In the learning process there is interaction between teachers and students. If during the learning process, the teacher can create an interesting learning atmosphere and make students enthusiastic in learning, then an effective learning process will be created.

In the implementation of a learning program, there must be a standard that is used as a guide for assessing the success of the program. "The assessment of a class is said to be successful or complete learning (classical completeness) if in that
class there are 80% of students who have completed learning" (Septiani, 2012: 172). Each subject in the school has a Minimum Completeness Criteria (KKM), so the learning process in the classroom can be said to be successful if 80% of the students in the class succeed in achieving the Minimum Completeness Criteria (KKM) that have been previously set.

One of the subjects studied in basic education is Social Studies. Social studies learning in elementary schools relates problems and community developments from the past to the present, this causes social studies learning to develop from time to time. Etin and Raharjo (2008: 15) reveal, "The purpose of social studies education is to educate and provide basic skills for students to develop themselves according to their talents, interests, abilities and environment, as well as provision for students to continue their education to a higher level. tall". It is clear that the main goal of social studies learning is to equip students to live, develop, and solve social problems that exist in society through learning and critical thinking skills that have been trained in school. In addition, the objectives of the subjects in the curriculum are as follows.

a. Recognize concepts related to people's lives and their environment.

b. Have the basic ability to think logically and critically, curiosity, inquiry, problem solving, and skills in social life.

c. Have a commitment and awareness of social and human values.

d. Have the ability to communicate, cooperate and be competent in a pluralistic society, at local, national and global levels.

If you look closely, the objectives of social studies learning have not been well realized in the world of Indonesian education. In fact, there are still many students who have difficulty understanding the concepts of social studies material. Based on the results of interviews and observations made, it was found that there were problems in learning social studies material on economic activities for Class IV-A at SDN Cilembu, including a lack of interest in learning and low student learning outcomes. Social Studies is one of the fields of study that contains a lot of social material so that the knowledge and information received by students are limited to rote products. The nature of the social studies subject matter has an influence on the learning process, where these properties make learning dominated by the lecture method. As a result, the dominance of activities during the learning process is not on the students but on the teacher so that students become passive, less involved in the learning process, and sit quietly listening to the teacher's explanations. This will certainly make students bored during the learning process and create a lack of interest in student learning. As for the results of the analysis of the values obtained by students in social studies subjects on economic activities, students who achieve the KKM are less than students who do not achieve the KKM. The KKM in social studies subjects is 70. The KKM is obtained from the school itself. The percentage of 20 students is 35% complete and 65% incomplete. This means that only 7 people have reached the KKM and the remaining 13 people have not reached the KKM. Based on these data, social studies learning in Class IV-A SDN Cilembu on
economic activity material has not been said to be successful because students who complete are still less than 80% so that it becomes a problem that must be fixed.

One of the solutions that can be used is to apply numbered heads together (NHT) cooperative learning. This learning allows students to be the center of the learning process and students are required to build their own knowledge. Learning theory that supports this learning model is constructivism theory. Constructivist learning theory emphasizes that in learning students are required to build their own knowledge and the teacher acts as a facilitator or bridge that connects students with knowledge. From this explanation, it is clear that numbered heads together (NHT) cooperative learning is supported by constructivism learning theory which requires student-centered learning and the formation of knowledge in students’ minds. According to Huda (2011: 130), this learning provides opportunities for students to share ideas and consider the most appropriate answers. In addition, it also encourages students to increase their spirit of cooperation. The characteristic of numbered heads together (NHT) cooperative learning is that at the time of presentation of the results of the discussion, the teacher calls the number of the heads of students in each group randomly. This way, of course, will ensure that all students are really involved in the discussion. Thus, of course, it can make students really understand the material and learning outcomes are maximized. In addition, the numbered heads together (NHT) type of cooperative learning activities will certainly encourage students to increase their interest in learning.

Based on the description above, cooperative learning of the numbered heads together (NHT) type is the right learning to use to increase student interest and learning outcomes in the material of economic activities in Indonesia, so the researchers chose the title "Application of Numbered Heads Together (NHT) Cooperative Learning to Increase Interest and Social Studies Student Learning Outcomes on Economic Activity Materials" (Classroom Action Research on Class IV-A Students at SDN Cilembu, Pamulihan District, Sumedang Regency, 2020-2021 Academic Year).

**Interest to learn**

Interest is basically the emergence of someone’s desire and will so that they are persistent and enthusiastic about doing something. The sense of preference and interest will be responded by the student’s mind to carry out activities according to the type of preference without any influence or coercion. As said by Shah (2014: 101) “Interest means a high tendency and excitement or a great desire for something”. Likewise according to Slameto (Nurhasanah and Sobandi, 2016: 130), "Interest is a sense of preference, a sense of interest and attention". Interest in learning will certainly affect the achievement of student learning outcomes in certain fields of study. Students who have a great interest in learning in a field of study will show a sense of love and interest, namely by focusing their attention more than other students. Intensive attention to the material that allows students to study harder and get good learning
outcomes. Thus, it can be concluded that interest in learning is a motivating factor for students in learning which is based on interest or pleasure, attention and students' desire to learn.

According to Hidayat (Pratiwi, 2015: 88), there are several functions of interest in learning, including the following.

1. A strong source of motivation to learn. Children who are interested in a learning material will try harder to learn than children who are less interested.
2. Interest affects the intensity of the child's appreciation. When children begin to think about their desires in the future, they will be even more interested in activities in the classroom or outside the classroom that support the achievement of these aspirations.
3. Add excitement to every learning process. Children who are interested in learning, the experience they get will be much more enjoyable than those who feel bored.

Safari (Ricardo and Meilani, 2017: 190) explains that, "There are several indicators used to measure student interest in the learning process, namely attention, interest, pleasure, and involvement". Likewise, according to Slameto (Nurhasanah and Sobandi, 2016: 130), "Students who have an interest in learning are usually characterized by a feeling of pleasure in learning, participation or involvement, and an attentive attitude". Thus it can be seen that the indicators of student interest in learning include attention, interest, pleasure, and involvement.

Learning Outcomes

Learning outcomes are everything that is achieved through various efforts in the form of changes in behavior so that it is clear that the individual has learned. As the opinion of Sudjana (2014: 3) that, "Student learning outcomes are essentially changes in behavior. Behavior as a result of learning in a broad sense includes the cognitive, affective, and psychomotor fields. Likewise, according to Suprijono (2012: 5) "Learning outcomes are patterns of actions, values, understandings, attitudes, appreciation and skills". Bloom (Suprijono, 2012: 5) explains that learning outcomes include cognitive, affective, and psychomotor abilities.

Cognitive domains are knowledge (knowledge, memory), comprehension (understanding, explaining, summarizing, examples), application (applying), analysis (describing, determining relationships), synthesis (organizing, planning, forming, building new), and evaluation (assessing). The affective domain is receiving (accepting), responding (giving a response), valuing (value), organization (organization), characterization (characterization). The psychomotor domain also includes productive, technical, physical, social, managerial and intellectual skills.

Learning outcomes are the results of the interaction of acts of learning obtained after experiencing the learning process. Where to measure learning outcomes, teachers usually give a test at the end of each lesson. As the opinion of Dimiyati and Mudjiono (2009: 20) that, "Learning results are the results shown from an interaction of acts of learning and are usually indicated by the test scores given by the teacher". This learning outcome certainly aims to measure the extent to which students' abilities have
been obtained after participating in learning. Thus, it can be concluded that learning outcomes are changes in behavior both in the cognitive, affective and psychomotor aspects as an achievement in a person after experiencing various learning processes.

According to Majid (Nurhasanah and Sobandi, 2016: 130), student learning outcomes are influenced by two factors, namely internal factors and student external factors. The internal factors of students include health problems, physical disabilities, psychological factors (intelligence, interest in learning, attention, talent, motivation, maturity and readiness of students), and fatigue factors. While external factors that affect the process and student learning outcomes include family factors, schools (teachers, learning quality, learning media, learning instruments or facilities) and society.

**NHT Type Cooperative Learning**

Cooperative learning is learning that involves the participation of students in a small group to interact with each other. The goal to be achieved is not only academic ability in terms of mastery of the subject matter, but there is also an element of cooperation for mastery of the material. This collaboration is the hallmark of cooperative learning. (Rusman, 2014: 203). There are several types of cooperative learning, one of which is *Numbered Heads Together* (NHT) cooperative learning. According to Suprijono (2012: 92), *Numbered Heads Together* (NHT) cooperative learning is group learning characterized by the use of head numbers. Learning begins with *Numbering* activities. The teacher divides the class into small groups. If the number of students is 24 people and is divided into 6 groups based on the number of concepts studied, then each group consists of 4 people. Each person in the group is given a head number, namely numbers 1 to 4. After that the teacher asks questions and each group brings their heads together (Heads Together) to think of answers. The next step is the teacher calls the students who have the same number from each group. For example, the teacher calls number 2, then each student with number 2 from each group must present his answer.

According to Huda (2011: 138) the steps for implementing *numbered head together* (NHT) cooperative learning are as follows.

a. Students are divided into groups. Each student in the group is given a number.

b. The teacher gives assignments/questions and each group does it.

c. The group discusses to find the answer that is considered the most correct and makes sure all group members know the answer.

d. The teacher calls a number. Students with the number called present the answers to the results of their group discussions.

According to Ibrahim (Adriani, KN, 2018: 32), the *numbered head together* (NHT) type of cooperative learning is developed into six steps as follows.

a. **Step 1** is preparation. In the preparation stage, the teacher prepares lesson plans by making Learning Scenarios (SP), student worksheets (LKS) that are in
accordance with NHT type cooperative learning.

b. Step 2 is group formation. The teacher divides the students into several groups consisting of 3-5 students. The teacher gives a number to each student in the group and a different group name. The group formed is a mix based on social background, race, ethnicity, gender, and learning ability. In addition, in group formation, initial test scores were used as the basis for determining each group.

c. Step 3 is that each group must have a package book or guide book. In group formation, each group must have a package book or guidebook to make it easier for students to complete worksheets or problems given by the teacher.

d. Step 4 is the discussion of the problem. In group work, the teacher distributes worksheets to each student as material to be studied. In group work, each student thinks together to describe and make sure that everyone in the group knows the answers to questions that have been in the worksheet or questions that have been given by the teacher. Questions may vary, from specific to general in nature.

e. Step 5 is to call the member number or give an answer. In this stage, the teacher calls one number and the students from each group with the same number raise their hands and prepare answers to students in class.

f. Step 6 is to draw conclusions. The teacher and students conclude the final answers to all questions related to the material presented.

In fact, the application of learning certainly has advantages and disadvantages of learning, as well as numbered head together (NHT) cooperative learning. According to Fathurrohman (2015: 82) the advantages of numbered head together (NHT) type cooperative learning are, (1) providing opportunities for students to share ideas and consider the most appropriate answers; (2) increase the spirit of student cooperation, and (3) can be used for all subjects and grade levels. While the drawback of this type of learning is that if the teacher cannot condition students well, it will cause noise in the class, so that the class becomes not conducive.

The RADEC model has four main bases of development, namely the goal of national education to form human characters, accessible learning resources, belief in social constructivism that students are capable of completing tasks independently, and efforts to develop

METHOD

The research method used is Classroom Action Research (CAR). This research was carried out in two cycles and each cycle consisted of 4 stages, namely planning, action implementation, action observation and reflection. The research location is at SDN Cilembu, Cilembu Village, Pamulihan District, Sumedang Regency. Cycle I will be held on June 2, 2021 and Cycle II on June 10, 2021. The subjects of this study were students of class IV-A with a total of 20 students. The object of research is interest and student learning outcomes. The data collection techniques used were teacher performance observation sheets, learning interest observations, learning interest
questionnaires, and social studies learning outcomes test sheets. The research model can be seen in the following figure:

![The Spiral Model CAR Cycle](image)

**Picture 1. The Spiral Model CAR Cycle According to Kemmis and Mc Taggart**

The targets for the success of this classroom action research are (1) the category of teacher performance is said to increase if it reaches the "Good" category with a percentage of 80%; (2) the category of learning interest based on observations and classical questionnaires must be classified as "Good" with a percentage of 80%; and (3) classical learning completeness is an indicator of success in this study. The specified KKM is 70. Students are said to be complete if they achieve a score above or equal to 70. A class is said to be complete if it reaches 80% classical learning completeness.

**RESULTS**

The first step that the researcher takes before carrying out a research is to know in advance the initial problems that occur. Researchers made observations at SDN Cilembu and found several problems that occurred in class IV-A regarding student interests and learning outcomes in social studies learning material on economic activities. Initial data on teacher performance reached 44%, initial data on student interest in learning reached 39.5% in the less category. While for the learning outcomes of 20 students who have not reached the KKM as many as 13 people and those who reach the KKM 7 people. With 35% classical completeness that has been completed, including the category of low learning outcomes. The data can be seen in the following table.
Table 1. Initial Conditions

<table>
<thead>
<tr>
<th>No</th>
<th>Data</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teacher Performance</td>
<td>44%</td>
</tr>
<tr>
<td>2</td>
<td>Interest to learn</td>
<td>39.5%</td>
</tr>
<tr>
<td>3</td>
<td>Learning outcomes</td>
<td>35%</td>
</tr>
</tbody>
</table>

After knowing the problems that occurred in class IV-A SDN Cilembu in social studies learning material on economic activities, the researchers carried out the first cycle stages. Activities in this planning included preparing an action plan in the form of lesson plans, worksheets, preparing research instruments in the form of observation sheets of interest in learning, learning interest questionnaire sheets, teacher interview sheets and learning outcomes test sheets. In addition, researchers also prepared facilities and supporting facilities needed in learning, including a set of equipment to make hats with numbered heads, namely colored paper, cardboard, scissors, ruler, staples, and rubber bands. After the planning activities were ready, the researcher continued at the implementation stage of learning using the snake and ladder game media.

The results of the first cycle have shown an increase from the initial conditions ranging from teacher performance, interest and student learning outcomes. After being given action, the teacher's performance reached 73%, students' interest in learning from the results of observations and questionnaires reached 75.5%, and student learning outcomes reached 70% of students who had reached the KKM or as many as 14 students who had completed. The data can be seen in the following table.

Table 2. Results of Cycle I

<table>
<thead>
<tr>
<th>No</th>
<th>Data</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teacher Performance</td>
<td>73%</td>
</tr>
<tr>
<td>2</td>
<td>Interest to learn</td>
<td>75.5%</td>
</tr>
<tr>
<td>3</td>
<td>Learning outcomes</td>
<td>70%</td>
</tr>
</tbody>
</table>

Based on table 2 shows that the results of the implementation of the first cycle have not reached the target of 80% that has been set, so improvements are needed in the next cycle. Based on the results of the reflection of the first cycle, the researcher determined the planning stages in the second cycle, namely the teacher's performance that was improved in the second cycle was by managing the class activities which was more mastered in the initial, core and closing activities. Learning in cycle II is carried out in one meeting by preparing lesson plans, worksheets, preparing research instruments in the form of observation sheets of learning interest, questionnaires of learning interest, teacher interview sheets and learning outcomes test sheets with different evaluation questions from cycle
I but the same cognitive level. The results of the implementation of the second cycle are as follows.

Table 3. Results of Cycle II

<table>
<thead>
<tr>
<th>No</th>
<th>Data</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teacher Performance</td>
<td>91.7%</td>
</tr>
<tr>
<td>2</td>
<td>Interest to learn</td>
<td>87.1%</td>
</tr>
<tr>
<td>3</td>
<td>Learning outcomes</td>
<td>95%</td>
</tr>
</tbody>
</table>

Table 3 shows that the results of the implementation of the second cycle have improved well, after being corrected in the second cycle with the acquisition of the teacher's performance score, the overall percentage increased to 91.7% in the very good category. Likewise, students' interest in learning reached a percentage of 87.1% with a very good category, so they had reached the predetermined target. And the learning outcomes obtained are from 20 students, students who complete or reach the minimum completeness criteria (KKM) are 19 students (95%) while students who have not completed or have not reached the KKM are 1 student (5%). Thus, data from the results of the second cycle of research, both interest data and learning outcomes have already reached the specified target.

**DISCUSSION**

The results of the study using cooperative learning type NHT social studies learning material economic activities gave a good influence on increasing interest in learning and student learning outcomes in grades IV-A SDN Cilembu. This is known from the implementation of research conducted with a series of lessons that have been carried out with several actions, namely two cycles.

The findings in the first cycle, in the initial activity there were still students who paid less attention to the teacher and just kept quiet when the teacher asked questions. Then in the core activity, when the teacher explained the material through picture media, there were still students who chatted and did not pay attention to the teacher's explanation. During the discussion, there were still students who were silent, did not participate and during the presentation process there were still students who looked shy to explain. This is presumably due to the less optimal teacher in managing the class and less motivating students during the learning process. In addition, the teacher pays less attention to the time allocation for each step of the learning process, so it is not in accordance with what has been planned. At the end of the lesson, the teacher is too domineering in terms of concluding the lesson, so students tend to just listen.

In cycle II, the implementation of learning is much better than cycle I. Teachers are able to manage the class better. Giving icebreaker focus pats and mackerel pats have made students more enthusiastic.
and more focused during the learning process. The existence of rules given by the teacher makes students more orderly. Then with an award in the form of a gift given by the teacher, it makes students seem happy. Students seem aware of being able to work well together and complete assignments on time. The increase in the assessment of the implementation of teacher performance in each cycle is shown in the following diagram.

**Picture 2** Teacher Performance Improvement In Initial Conditions, Cycle I, and Cycle II

Through cooperative learning type NHT, students' interest in classical learning has increased in each cycle, it can be seen from the recapitulation of the percentage of student activities from cycle I to cycle II as follows.

**Picture 2** Increased Interest in Learning In Initial Conditions, Cycle I, and Cycle II
Based on the diagram above, it can be seen that the percentage of student interest in learning based on observations and questionnaires increased from the initial data to cycle I and then to cycle II. The average results of observations and questionnaires indicate that the study has reached 80% of the specified target. This proves that NHT cooperative learning can increase students’ interest in learning. In accordance with the NHT type of cooperative learning function proposed by Fathurrohman (2015: 82) that numbered head together (NHT) type cooperative learning can provide opportunities for students to share ideas, consider the most appropriate answers and increase the spirit of student cooperation, so that will increase student interest in learning. Likewise, according to Huda (2011: 130), the hallmark of NHT type cooperative learning is that at the time of presentation of the results of the discussion, the teacher calls the student’s head number in each group randomly. This way, of course, will ensure that all students are really involved in the discussion. Thus, of course, it can make students really understand the material and learning outcomes are maximized. In addition, the steps of NHT type cooperative learning activities will certainly encourage students to increase their interest in learning.

The percentage of learning completeness in the material of economic activities through cooperative learning of the NHT type in class IV-A SDN Cilembu, Pamulihan District, Sumedang Regency can be seen in the following diagram.

![Improved Learning Outcomes](image)

**Picture 4 Improved Learning Outcomes**

In Initial Conditions, Cycle I, and Cycle II Based on the results of the tables and diagrams above, it shows that student learning outcomes have increased from the initial data to the first cycle then to the second cycle. Initial data shows that 35% of students have completed the KKM. Then after being given treatment in the first cycle, 70% of the students had completed the KKM. Then after carrying out repairs in cycle II, learning outcomes reached 95% of students who completed KKM. This means that there is an increase of 35% from the initial data to the first cycle, and an increase of 25% from the first cycle to the second cycle and the results have reached the specified target of 80%. This proves that NHT cooperative learning can improve student learning outcomes. In accordance with Huda’s statement (2011: 130), this learning provides opportunities for students to
share ideas with each other and consider the most appropriate answers. In addition, it also encourages students to increase their spirit of cooperation. The characteristic of numbered heads together (NHT) cooperative learning is that at the time of presentation of the results of the discussion, the teacher calls the number of the heads of students in each group randomly. This way, of course, will ensure that all students are really involved in the discussion. Thus, of course, it can make students really understand the material and learning outcomes are maximized. Based on the data above, it can be concluded that research through cooperative learning of the NHT type on the material of economic activities can increase the interest and learning outcomes of grade IV-A students at SDN Cilembu.

CONCLUSION

Based on the results of research on efforts to increase student interest and learning outcomes in economic activity materials through cooperative learning of the Numbered Heads Together (NHT) type in class IV-A students of SD Negeri Cilembu, Pamulihan District, Sumedang Regency for the 2020/2021 academic year, it can be concluded as follows.

Cooperative learning of the Numbered Heads Together (NHT) type can increase the interest in learning social studies for grade IV-A students in the material for economic activities for the 2020/2021 school year. This is evident from the increase in the percentage of observations and questionnaires showed a percentage of 39.5% with a less category. After being given action, students' interest in learning in the first cycle became a percentage of 75.5%. Then there was an increase again of 11.6% in the second cycle, so that the percentage classically reached 87.1% in the very good category.

Numbered Heads Together (NHT) cooperative learning can improve social studies learning outcomes for grade IV-A students in the material for economic activities for the 2020/2021 academic year. This is evident from the increase in the percentage of student learning outcomes in each cycle and has reached the specified target of 80%. Initial data on student learning outcomes from a total of 20 students only 7 students who achieved the KKM score or only showed a percentage of 35% who had completed. After being given treatment, there was an increase in the cycle to 14 students who achieved the KKM score or reached a percentage of 70% which was declared complete. Meanwhile, in the second cycle there was an increase again to 19 students who had achieved the KKM score or reached a percentage of 95% which was declared complete.

REFERENCES


