



## The Effect of Numbered Head Together Learning Model on Social Skills and Learning Outcomes of IPS Class V Students

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### Abstrak

Penelitian ini bertujuan Untuk mengetahui Model Pembelajaran *Numbered Head Together* terhadap keterampilan sosial dan hasil belajar IPS Siswa Gugus II Kecamatan Ujung Tanah. Jenis penelitian ini yaitu penelitian kuantitatif. Penelitian ini menggunakan jenis penelitian *quasi eksperimen*. Subjek yang digunakan dalam penelitian ini adalah peserta didik kelas V gugus II Kecamatan Ujung Tanah Kota Makassar dengan jumlah peserta didik sebanyak 60 peserta didik. Instrumen yang digunakan dalam penelitian ini berupa instrumen pengumpulan data yaitu tes, observasi dan lembar dokumentasi. Teknik analisis uji deskriptif dan inferensial (*manova*). Berdasarkan hasil analisis uji t maka penerapan model pembelajaran *Numbered Head Together* terhadap keterampilan sosial dan hasil belajar IPS gugus II Kecamatan Ujung Tanah Kota Makassar mengalami peningkatan secara signifikansi. Hasil uji manova Pembelajaran *Numbered Head Together* terhadap keterampilan sosial dan hasil belajar IPS gugus II Kecamatan Ujung Tanah Kota Makassar menunjukkan peningkatan secara signifikan, maka  $H_0$  ditolak dan  $H_a$  diterima. Berdasarkan hal tersebut maka dapat disimpulkan bahwa ada pengaruh yang signifikan dalam penggunaan Model Pembelajaran *Numbered Head Together* terhadap keterampilan sosial dan hasil belajar IPS gugus II Kecamatan Ujung Tanah Kota Makassar.

**Kata Kunci:** Model Pembelajaran *Numbered Head Together*, Keterampilan Sosial, Hasil belajar

### Abstract

This study aims to determine the *Numbered Head Together Learning Model* for social skills and social studies learning outcomes for Cluster II Students in Ujung Tanah District. This type of research is quantitative research. This research uses a quasi-experimental research type. The subjects used in this study were students in class V cluster II, Ujung Tanah District, Makassar City with a total of 60 students. The instruments used in this study were data collection instruments, namely tests, observations and documentation sheets. Descriptive and inferential test analysis techniques (*manova*). Based on the results of the t-test analysis, the application of the *Numbered Head Together learning model* to social skills and social studies learning outcomes in cluster II, Ujung Tanah District, Makassar City has increased significantly. The results of the manova test of *Numbered Head Together Learning* on social skills and social studies learning outcomes in cluster II, Ujung Tanah District, Makassar City show a significant increase, so  $H_0$  is rejected and  $H_a$  is accepted. Based on this, it can be concluded that there is a significant influence in the use of the *Numbered Head Together Learning Model* on social skills and social studies learning outcomes Cluster II, Ujung Tanah District, Makassar City.

**Keywords:** one or more word(s) or phrase(s), that it's important, specific, or representative for the article.

### Introduction

Basically, education is a learning process to get information and knowledge

conveyed by the teacher which involves various activities and actions taken to get better learning outcomes. One of the learning activities is by using various teaching

and learning activities that involve students and teachers. According to (Salmia & Yusri, 2021) states that education is an inseparable part of life and human life. However simple the human community needs education. So in a general sense, life and community will be determined by the educational activities within it. Because education is naturally a necessity of human life.

Teaching and learning activities are essentially educational practices that are not simple, especially with regard to the quality of education. Education and learning are concepts in the social field that are usually related to processes and products. According to (Mulyasa, 2011) states that improving the learning process greatly affects the quality, both the final product and the process it takes so that if one of these factors experiences isolation, the process does not run effectively..

RI Law No. 20 of 2003 concerning the National Education System Chapter 1 Article 1, which reads that education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character , as well as the skills needed by himself, society, nation and state.

Based on the statement above, education is one of the most important aspects in the educational process which will have a positive impact on building quality human resources. Therefore, every human being must strive to improve the quality of education in order to realize a better life.

Education and learning are two things that are interrelated, where learning is part of education. The learning process carried out by the teacher using the learning model applied in class will make students more interested in participating in the learning conducted by the teacher. The application of learning models has a significant role in learning. According to (Komalasari, 2010)

states that the application of the Numbered Head Together cooperative learning model is quite easy. Numbered Head Together is a learning model in which each student is given a number and a group is formed, then the teacher randomly calls out the numbers from the students. This technique provides an opportunity for students to share ideas with each other and consider the most appropriate answer. It also encourages students to increase their cooperative spirit. The ability that is expected to be owned by students is determined by the use of a learning model that is relevant and in accordance with the objectives. This means that learning objectives will be achieved by using the right model, in accordance with the standards of success that are embedded in a goal. Models that can be used in learning activities have various uses depending on the formulation of objectives.

Various kinds of learning models aim to improve the quality of teaching and learning processes and results, one of which is the Numbered Heads Together cooperative learning model. According to (Sudewiputri & Dharma, 2021) states that the Numbered Heads Together learning model is a group discussion learning model that is carried out by giving numbers to all students through quizzes or assignments to be discussed. According to the characteristics of elementary school students, according to (Jumarudin, Abdul Gafur, 2014), they arise motivation and process skills in special subjects, like to form peer groups, are still curious and want to learn, and children perceive grades as a measure of their learning achievement at school, so the Numbered Head Together model considered suitable for improving student learning outcomes in social studies subjects.

Based on observations made in several Class V Cluster II SDs, Ujung Tanah District, Makassar City, namely UPT SPF SDN Patingalloang 1, UPT SPF SDN Tabarringan 5, UPT SPF SD Tabarringan 1, SD Hang Tuah,

UPT SPF SD Inpres Tabaringan 1, and UPT SPF SD Inpres Tabaringan, it can be seen that in the social studies learning process there is still a tendency for students not to have process skills in learning, students do not want to ask questions to the teacher even though they don't actually understand the material presented. But when the teacher asks which part they don't understand, students often just keep quiet.

From the results of observations it was found that the cause was the learning process which was still monotonous, where each learning activity was dominated by the teacher so that students looked passive because of the lack of interaction and communication between students and teachers. Furthermore, student communication and cooperation in learning has not been well established, it appears that in group discussion activities and problem solving, students tend to work alone.

Based on the background above, it is necessary to use the right learning model and students must have social skills in their surroundings. According to National Education System Law Number 20 of 2003 article 39 paragraph 2 explains that educators have the duty to plan and carry out the learning process. The development of children's social skills is not an easy thing and is formed suddenly, so efforts are needed to provide space for children to get used to, practice and improve social skills through learning. The social skills of students by playing are able to improve children's social skills, where the form of cooperative games in this research can improve children's social skills in the form of cooperation, communication and social interaction in children to improve student learning outcomes through one of the appropriate learning models to be applied in learning that is the cooperative learning model of the Numbered heads together

(NHT) type. This learning model is one of the cooperative models that uses a group structure, this structure provides an opportunity to develop individual thinking skills. In addition, the cooperative learning model of the Numbered Heads Together type also provides opportunities for students to develop processing and sharing abilities so that the abilities of students both individually and in groups can develop and can improve social skills and student learning outcomes both in terms of affective, cognitive and psychomotor in order to achieve learning goals.

According to (Md. Padmarani Sudewiputri, 2021) the Numbered Head Together (NHT) Learning Model is an approach developed by Kagan, to involve many students in obtaining the material covered in a lesson and checking their understanding of the lesson content. According to (Permana, 2016) the NHT model is part of the structural cooperative learning model, which emphasizes special structures designed to influence student interaction patterns. According to (Pendy & Mbagho, 2020) stated that the Learning Numbered Head Together Cooperative learning model is a type of cooperative learning designed to influence interaction patterns and as an alternative to traditional class structures. It is hoped that by using the Numbered Head Together cooperative learning method it can solve problems. The ability to solve mathematical problems is one of the abilities that students need to master because through problem solving activities, important aspects of social studies skills such as applying rules to non-routine problems, finding patterns and so on, can be developed better.

Each student gets the same opportunity to support his team in order to get maximum grades so that they are motivated to learn. Thus each individual feels assigned and responsible so that learning objectives can be achieved.

According to (Aris, 2016) states that Numbered Head Together is a group learning technique in which each member of the group is responsible for their group assignments, so that there is no separation between one student and another student in a group to give and receive one another.

The Numbered Head Together learning model is believed to be able to make student learning active when learning activities take place, with a new learning atmosphere and also provide comfort for students so it is expected to make students more prepared in learning and ready to accept the material provided by the teacher. There is a stage where the teacher gives numbers to all group members, even though all students get numbers but the activities carried out by students are group discussion activities not individually meaning that student learning activities are more dependent on group cooperation, however that does not mean that each individual does not get an assessment rather the learning model This requires students to work together to solve problems in a deliberative manner, so that each student has the same opportunity, namely to be able to give their opinion in an effort to gather information that will be used as material for consideration of answers to the problems being studied.

From the explanation above, it can be concluded that the Numbered Head Together type of cooperative learning model is a way that is deliberately carried out by the teacher through dividing students into several groups, with each group member having a certain number, the teacher gives issues to be discussed in the group and the teacher calls the student's number randomly to present the results of the discussion.

According to (Purwanto, 2014) states that the cognitive domain is a change in behavior that occurs in the area of cognition. The learning process that involves the cognition area includes activities from

receiving stimulus, storing and processing it in the brain into information to recalling information when needed to solve problems. According to Bloom, in a hierarchy, the level of cognitive learning outcomes starts from the lowest and simplest, namely memorization, to the highest and most complex, namely evaluation. The six levels are knowledge (C1), understanding (C2), application (C3), analysis (C4), synthesis (C5) and evaluation (C6).

According to (Arikunto, 2013) revealed cognitive domains in elementary school students that are suitable to be applied are memory, understanding and application and analysis. The purpose of the cognitive aspect is oriented towards thinking skills which include simpler intellectual abilities, namely remembering, to the ability to solve problems that require students to connect and combine several ideas, ideas, models or procedures learned to solve these problems.

According to (Purwanto, 2014) divides affective learning into five levels, namely acceptance (responding to stimuli), participation, assessment (determining the choice of a value from a stimulus), organization (linking learned values), and internalization (making values as way of life). Learning outcomes are arranged hierarchically from the lowest level to the highest. So the affective domain is related to values which are then linked to attitudes and behavior.

Learning outcomes are arranged in order starting from the lowest and simplest to the highest which can only be achieved if students have mastered lower learning outcomes. According to (Salmia, 2020) classifies psychomotor learning outcomes into six, namely, perception (distinguishing symptoms), readiness (placing oneself to start a movement), guided movement (imitating an exemplary model), habitual movement (performing a movement without a model until it reaches habit). , complex

moves (performing a series of moves in succession), and creativity (creating original or original new moves and combinations of moves).

Based on some of the opinions above, it can be concluded that learning outcomes are the level of success of students in learning subject matter at school. Good learning outcomes are learning outcomes that fulfill and can achieve learning goals and include the three domains of student intelligence, namely the cognitive, affective, and psychomotor domains. While the learning outcomes referred to in this study are learning outcomes from a cognitive perspective in the form of mastery of the material which will be indicated by cognitive test assessments with the ability levels obtained by students divided into three categories namely knowledge, understanding, and application when learning science using student worksheets .

Based on the description above, it can be explained that the Numbered Head Together cooperative learning model can improve social skills, and student learning outcomes, therefore the research aims to determine the Effect of Numbered Head Together Learning Model on Social Skills, and Student Learning Outcomes in Class V Cluster II District Land End of Makassar City.

### **Metode (15%)**

This type of research is a quantitative study and aims to compare the Numbered Head Together learning model, social skills and social science learning outcomes for fifth grade students in cluster II Ujung Tanah sub-district, Makassar City. The type of research used is a quasi experimental design and the design used is a non-equivalent control group. Quasy experimental design, namely giving different treatment to the two research groups, the first group received the Numbered Head Together learning model which is called the experimental class, and the second group studied with the

conventional learning model and was called the control class. These two classes were chosen randomly or randomly.

The sampling technique used is random sampling technique (random sampling) in this study the type used is Cluster Sampling (Area Sampling) (Sukmawati, Salmia, 2023). The sampling technique was carried out by selecting several elementary schools which were considered to be representative of the study population. From the six schools, 2 schools were obtained, namely UPT SPF SDN Pattingalloang 1 and UPT SPF SDN Tabarrangan 5. From these two classes a draw was carried out, where the class selected to be the experimental class was UPT SPF SDN Tabarrangan 5 and was given the Numbered Head Together learning treatment, while the selected class was the control class was UPT SPF SDN Pattingalloang 1 and without conventional treatment or learning.

As for data collection techniques and research instruments, namely the experimental class was given lessons using the Numbered Head Together learning model. The data collection technique used in this study is the pre-test and post-test (Sukmawati, Sudarmin, 2023), while the data collection steps will be carried out as follows:

- 1) Initial Test (Pre-Test) Initial test is carried out before treatment. Researchers will give tests in the form of questions to students with the aim of knowing student learning outcomes.
- 2) Final test (post-test) After treatment, the next action is a post-test. Researchers gave tests in the form of questions then answered based on the steps using the Numbered Head Together learning model.

Observation in this study meant that data collection techniques were carried out through an observation, accompanied by records of the condition or behavior of the target object to obtain data regarding students' social skills during learning and

class conditions during the learning process related to active participation in carrying out responsibilities. answers and attention to learning in class.

Documentation is intended to obtain data directly from the research site, including the Learning Implementation Plan (RPP), syllabus, student attendance list, research instrument variables, and evidence of student activity when the learning process is in progress.

Descriptive analysis is intended to explain scientific process skills and scientific learning outcomes that are taught with the Numbered Head Together learning model. It consists of sample size, ideal score, maximum score, minimum score, score range, mean (mean), median, mode, standard deviation and variance.

Statistical analysis of inference and normality test and homogeneity test were used to test the research hypothesis. The hypothesis is done by using the Manova test.

## Hasil dan Pembahasan (70%)

### A. Research Results

#### 1. Descriptive Analysis Test

**Table 1 Categorization of Social Skills Class Experiment Before Given Learning Numbered Head Together**

No.	Value Range	Frekuensi	Persentase (%)	Category
1	0 – 24,9	12	40%	Low
2	25 – 49,9	18	60%	Currently
3	50 – 74,9	-	-	Tall
4	75 – 100	-	-	Very high
Amount		30	100	

Based on the results of the statistical analysis of the social skills of the experimental class before applying the Numbered Head Together learning model above, it was obtained data from 12

students in the low category with a percentage of 40%, 18 students in the medium category with a percentage of 60% and in the high and very high categories none students in that category.

**Table 2. Categorization of Experimental Class Social Skills After Being Given Learning Numbered Head Together**

No.	Value Range	Frekuensi	Persentase (%)	Category
1	0 – 24,9	0	0%	Low
2	25 – 49,9	2	7%	Currently
3	50 – 74,9	17	56%	Tall
4	75 – 100	11	37%	Very high
Jumlah		30	100	

Based on the results of the statistical analysis of the social skills of the experimental class after applying the Numbered Head Together learning model above, it was obtained that there were no students in the low category, 2 students in the medium category with a percentage of 6%, 17 students in the high category with a percentage of 57% and 11 students in the very high category with a percentage of 37%.

**Table 3. Categorization of Experimental Class Pretest Learning Outcomes**

No.	Value Range	Frekuensi	Persentase (%)	Category
1	0 - 74	30	100	Need Guidance (D)
2	75 - 82	-	-	Enough (C)
3	83 - 92	-	-	Good (B)
4	93 - 100	-	-	Very good (A)
Amount		30	100	

Based on the table of results of statistical analysis of experimental class

learning outcomes before applying the Numbered Head Together learning model above, 30 students were obtained in the category of needing guidance, there were no students in the sufficient, good and very good categories based on the results of the research that had been done.

From the circle diagram of the categorization of experimental class pretest learning outcomes above, it shows that the number of students obtaining the category of needing guidance is as many as 30 people with a percentage of 100%, and for the categories sufficient, good and very good there are none.

**Table 4. Categorization of Experimental Class Posttest Learning Outcomes**

No.	Value Range	Frekuensi	Persentase (%)	Category
1	0 – 74	6	20	Need Guidance (D)
2	75 – 82	11	37	Enough (C)
3	83 – 92	10	33	Good (B)
4	93 – 100	3	10	Very good (A)
Amount		30	100	

Based on the results of the statistical analysis of post-test learning outcomes in the experimental class with the Numbered Head Together learning model above, a score of 6 students was obtained in the category needing guidance with a percentage of 20%, 11 students in the sufficient category with a percentage of 37%, 10 students in the good category with a percentage of 33% and 3 students in the very good category with a percentage of 10%.

## 1. Normality Test

**Table 5. Normality test results for the process skills of the experimental and control classes**

Tests of Normality							
	Kelas	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	df	Sig.
Social Skill Tests	Eksperimen NHT	.142	30	.126	.933	30	.059
	Kontrol Konvensional	.143	30	.119	.919	30	.025

a. Lilliefors Significance Correction

Based on the output of the SPSS program above, it can be shown that the sig. obtained by the experimental class of 0.126 for the Kolmogorov-Smirnov statistics. From this value it shows that it is greater than the significant level  $\alpha = 0.05$  (sig. > 0.05), so it can be concluded that the experimental class values are normally distributed. Whereas in the control class using a conventional learning model of 0.119 indicates that the data is normally distributed.

**Table 6. Normality test of experimental and control class learning outcomes**

Tests of Normality								
	CLASS	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk			
		Statistic	Df	Sig.	Statistic	df	Sig.	
Learning Outcomes	Eksperimen	.143	30	.117	.937	30	.078	
	Control	.156	30	.059	.935	30	.065	

Lilliefors Significance Correction

Based on the output of the SPSS program above, it can be shown that the sig. obtained by the experimental class of 0.117 for the Kolmogorov-Smirnov statistics. From this value it shows that it is greater than the significant level  $\alpha = 0.05$  (sig. > 0.05), so it can be concluded that the experimental class values are normally distributed. Whereas in the control class using a conventional

learning model of 0.59 indicates that the data is normally distributed.

## 2. Homogeneity Test

**Table 7 Results of Experimental and Control**

Test of Homogeneity of Variance					
		Levene Statistic	df1	df2	Sig.
Social Skills	Based on Mean	1.382	1	58	.245
	Based on Median	.920	1	58	.342
	Based on Median and with adjusted df	.920	1	50.240	.342
	Based on trimmed mean	1.313	1	58	.257

Based on the homogeneity test in the table above, the Based on Mean is 0.245. The Based on Mean value is greater than 0.05, so it can be concluded that the control class and experimental class students come from populations that have the same variance, or the two classes are homogeneous.

**Table 8 Results of Experimental and Control Class Homogeneity Tests**

Test of Homogeneity of Variance					
		Levene Statistic	df1	df2	Sig.
Learning Outcomes	Based on Mean	1.400	1	58	.242
	Based on Median	1.469	1	58	.230
	Based on Median and with adjusted df	1.469	1	55.729	.231
	Based on trimmed mean	1.516	1	58	.223

Based on the homogeneity test in the table above, the Based on Mean is 0.242. The Based on Mean value is greater than 0.05, so it can be concluded that the control class and experimental class students come

from populations that have the same variance, or the two classes are homogeneous.

## 4. Hypothesis testing

After the prerequisite test is fulfilled, then the research hypothesis is tested with the Manova test. The Manova test is used to find out the Numbered Head Together Learning Model for Students' Social Skills and Social Studies Learning Outcomes for Class V Cluster II Students, Ujung Tanah District, Makassar City

**Table. 9 Manova Test Table**

Source	Variable	Calculated Significance Value
NHT Learning Model	Social skills	0,000
	Learning outcomes	0,000

From the table of the results of the Manova test for social skills and student learning outcomes, it shows a significance value of 0.000.  $0.000 < 0.05$  then  $H_0$  is rejected and  $H_a$  is accepted. Based on this, it can be concluded that there is a significant influence in the effect of the Numbered Head Together Learning Model on students' Social Skills and Social Studies Learning Outcomes for Class V Cluster II Students, Ujung Tanah District, Makassar City.

## Discussion of Research Results

Based on the results of research using the Numbered Head Together Learning Model can have a positive influence on social skills and learning outcomes in IPS (Social Science). Social skills in question include the ability to communicate, the ability to cooperate, listen to the opinions of others (empathy), give and receive criticism, and act according to applicable rules. Students' social skills through working together in groups in Number Head Together increase the activity of sharing creativity, ideas, listening to the opinions of others, helping each other, and



achieving common goals. The social skills acquired through Number Head Together will be useful for students in everyday life. Student involvement in the learning process using Number Head Together encourages active participation of students in the learning process. This allows students to play an active role in group discussions and contribute to learning. Number Head Together can increase student involvement in social studies learning. Students will feel more involved, have higher motivation, and feel they have responsibility for their own learning, so that the use of the Numbered Head Together learning model can improve student learning outcomes. By strengthening conceptual understanding, analytical skills, critical thinking skills, and social skills, students will be able to apply their knowledge and skills in the social studies context. Social studies learning outcomes can be reflected in students' abilities to relate information, identify patterns, analyze social issues, and make informed conclusions.

Based on the results of the analysis of the Manova test, there is an effect of the Number Head Together Learning Model on social skills and social studies learning outcomes Cluster II, Ujung Tanah sub-district, which has significantly increased in significance so that  $H_0$  is rejected and  $H_a$  is accepted. Based on this, it can be concluded that there is a significant influence in the influence of the Number Head Together Learning Model on social skills and Social Studies Cluster II learning outcomes in Ujung Tanah sub-district. This is in line with research conducted (Marti, Syamswisna, & Panjaitan, 2014) with the research title The Effect of the Number Head Together Learning Model on Social Science Learning Outcomes of Class V Students at SD Negeri Sukadana. Based on the analysis of the t-test, the final test scores for the experimental class and control class experienced a significant increase, so  $H_a$  was accepted and

$H_0$  was rejected. This means that learning using the Numbered Head Together (NHT) model has better learning outcomes than using the lecture and assignment methods. So it was concluded that there was an effect of using the Numbered Head Together model on social science learning outcomes (IPS) about the Geographical Location of Indonesia in class V students at Sukadana State Elementary School.

In accordance with the theory according to Herdian (2009) put forward three goals to be achieved in Numbered Head Together learning, namely: 1) structural academic learning outcomes, which aim to improve student performance in academic tasks, 2) Recognition of diversity, 3) skill development social media aims to develop students' social skills.

#### **Simpulan (5%)**

The effect of the Number Head Together Learning Model on social skills and social studies learning outcomes of Cluster II Students in Ujung Tanah District, the results of the Manova test on social skills and student learning outcomes showed a significance value obtained by  $H_0$  rejected and  $H_a$  accepted. Based on this, it can be concluded that there is a significant influence in the use of the Number Head Together Learning Model on the social skills and social studies learning outcomes of Cluster II Students in Ujung Tanah District. Teachers in schools are expected to be able to design and carry out a learning activity that can create a conducive atmosphere, which can provide interest and student learning outcomes. This research can be used as a reference in developing learning models that are applied in schools.

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