

Improving Activities and Learning Outcomes of Financial Accounting through the Application of Model Numbered Heads Together

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Abstract. Numbered Heads Together (NHT) is one of the new learning methods that is effectively applied in schools, where this model can train and motivate students in following the teaching and learning process in the classroom. The design of this study is class action research (PTK). The purpose of this study is to find out an overview of the application of the Numbered Heads Together (NHT) model so that it can improve the activities and learning outcomes of Financial Accounting class XI AKL 1 SMK Negeri 2 Palu for the 2021/2022 Academic Year. The research design follows the Kemmis & Mc Taggart model. This study uses 2 cycles and each cycle consists of 4 stages, namely: Planning, Implementation, Observation, and Reflection. Of the 30 students in cycle I, the criteria for Active participated in learning as many as 18 people (60%), Moderately Active 8 people (26.67%), Inactive as many as 4 people (13.33%). Based on the test results and observation results that have been carried out, this PTK only reaches cycle II because the criteria for individual absorption of 70 and classical completion of at least 85% have been achieved, namely 93.33%. The average teacher's teaching and learning activities have been "Good" and the average student has been "Active" following the learning.

Keywords: NHT, activity, cycle, learning outcomes

1. Introduction

Financial Accounting is a subject presented in classes XI and XII. In class XI is a new subject for students. Even though they are now in the even semester where they are familiar with the subject of Financial Accounting from the odd semester, there are still some attitudes displayed by students who are essentially students who are not very active in participating in learning. If the theory / knowledge of students has difficulty in observing the subject matter which results in low learning outcomes. This is where teachers need to make strategies or choose methods that can stimulate interest in learning so that students are enthusiastic about participating in learning so that they are able to raise their grades / learning outcomes. (Akib, Amran, and Darwis 2021; Arhas, Mahardika, and Zainuddin 2022; Sirait, Arhas, and Suprianto 2019; Suprianto et al. 2020)(Darwis et al. 2022; Saleh et al. 2022)

During this time learning focuses on the lecture method, question and answer method, discussion method. The Numbered Heads Together (NHT) model can be used as a learning alternative to increase student learning activities. If it is noticed, that the characteristics and characteristics of the NHT learning model refer more to efforts to increase and encourage student activity to interact in the classroom during teaching and learning activities. (Afriyeni 2020; Haydon et al. 2019; Yunitasari et al. 2020)(Pardede and Herman 2020; Rahma and Fatimah 2019) NHT is one of the new teaching learning methods that is effectively applied in schools, where this model can train and motivate students in following the teaching and learning process in the classroom.

Numbered Head Together is a cooperative learning model that uses numbers placed on top of the head with the aim of making it easier for teachers to explore student activities in finding, processing, and reporting information from various sources that are finally presented in front of the class. This strategy was first introduced by Spencer Kagan in 1992 .

Numbered head together is a type of cooperative learning designed to influence student interaction patterns and as an alternative to traditional classroom structures to involve more students in studying the material covered in a lesson and checking their understanding of the lesson content.

Based on the above understanding, the NHT (numbered head together) learning model is cooperative learning that is carried out by involving students to interact and think together, so that each student can be active in mastering the material by using the number on each student's head as an identity that makes it easier for teachers to explore student activities in finding, processing, and reporting information from various sources that can finally be presented in front of the class.

The use of numbers on the head that are used as an attempt to arouse the motivation of students individually in expressing answers or responses orally. (Istiqlal and Kustianingsih 2020; Risnaldi, Usman, and Achmad 2017; Sri Puji Retno, Khoiri, and Ihda Norra 2021) The specialty of NHT is that it makes the evaluation of students more enjoyable and does not make students tense in the face of the test or evaluation because students are invited to play while learning. In addition, the NHT learning model makes students happy in learning, can develop student leadership attitudes, develop students' self-confidence. Develop a sense of mutual belonging. This privilege made the author interested in implementing it in schools.

2. Method

The location of this class action research is located at SMK Negeri 2 Palu, which is located at Jalan Setia Budi No. 58 Palu, Palu City, Central Sulawesi. The implementation time is in the even semester of the 2021/2022 academic year. The subjects of the penelitian were class XI AKL 1 students totaling 30 people, consisting of 7 males and 23 females. The design of this study is classroom action research (PTK). The design of the study follows the model of Kemmis & Mc Taggart (Bandrang 2022; Etta 2022). This study uses 2 cycles and each cycle consists of 4 stages, namely: Planning, Implementation, Observation, and Reflection. There are 2 types of data in this study, namely: Qualitative Data and Quantitative Data. Qualitative Data is collected by using the Observation sheet, which is to make a series of observations directly on researchers and research subjects during the implementation of learning. Quantitative data is collected by giving a Test at the end of each cycle. Data analysis in this study was carried out during and after data collection. The stages of data analysis activities are:

1. Reducing data

Based on the results of the student's employment test on the given test, as well as the information the observer may not be able to provide clear information. To obtain clear information from the data, data reduction is carried out (simplifying the data).

2. Presenting data, and data verification / inference

Presenting data is done by organizing the data of the reduction results. The data that has been presented is then analyzed in order to make the next action design.

3. Inference/Verification

Inference is the process of the appearance of the quintessence, of the organized presentation in the form of a short and clear statement of sentences or information.

The data obtained are analyzed by the technique of individual absorption percentage and classical completeness obtained by students.

Indicators of the success of this class action research if the learning outcomes of the Financial Accounting subject, especially the basic competence of "Analyzing the formation of petty cash" and the basic competence of "Analyzing the management of company cash funds in banks" in class XI AKL 1 SMK Negeri 2 Palu Academic Year 2021/2022 reach an individual absorption capacity of at least 70% and a classical

absorption capacity of 85%. The intended success in this PTK is the success of assessment in the cognitive realm.

Observation sheets are used to determine teacher and student assessments of the implementation of teaching and learning activities using the Numbered Heads Together model. Indicators of successful observation are successful if the average teacher's teaching and learning activities are "Good" and the average student is "Active."

3. Results and Discussion

As stated in the previous section, each cycle of this study consists of several stages, namely: Initial Reflection, Planning, Implementation, Observation, and Reflection. The results obtained at each stage in each cycle are described as follows

3.1 Cycle I

As stated in the previous section, each cycle of this study consists of several stages, namely: Initial Reflection, Planning, Implementation, Observation, and Reflection. The results obtained at each stage in each cycle are described as follows:

1. Planning

A number of activities that have been carried out at this stage include making: Lesson plans, learning scenarios, number cards, final test questions of cycle I, and observation sheets for teachers and students. In addition, a number of equipment materials that will be used are prepared including: Package books, LKS, striped HVS kits for students, and infocus and markers for teaching and learning activities.

2. Implementation

The implementation of actions in cycle 1 is carried out 1 time face-to-face in learning activities outside the end of the cycle test activities. The number of class hours is 6 class hours (6 x 45 minutes), while the end-of-cycle test with a time of 45 minutes.

Face-to-face is carried out on Tuesday, January 11, 2022, at 3 to 8 hours and the material taught is:

- a. Definition of Petty Cash.
- b. Petty Cash Functions.
- c. Necessary equipment.

In this first cycle, teachers / researchers present learning materials according to planning, namely using the *Numbered Heads Together* model.

One week after the first cycle of learning, on Tuesday, January 18, 2022, the final test of cycle I was carried out. The questions given are multiple-choice questions. The results obtained can be seen in table 4. 1

Table 1: Recap of Test Results End of Cycle I

No.	Acquisition Aspects	Result
1	Number of students	30 people
2	Number of completed students	23 people
3	Classical completeness	80.00%
4	Top rated	100 (2 people)
5	Lowest value	50 (3 people)

After the final test assessment of cycle I, out of 30 students, the result was 23 students (80%) who completed the highest score of 100 as many as 2 people, the lowest score was 50 achieved by 3 students.

3. Observation

The focus of observation is the observation of teacher activities and student activities during the implementation of learning, as well as the analysis of test results.

a. Teacher Activities

Observation of teacher activities aims to see the suitability of the implementation of learning with the lesson plan. Observations made during the implementation of learning on Tuesday, January 11, 2022, are generally of good value, there are only those that are of good value, namely in terms of time management and student enthusiasm. More complete observations can be seen in the appendix.

b. Student Activities

Observation of student activities was carried out during the implementation of learning on Tuesday, January 11, 2022. The observation results can be seen in table 4.2 below.

Table 2: Recapitulation of Observation Results of Student Learning Activities
Cycle I

No	Criterion	Number of Students	Percentage
1	Active	18	60.00
2	Moderately Active	8	26,67
3	Less Active	4	13,33
4	Inactive	0	0.00

Of the 30 students in cycle I, the criteria for Active participated in learning as many as 18 people (60%), Moderately Active 8 people (26.67%), Inactive as many as 4 people (13.33%).

4. Reflection

Based on the results of Cycle I, both test results and observation results have not reached the completion criteria, where the final test results of cycle I classical completeness are only 80% and the achievement of student activity following new learning 60% and. To that end, researchers proceed to Cycle II.

3.2 Cycle II

In this cycle II, presents the following objectives: Analyzing the management of the company's cash funds in banks, with indicators:

1. Defines cash.
2. Identifying cash characteristics.
3. Identify cash receipts from cash sales.
4. Identify cash receipts from receivables.

As is the case in cycle I, in cycle II several activities are also carried out at each stage.

1. Planning stage

A number of activities that have been carried out at this stage include making: Lesson plans, learning scenarios, number cards, final test questions of cycle I, and observation sheets for teachers and students. In addition, a number of equipment materials that will be used are prepared including: Package books, LKS, striped HVS paper for students, and infocus and markers for teaching and learning activities.

2. Implementation

The implementation of actions in cycle II is carried out 1 time face-to-face in learning activities outside the final test activities of the cycle. The number of class hours is 6 class hours (6 x 45 minutes), while the total end-of-cycle test time is used 45 minutes.

Face-to-face is carried out on Tuesday, January 25, 2022, at the 3rd to 8th hours and the materials taught are:

- a. Understanding Cash.
- b. Cash Characteristics.

In cycle II, teachers / researchers present learning materials according to planning, namely using the *Numbered Heads Together* model.

Because one week later the national holiday/Chinese New Year, the final test of cycle II will be carried out on Tuesday, February 8, 2022. The questions given are multiple-choice questions. The results obtained can be seen in table 4. 3.

Table 3: Recap of Test Results End of Cycle II

No.	Acquisition Aspects	Result
1	Number of students	30 people
2	Number of completed students	28 people
3	Classical completeness	93.33%
4	Top rated	100 (5 people)
5	Lowest value	60 (2 persons)

Of the 30 students, the test results in cycle II were 28 students with a classical completion of 93.33%. The highest score of 100 is 5 people and the lowest score is 60 as many as 2 people.

3. Observation

The focus of observation is the observation of teacher activities and student activities during the implementation of learning, as well as the analysis of test results.

a. Teacher Activities

Observation of teacher activities aims to see the suitability of the implementation of learning with the lesson plan. The observations made during the learning implementation on Tuesday, January 25, 2022, are all good value. More complete observations can be seen in the appendix.

b. Student Activities

Observation of student activities was carried out during the implementation of learning on Tuesday, January 25, 2022. The observation results can be seen in table 4.4 below.

Table 4: Recapitulation of Observation Results of Student Learning Activities
Cycle II

No	Criterion	Number of Students	Percentage
1	Active	27	90
2	Moderately Active	3	10
3	Less Active	0	0.00
4	Inactive	0	0.00

Of the 30 students in cycle II, the number of students who actively participated in learning was 27 people (90%), 3 active enough (10%).

4. Reflection

Based on the test results and observation results that have been carried out, this PTK only reaches cycle II because the criteria for individual absorption of 70 and classical completion of at least 85% have been achieved, namely 93.33%. The average teacher's teaching and learning activities have been "Good" and the average student has been "Active" following the learning.

4. Conclusion

After observing the values / test results of cycle I and cycle II, it turns out that there is a significant difference. The difference in the scores in question is that from the number of students as many as 30 people, students who completed in the first cycle as many as 23 people (80%) increased to 28 people (93.33%) in cycle II. The highest value in cycle I was 100 as many as 2 people and increased in cycle II by 5 people who obtained a value of 100. The lowest value in cycle I is 50 as many as 3 people and in cycle II the lowest value is 60 as many as 2 people. This research only reaches cycle II because the indicators of learning success/completeness are individual absorption of at least 70% and classical absorption of 85% have been achieved. The intended learning outcomes are results/ values in the cognitive/knowledge realm. Likewise with the results of observations on teachers who teach, in this case the researcher, in the process of teaching and learning activities are on average good, student activities are also active on average.

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