

COOPERATIVE LEARNING MODEL TO IMPROVE ACCOUNTING LEARNING OUTCOMES POST PANDEMIC AT HIGHER EDUCATION

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Abstrack

In achieving success in the learning process in accordance with the curriculum, in learning activities not only the teacher plays a full role but vice versa. However, the teacher still plays an important role in the teaching and learning process, especially in the process of delivering material, therefore various learning methods start from lectures, demonstrations, and cooperatives. Based on cognitive learning theory, one of the learning models that can increase student interest, activity, and learning outcomes is the cooperative learning model. Of the various methods the author chose the Numbered Heads Together cooperative learning model so that it is expected to improve student learning outcomes, bearing in mind that this learning model has never been applied before. This research is a type of classroom action research with a Quantitative Descriptive method conducted in two cycles. The results showed that with the Numbered Heads Together cooperative learning model, student learning outcomes could be achieved in each cycle. Student responses to the application of the Numbered Heads Together (NHT) cooperative learning model in accounting learning were very positive. This can be seen from the students who are happy in following this whole lesson.

Keywords: Cooperative Learning Model Numbered Heads Together Type, student learning outcomes.

1. Introduction

In achieving success in the learning process that is in accordance with the curriculum, the performance of educators and children is required to manage their creativity by connecting real situations to be brought in class, but students often feel bored with the same learning model every day. In learning activities not only do educators play a full role but on the contrary, educators still play an important role in the teaching and learning process because without educators learning will not be successful. The role of educators in the learning process is educators as facilitators, educators as managers, and educators as evaluators in learning (Sulistiawan, 2005). This effective role encourages educators to pay attention to what methods are used in conveying subject matter. Various learning methods

ranging from lectures, demonstrations, and cooperative learning, one of which can be used by educators in delivering material, but in this study choosing cooperative learning because cooperative learning involves more students in the learning process.

(Ibrahim M, 2005) cooperative learning model is a learning model that requires students to work together in small groups to complete joint tasks and depend on each other to achieve mutual rewards. The teaching and learning activities in the Accounting subject of all students are still below the standard value of teaching and learning completeness. Where the value of the daily test results obtained by students is known to be 75% of students who have not completed their studies. The incomplete learning outcomes of these students are mostly because students are often bored and happy with activities carried out outside the classroom, therefore the research to be carried out is expected to reduce boredom. Based on this example it seems clear that the state of boredom in existing students shows a decrease in learning motivation in students so that it causes a lack of maximum absorption of the subject matter being taught and ultimately causes a decrease in learning achievement in students (Purwaningsih, 2001). From the problems above, it can be seen that the selection of learning methods that are not appropriate with the existing conditions can cause various problems and can also hinder the success of a learning process for both students and educators, so that a learning model is needed that can increase interest, activity, and student learning outcomes. students and the most important thing is that the result is that students can achieve the set standards of completeness. Based on cognitive learning theory, one learning model that can increase student interest, activity, and learning outcomes is the cooperative learning model.

One of the goals of cooperative learning is to improve student performance in academic tasks and improve student assessment of academic learning related to learning outcomes. In the cooperative learning model there are several variations including: Student Teams Achievement Division (STAD), JIGSAW, Group Investigation, Think Pair Share (TPS) and Numbered Heads Together (NHT). In this study, one of the approaches that will be developed by researchers is the Numbered Heads Together cooperative learning model or numbering thinking together, which is cooperative learning designed to influence student interaction patterns and as an alternative to traditional class structures and involve more students in studying the material. covered in a lesson and check their understanding of the content of the lesson (Nur, 2005). In the structural approach, the Numbered Heads Together type requires students to always be ready to receive subject matter, because the educator will call randomly after students unite opinions with their groups on the answers to the questions given by the educator then the students whose number is called will try to provide answers. whole class.

The cooperative learning model of the Numbered Heads Together (NHT) type will be applied to the subject of applying the trading company accounting cycle, with sub-topics namely cost of goods sold, profit and loss statements, reports on changes in capital, and balance sheets. The competency standard is to apply the stages of the trading company accounting cycle with basic competencies in preparing financial reports (Dewi, 2004). With the application of this learning model, it is hoped that they can more actively express their opinions and solve a problem, and can better understand the material presented by educators. Based on the description of the background above, in this study researchers can raise the following issues: How is the effectiveness of student learning outcomes after

applying the Numbered Heads Together cooperative learning model in accounting subjects?

2.Literatur review

2.1.Definition of Teaching and Learning Process

Understanding learning in the everyday sense is as an addition to knowledge, but there are those who interpret that learning is the same as memorizing because people learn to memorize. The definition of learning is still very narrow, because learning is not only reading and memorizing but also reasoning. Learning is defined as "observing, reading, imitating, trying something, listening and following a certain direction" (Suprijono, 2009). Thus learning is a change in disposition or ability achieved by someone through activity. The change in disposition is not obtained directly from a person's natural growth process. In learning what is important is adjustment, namely obtaining the right response to solve the problem at hand. Important learning is not repeating things that must be learned, but understanding or gaining insight (Slameto, 2003). From the description of the opinion above, it can be concluded that learning is a business process carried out by someone to obtain a change in knowledge, skills, habits and behavior. So that from learning, a person is expected to be able to experience changes that are better than what is learned. (Djamarah, 2006), the process of teaching and learning is a change in behavior, both concerning knowledge, skills and attitudes, even covering all aspects of the organism or personality. Teaching and learning activities such as organizing learning experiences, processing teaching and learning activities, assessing processes and learning outcomes, all of which are included in the scope of the educator's responsibilities (Mulyasa, 2007). From the above understanding, it can be concluded that the core of the teaching and learning process includes activities carried out by educators starting from planning, implementing, to evaluating activities (Mulyasa, 2007). The role of the educator in the teaching and learning process includes: As a facilitator, Providing the conditions students need to learn, As a mentor Providing guidance to students so they are able to learn smoothly and succeed effectively. As a motivator Give encouragement so that students are willing and active in learning in accounting (Firdaus, 2000). As an organizer Organizing the teaching and learning process in the classroom. As resource person Can provide information needed by students.

2.2.Basic Principles and Characteristics of Cooperative Learning

The basic principles of cooperative learning: Each member of the group (students) is responsible for everything that is done in the group. Each group member (student) must know that all group members have the same goal. Each group member (student) must share the same duties and responsibilities among the group members. Each member of the group (students) will be subject to evaluation. Each group member (student) shares leadership and requires skills to learn together during the learning process. Each group member (student) will be asked to individually account for the material handled in the cooperative group. (Isjoni, 2007) states the characteristics of cooperative learning compared to group work put forward by Bennett are: Positive Interdependence, a reciprocal relationship based on the existence of the same interests or feelings among group members where one person's success is another's success or vice versa. To create this atmosphere, educators need to design structure and group assignments that

allow each student to learn, evaluate himself and his group mates in mastery and ability to understand the subject matter (Suharsimi Arikunto, 2009). Conditions like this allow each student to be positively dependent on other group members in learning and completing the tasks for which they are responsible which encourages each group member to work together. Interaction Face to Face, interaction that occurs directly between students without any intermediaries. There is no prominence of individual strengths, there are only verbal patterns of interaction and changes among students which are enhanced by the existence of positive reciprocal relationships so that they can influence the results of education and teaching (Sudjana, 2005). There is personal responsibility regarding the subject matter in group members. So that students are motivated to help their friends, because the goal in cooperative learning is to make each member of the group become stronger personally (Suharsimi Arikunto, 2006). The most important goal that is expected to be achieved in cooperative learning is that students learn the skills of working together and relating. These are skills that are important and very much needed in society. The students know the level of success and effectiveness of the collaboration that has been carried out.

(Ibrahim M, 2005)states three important instructional goals that can be achieved with cooperative learning, namely in cooperative learning even though it includes a variety of social goals, it also improves student achievement or other important academic tasks. Some experts argue that this model excels in helping students understand difficult concepts. The developers of this model have shown that the cooperative reward structure model has been able to increase student scores in academic learning and changes in norms related to cooperative learning outcomes can benefit both lower and upper group students who work together to complete academic assignments . Acceptance of individual differences, another goal of the cooperative learning model is broad acceptance of people who are different based on race, culture, social class, abilities, and disabilities. Cooperative learning provides opportunities for students from various backgrounds and conditions to work interdependently on academic tasks and through cooperative reward structures will learn to respect one another. Development of social skills, the third important goal of cooperative learning is to teach students the skills of working together and collaborating. It is important for students to have social skills because currently many young people still lack social skills.

In the above objectives, it is hoped that by respecting the opinions of others and correcting mistakes together, looking for the right and good answers, by looking for sources of information from anywhere such as textbooks, books in the library and other supporting books, to be used as an assistant in finding good and correct answers and acquiring knowledge, the subject matter being taught is getting wider and better. (Ibrahim M, 2005)states that assessment and evaluation procedures are described mostly based on the assumption that educators are using a competitive or individualistic reward system, because the cooperative learning model works under a cooperative reward structure and because many lessons in cooperative learning aim to achieve learning. complex cognitive and social, requires a different approach to assessment and evaluation. In cooperative learning requires testing procedures that are different from the structure of a model built on cooperative learning. In giving values, educators must be consistent with the concept of cooperative reward structures. It is important for educators to value the results of both group outcomes and the cooperative behavior that produces the final results (Suharsimi Arikunto, 2003). The last important assessment and

evaluation that is unique to cooperative learning is the recognition of student learning efforts and results, for example educators announce the results of team and individual learning in class after learning.

2.3. Definition of Numbered Heads Together

There are many ways we can do to improve the quality of learning. One of them is using the right model in the teaching and learning process. Of course the model we use tends to lead to the Creative Learning Model. There are several Creative Learning Models. One of them is Number Head Together (NHT). This learning model is quite often used by educators in PTK (Classroom Action Research). (Ibrahim M, 2005), Number Head Together (NHT) is an approach that involves more students in the material covered in a lesson and checks their understanding of the content of the lesson. Instead of asking questions to the whole class, educators use a four-step structure namely numbering, asking questions, thinking together and answering. From the description of the opinion above, it can be concluded that Numbered Heads Together (NHT) is a learning method in which each student is given a number, then a group is formed, then the teacher randomly calls the number of the students. This learning model usually begins by dividing the class into several groups. Each student in the group is deliberately given a number to facilitate group work performance, changing group positions, compiling material, presenting, and getting responses from other groups. Numbered Heads Together (NHT) is basically a group discussion variant where the characteristic is that the teacher only appoints a student who represents the group, without telling in advance who will represent the group. This method guarantees the total involvement of all students. This method is also an excellent effort to increase individual responsibility in group discussions. Numbered Heads Together (NHT) has several advantages, namely: every student is ready for everything, can carry out discussions in earnest, clever students can teach students who are less intelligent, the values of cooperation between students are more tested, creativity students are motivated and students' insights develop, because they have to seek information from various sources. Numbered Heads Together (NHT) also has several weaknesses, namely: the possibility of the number being called, called again by the educator; not all group members are called by the educator. Meanwhile, technical constraints, such as seating problems, are sometimes difficult or do not support group activities, especially for classes with more than 35 students.

3. Research methods

3.1. Types of research

This type of research in this thesis uses Action Research with quantitative descriptive methods. Classroom Action Research is action research conducted with the aim of improving the quality of learning practices in the classroom. (Ibrahim M, 2005)

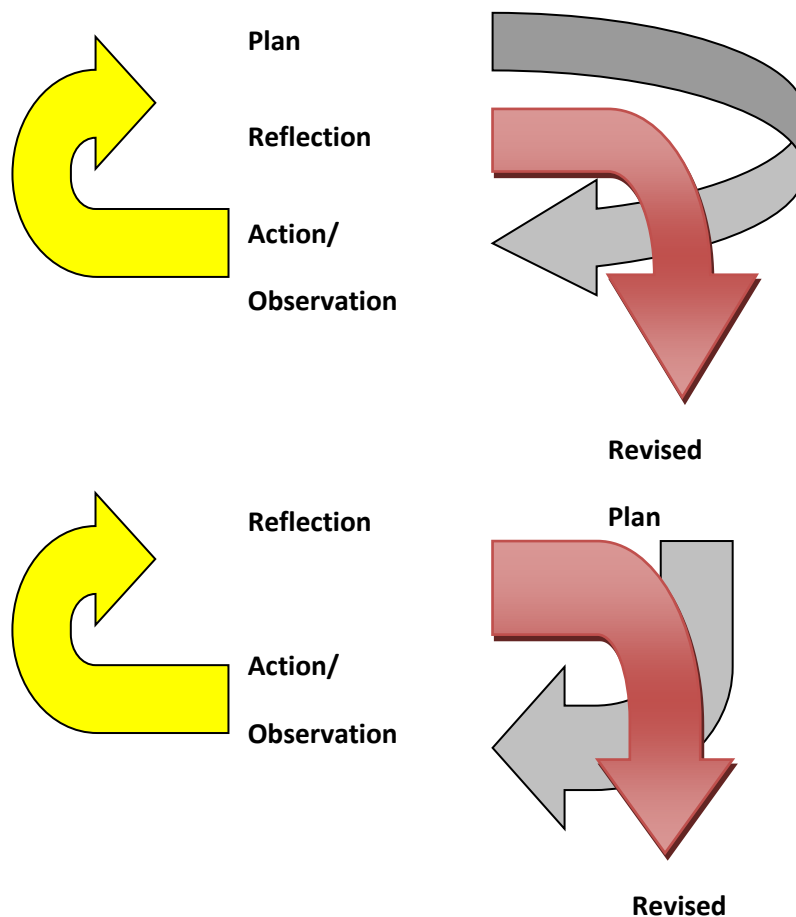
3.2. Research Subjects and Objects

Field of Study Educators, are research subjects as observers in research. In addition, the research subjects were students of the accounting education study program. Class determination was taken using purposive sampling technique. The object of this research is the application of the Numbered Heads Together cooperative learning model.

3.3. Research design

The research design used is in accordance with the Classroom Action Research design. In this study, those involved included educators, students, and observers. In this study the researcher also acts as a teacher in the class that will be examined in learning Accounting. Action Research is carried out because it is able to offer new approaches and procedures that are more promising to have a direct impact in the form of improving and increasing the professionalism of educators in managing the teaching and learning process in the classroom. The implementation of data collection in this study was carried out in three cycles and each cycle in this study followed the flow of action research design.

Figure 1.
Class action research design



This was carried out in several stages: Cycle 1 planning, at this stage before conducting research, researchers compiled problem formulations, objectives, and made plans. Cycle 2 of action and observation (Action and Observation), at this stage what action will the researcher take as an effort to make changes and observe the results or impact of the actions taken by the researcher on students. Stage 3 reflection (Reflection), at this stage the researcher examines, sees and

considers the results or impacts of the actions to be taken. Stage 4 revision (Revised), at this stage based on the results of reflection, the researcher makes a revised design to be implemented in the next cycle (Tim Penyusun, 2006). Likewise the design of the application of the Numbered Heads Together cooperative learning model according to (Ibrahim M, 2000) which is carried out in three cycles is as follows:

3.4. Research Instruments

In this study the instruments used included learning instruments in the form of Learning Implementation Plans, Student Books, and evaluation questions/test sheets. The research instrument was in the form of: observation sheets consisting of cooperative learning management sheets of the Numbered Heads Together type. Questionnaire sheet to measure students' responses Researchers used a questionnaire with a Guttman scale which was made in the form of multiple choices and could also be made in the form of a checklist. Respondents' answers can be in the form of the highest score (1) and the lowest score (0). Research uses the Guttman scale if you want to get a clear or firm and consistent answer to a problem that is asked (Riduan, 2009). Data collection techniques used in this study were observation, documents, questionnaires, and interviews.

3.5. Data analysis technique

After conducting a series of data, the next step is to perform data analysis. Data analysis is intended to find out the results of a series of research activities that have been carried out. The method used in this study is the Quantitative Descriptive method. Descriptive research is used to describe the activities of educators, students and responses or opinions of students in learning. While quantitative data is data in the form of numbers obtained from students' pre-test and post-test scores (Sugiyono, 2006). To analyze the results of the assessment given by observers on the ability of educators to manage cooperative learning and student activities during teaching and learning activities, an assessment with a Likert scale is used.

4. Results

4.1. Application of Numbered Heads Together Cooperative Learning Model Planning

Prior to carrying out the teaching and learning process several preparatory things were carried out, including preparing the material to be taught in the first cycle, namely: Trading Companies and Cost of Goods Sold, as well as compiling research instruments in the form of a syllabus, Learning Implementation Plan, pre-test and post-test question sheets, activity observation sheets educators in the management of cooperative learning models, and student activity sheets.

Actions and Observations

The learning activity begins with conveying the subject title of "Trading Companies and Cost of Goods Sold", with the time allotted. Educators explain the learning objectives to be achieved at the end of learning and motivate students by linking initial knowledge such as asking questions about knowledge about trading companies in that cycle. In the main activities, the educator starts learning by explaining material about Trading Companies and Cost of Goods Sold, students pay attention to the explanation given by the educator, then the educator gives

students the opportunity to ask questions. Furthermore, the teacher divides students into seven groups, each consisting of 5-6 people. This division is based on the value of the previous subject (daily test score) and the number of absences that have been randomized. Then the educator gives a number 1-6 to each group member. After the group is formed and conditioned, the teacher gives a different problem and asks students to discuss the questions in their respective groups. In the first cycle, one group answered the definition of cost of good sale, namely group one, two groups calculated net purchases, namely groups two and three, two groups calculated merchandise available for sale, namely groups four and five and calculated the cost of good sale, namely groups six and seven. When students are discussing in groups the teacher goes around to observe, guide and help students who are experiencing difficulties and the educator continues to remind students to carry out the cooperative skills that have been explained at the beginning of the cycle. After the allotted time to discuss and solve the problems given by the educator has run out, the educator calls a number randomly and the students whose numbers are called present the results of their group discussions and are responded to by other groups in the enthusiastic discussion session of the students not yet visible so that during discussions only certain groups responding to the answers provided. Educators give points to groups that answer and provide responses to the answers that have been presented. In the closing activity, the teacher together with the students summarizes the material that has been studied, then the teacher gives post-test questions to the students.

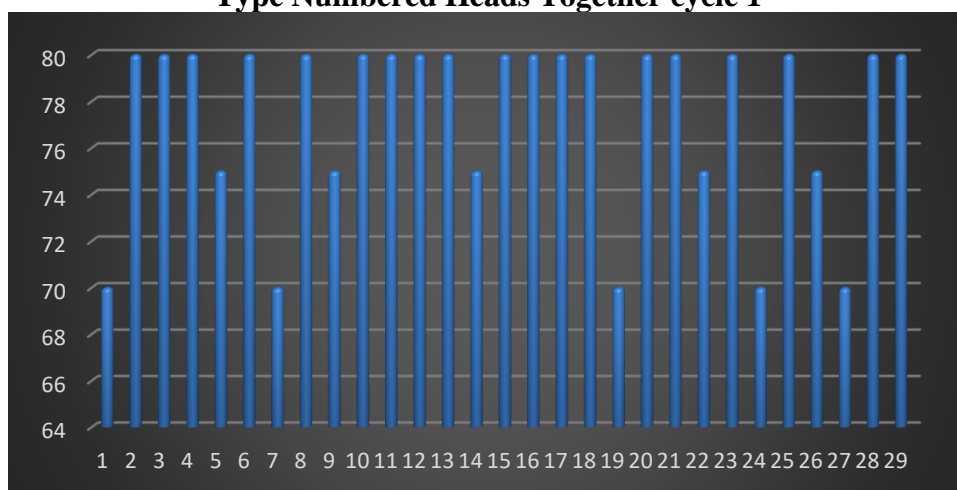
Reflection

In accordance with the description of the actions and observations that in the introduction the teacher conveys and explains the material being taught and conveys the objectives clearly and in detail. Educators provide motivation to students so that students can open up their insights by adding a direct description of the real world provided by educators. In the core activities, the time spent explaining the material is quite long because the material provided is new so that students ask more questions, then the educator divides students into several groups, a lot of time is consumed because educators must organize students to carry out discussions calmly, educators must have a lot of giving instructions to students because students are still not used to cooperative learning. Educators are quite skilled in guiding students in their groups and guiding students in presenting the results of random discussions but students are still less enthusiastic in responding to other groups' answers. Educators are very open to students when students find it difficult to understand questions that must be solved or instructions that are not understood by students. In the learning process, both when explaining and discussing, the educator monitors students in each group and makes a final assessment.

At the end of the lesson the educator concludes and relates the material that has been taught to the problems that have been discussed. This encourages students to ask questions so that feedback occurs between the educator and students. Then the teacher gives a test sheet that is done individually. During learning activities irrelevant behavior appears during group discussions. Based on the description above, it can be concluded about the deficiencies that must be corrected from cycle I to the next cycle, including: a. The lack of explanations delivered by educators, so students still often ask questions about the learning. b. The role of educators is still dominant in organizing students into groups, presenting material,

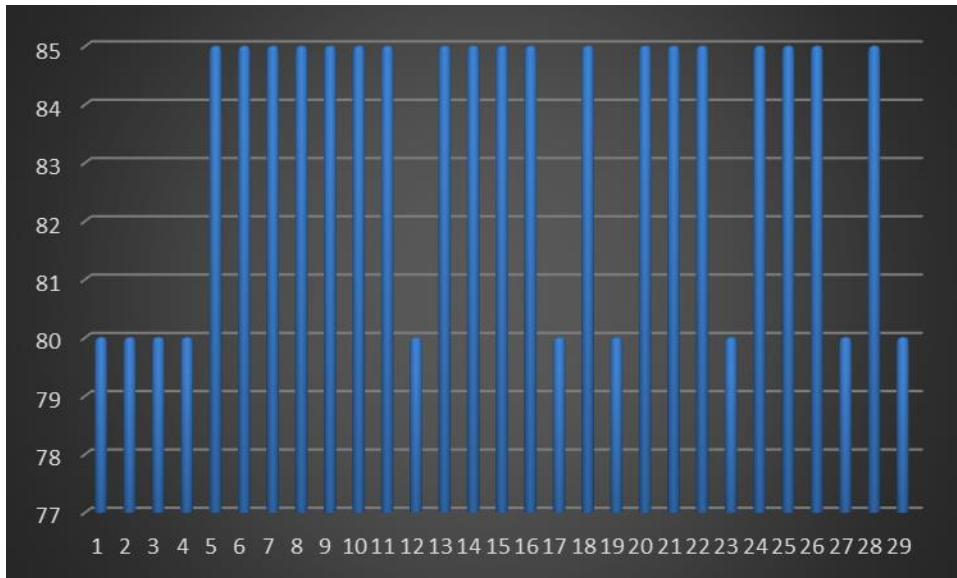
and guiding students so that learning activities are still centered on educators. c. Students are still confused with the learning that is being carried out. d. In summarizing the teacher's material is still lacking so that at the end of learning students often ask questions about the material. e. In the process of discussion the ability of students to ask questions is still lacking. f. In summarizing the material, students are still unable to catch the explanation from the educator. f. The learning completeness of students classically still needs to be improved, because it is still below the completeness criteria set by the school. In summary, the analysis of the results of observations of educator activities can be seen from the diagram below:

Graph 1.
The Value of the Cooperative Learning Model
Type Numbered Heads Together cycle 1



Based on table 1, the activities of students in cooperative learning type Numbered Heads Together in the first cycle as a whole got an average score of 77 with pretty good qualifications. Student activities in working on/discussing teacher questions in question sheets, expressing opinions, asking questions between students or educators, summarizing the subject matter, and moving quickly to where their respective groups get quite good grades.

Graph 2.
The Value of the Cooperative Learning Model
Type Numbered Heads Together cycle 2



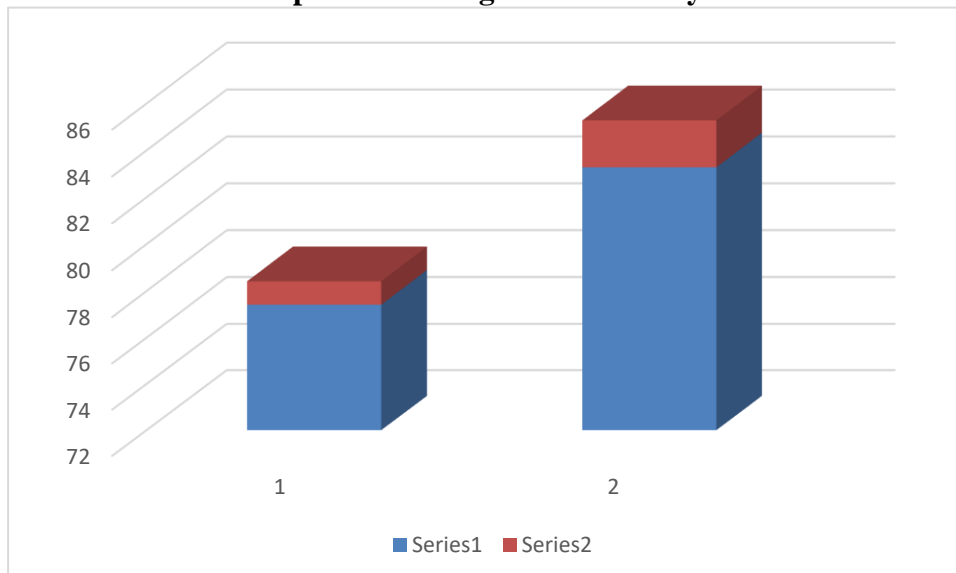
Student activities during cooperative learning type Numbered Heads Together in the second cycle as a whole got an average score of 83 with good qualifications. This number increased when compared to the first cycle. Overall student activity has experienced a good increase. Student activities related to cooperative skills, namely working on/discussing teacher questions in question sheets, asking questions between students or educators, student activities moving quickly to where the group is, and expressing opinions is very good.

5. Discussion

5.1. Application of Numbered Heads Together Cooperative Learning Model

Based on graph 3, the management activities of educators have increased for two cycles, the management of the Numbered Heads Together cooperative learning model with fairly good qualifications has become good. On average all aspects get good qualifications, except for the aspects of guiding students' cooperative skills, announcing awards, giving final tests to students, time management and student-centered class atmosphere getting pretty good.

Graph 3. Learning outcomes of cycles 1 and 2



Based on the results of these observations it can be concluded that the overall management of educator learning is good, but there are still some aspects that are not good, and need to be improved. In this first cycle, educators are still adjusting to the Numbered Heads Together type of cooperative learning. In addition, students are not familiar with Numbered Heads Together type cooperative learning, so it is difficult for educators to train students to use cooperative skills. Likewise in the management of the Numbered Heads Together cooperative learning model in the second cycle as a whole got good qualifications, this shows that the ability of educators in managing learning has increased when compared to the first cycle. In this second cycle, the aspects that have been successfully improved are aspects of the class atmosphere that are student-centered, student enthusiasm, time management, giving final tests to students, and guiding students' cooperative skills. Based on the results of these observations it can be concluded that the ability of educators in managing learning in the second cycle has increased when compared to the first cycle. While the assessment of the activities of students listening/paying attention to the explanations of educators or friends and the activities of students in answering questions is good. This shows that the involvement of students in teaching and learning activities is good and students are starting to adjust to cooperative learning. Even though the reading and writing activities that are relevant to teaching and learning activities, as well as summarizing the subject matter still get the same grades as in the previous cycle, the qualifications obtained are good with each one getting a good grade. This shows that learning in groups has been going very well.

Based on table 3 of the individual and classical mastery results above, it can be seen that there is an increase in mastery in each cycle so that in general it can be said that using the Numbered Heads Together cooperative learning model can improve student learning outcomes. Cooperative group development scores indicate the predicates of each group in each cycle. In general, the development of the group when viewed from the first cycle to the second cycle has increased for scores that affect the predicate obtained. All groups in the last cycle received a good predicate, this predicate is the highest predicate in giving awards for the development of study groups.

6. Conclusion

Based on the results of research using the Action Research design for three cycles in teaching and learning activities with the Numbered Heads Together cooperative learning model in accounting subjects, it is concluded that the application of the Numbered Heads Together type cooperative learning model in accounting subjects carried out by researchers always experiences an increase grades with Good qualifications. For student activities also experienced an average increase in each cycle with a Good qualification. With the implementation of Numbered Heads Together cooperative learning, learning outcomes increase, which can be seen from the achieved classical mastery. The responses or opinions of students towards cooperative learning activities of the Numbered Heads Together type as a whole are positive and this is something new for students. From the results of this study, it is suggested for researchers who will develop a learning model like this in the future to pay attention to the motivation of educators. The cooperative learning model of the Numbered Heads Together type requires high motivation

for educators so that if it is carried out, the preparation of educators must be truly mature and the classroom atmosphere becomes active for both educators and students. In order for the implementation of learning to take place properly, the emphasis on information must be clear so that irrelevant behavior in students does not appear. Educators need to pay attention to the selection of subject matter to be used in implementing the Numbered Heads Together cooperative learning model, because not all subject matter is suitable for applying the Numbered Heads Together cooperative learning model.

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