

# The Effectiveness of the NHT Model in Improving Social Skills and Social Studies Learning Outcomes in Primary Schools

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**Abstract:** This study aims to determine the effectiveness of the application of the NHT model to improve social skills and social studies learning outcomes of grade IV at SDN Kembangan Utara 01. The design of this study uses Quasi Experimental (Nonequivalent Control Group). The research instrument used social skills observation and learning achievement tests. Data were analyzed using quantitative analysis. The results obtained by an average value of 83.86% observation of social skills with a good category. The NHT model of social skills is declared effective because it gets an average percentage score  $\geq 76\%$ . Improved learning outcomes based on the acquisition of a normalized gain value with 0.83 high criteria. The NHT model of learning outcomes in the category is quite effective with an average N-Gain value of 74.6%. The conclusion of this study is that the NHT model has proven to be effective in improving social skills and social studies learning outcomes.

## 1. Introduction

Education is a necessity for human life and is used as a measure of the prosperity of a country [1]. Through education, a country can give birth to the next generation who have high intellectual and competent. However, education is not just a priority to intellectual and cognitive-factors but education must develop a human with good morals [2] [3]. Thus, learning activities should be tailored to the activity-based activities and characteristics that active learning and develop students' skills. Social learning is a teaching plan that combines the knowledge, skills and values necessary to become citizens participate actively in society [3][4]. Social studies learning in Primary Schools according to the main objective of the National Council Social Studies is to prepare students active and involved in having knowledge, intellectual processes, competencies to become good citizens [5][6]. Social studies learning in Primary Schools prepares students as citizens who master knowledge, skills, attitudes and values that can be used as the ability to solve personal problems or social problems [3][7].

Through social studies students can recognize the relationship between humans and the environment, understand the events that occur around them and understand that humans are social beings [2][3][8]. The skills need to be developed in the social studies learning is social skills [9]. Social skills to function as a means to obtain a good relationship in interacting with other people and planting the students' social skills should be applied in everyday learning activities [9][10]. Social skills as socially acceptable



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behaviors that allow one to interact with others in ways that generate positive responses and help avoid negative responses [11]. Social skills are a series of important competence for students to initiate and maintain positive social relationships with peers, teachers or other community environment [6][12]. Aspects of social skills that students need to have are: peer relational skills, self-management skills, academic skills, compliance skills, and assertion skills [13][14][15]. Social studies learning is important learning and provision for students in developing social skills, so as a teacher can manage each social learning process interactively. The interactive learning by developing different learning models to motivate and encourage students to get involved in the learning process in totality. Cooperative learning is a teaching strategy that consists of a set of classroom activities in which students work in groups in a coordinated way to solve a given problem [16][17]. The cooperative learning model aims to develop the psychomotor, cognitive and affective domains of students. Students are encouraged to self-learning methods and share their knowledge [18].

NHT Models is a cooperative learning strategy that combines a unique strategy teacher questions involving students actively while increasing the value of their academic and behavioral outcomes [19]. The purpose of the NHT is to provide opportunities for students to share ideas and consider the most appropriate response, then to increase the cooperation of students and can be applied to all subjects at grade level [19][20]. NHT make students actively involved in the learning process so that the material is easy to understand, enhance the value of academic and student behavior [21]. Learning outcomes are attempts to obtain behavioral changes and as a result of individual experiences in their interactions with their environment [22]. Learning outcomes are the embodiment of abilities due to behavioral changes made by educational efforts and these abilities concern the cognitive, affective, and psychomotor domains [23]. The implementation of cooperative learning model NHT effectively develop social skills Primary School fourth grade students in the district Candisari Semarang [24]. The completeness in the class that implements the NHT learning model has reached the criterion of a minimum score of 75 [24]. The purpose of this study was to determine how the effectiveness of the application of NHT to the improvement of social skills and student learning outcomes in social studies teaching fourth grade at SDN 01 North Kembangan, West Jakarta.

## 2. Literature Review

### 2.1 *Model Number Head Together (NHT)*

Numbered Head Together (NHT) is one of the cooperative learning models. This learning model was developed by Spenser Kagan in 1993 [19][20]. NHT learning model is also mentioned as a pattern that is used as a guide in the learning in the classroom and tutorial [25]. NHT cooperative learning model aims to develop psychomotor, cognitive and affective domains of the students [20][25]. Students are encouraged to self-learning methods and share their knowledge [18].

NHT is a cooperative learning strategy that combines a unique strategy teacher questions involving students actively while increasing the value of their academic and behavioral outcomes [19]. NHT is a group learning model where each group member is responsible for the group's work, so there is no separation between one student and other students in one group to give and receive from one another [26].

### 2.2 *Social Science*

Definition of Social Science is an academic study as an integrated education of disciplines of social sciences and other relevant disciplines, and then packaged in a psychological, scientific, pedagogical, and socio-cultural to the goal of Education [3][6]. Social studies that is the study of the various disciplines of social and human basic activities to provide a deep insight and understanding to students, especially at the elementary and secondary levels [6]. According Syllabus Curriculum 2013 social studies in primary school aims to produce citizens who are religious, honest, democratic, creative, critical, love to read, have the ability to learn, curiosity, concerned with the social and physical environment, contributing to the development of social life and culture, and communicate productively [27][28].

Social Science at the school level aims to prepare students to have the basic ability to think logically and critically, curiosity, inquiry, problem solving and skills in social life [27]. Therefore, through the Social Science learners can learn to understand the social problems and the ability to make decisions and participate in various community activities, have the social skills to be good citizens.

### *2.3 Social Skills*

Social skills as acceptable behavior socially that allows a person to interact with others in a way that causes a positive response and help avoid a negative response [11][29]. Social skills are skills that are used when interacting on an interpersonal level with others, goal-directed, inter-related, according to the situation of behavior unit that can be identified and learned behavior [15]. The forms of social skills are: Peer relational skills, Self-management skills, Academic skills, Compliance skills, and Assertion skills [29]. Social skills that students need to have include: Living and working together; taking turns; respecting the rights of others; being socially sensitive; Learning self-control and self-direction; Sharing ideas and experience with others [30].

## **3. Methods**

### *3.1 Research Design*

The study was conducted in Quasi-Experimental (Nonequivalent Control Group Design) [31]. Students are given a pretest before treatment then given a posttest after treatment [31]. Data critical thinking skills in the classroom control and experiment were analyzed using descriptive analysis of the percentage.

### *3.2 Research Subject*

The research subjects were 44 fourth grade Primary School students consisting of the experimental group (n = 22) and the control group (n = 22). In the learning process, students are divided into groups of 4-5 members.

### *3.3 Data Collection Instruments*

The researcher uses observation sheets to observe students' social skills that emerge during learning discussions. Each observation sheet has five aspects and each aspect has four indicators that must be observed by the observer. Researchers also use the evaluation test instrument in the form of multiple-choice questions in the pretest and posttest to measure student learning outcomes. In research data collection techniques, researchers use several techniques and procedures that are tailored to the characteristics of the data. Data collected by interview, documentation, observation and evaluation tests with grating instruments that have been created and developed.

### *3.4 Data Analysis*

Data analysis techniques for social skills and learning outcomes use quantitative statistical tests. The research statistical test used is a non-parametric test, the Mann Whitney test [31]. But before quantitative statistical tests in the analysis of social skills data, the ordinal data are converted first using the help of MSI software. Then also conducted a descriptive analysis by calculating the percentage of the average calculation of each meeting to see an increase in students' social skills.

## **4. Results and Discussion**

Learning activities or processes are always related to learning objectives, as well as learning planning and implementation. By planning and implementing good learning, it will create effective learning [12]. The way to realize an effective learning is in the process of teaching and learning using various variations in the delivery of material, be it media, models, sounds, and motion [20].

In this study, researchers found that based on the analysis of observational data has been known that an increase in social skills in the experimental class that implements NHT. This was stated by there was an increase of each meeting, and the average value at the last meeting to get the value of a percentage

of 83.86% in both categories. Following are the results of the average value of observing social skills shown in the table below.

**Table 1.** Results of Calculation of Average Social Skills

Session	Experiment Group		Control Group	
	Score Average (%)	Category	Score Average (%)	Category
1	60	Fair	58.63	Poor
2	72.27	Fair	61.36	Fair
3	83.86	Good	68.86	Fair

In this study, the NHT model is categorized as effective because the acquisition of the average percentage score reaches a good category. The study categorized been successful if the social skills of students achieving good criterion, which is the average percentage of students  $\geq 76\%$  [32]. Based on the above statement, we can conclude that there is an increasing social-skills in both classes. Based on the data analysis of learning outcomes has been known that an increase in student learning outcomes in class experiments using NHT with the acquisition of the average value of the gain is normalized 0.73 with high criteria, meaning that there is an increased understanding or mastery of concepts were high after studying with application of the NHT model. The improvement also made the learning outcomes of all students in the experimental class meet the minimum completeness criteria set by the school, which is  $\geq 75$ . The following is the elaboration of the recapitulation of the gain calculation data using the N-Gain formula.

**Table 2.** Summary of Results of N-Gain Control Class and Class Experiment

Group	Average <i>Pretest</i>	Average <i>Posttest</i>	<i>N-Gain</i>	Category
Experiment	46.78	86.07	0.73	High
Control	42.24	73.01	0.51	Medium

Based on data from Table 2, showed that the experimental class to get the average value of student learning outcomes pretest was 46.78, and increased in the post-test results with an average of 86.07. From the results of the pretest and posttest, the researcher gets an average calculation of the N-Gain value in the experimental class, which is 0.73 which is included in the high criteria. Thus, it can be concluded that there is an increased understanding or mastery of concepts on the application of NHT with high criteria. Whereas in the control class shows that the average value of pretest student learning outcomes is 42.24 and increased in posttest results with an average of 73.01.

Learning effective if the learning outcomes approach to the problem is better than conventional learning at the level of a certain completeness and effective learning outcomes in the event of a positive behavior change, achievement of learning objectives that have been applied [12]. Furthermore, in this study, researchers found that learning with the application of NHT makes students active, enthusiastic, and the motivation for the students to learn. Student activity can be seen in the involvement of students working together and participating in discussion interactions, such as giving opinions and sharing answers. While the students were enthusiastic attitude when students try to complete his responsibility, which is looking for answers and make sure each group's friends know the answer to every question with the correct numbers. So that every student has the opportunity to explain the correct answers at random questions provided by the teacher. In addition, researchers also give rewards to the group that gets the most points in the second meeting. This keeps students motivated in the learning process in order to further improve cooperation and become a winning team. So that at the third meeting, each student more enthusiastic about cooperation.

## 5. Conclusions

Based on the results of research and discussion that has been concluded the following conclusions: (1) there is an increase in social skills and student learning outcomes in the class that uses the implementation of the NHT model compared to classes that do not use the NHT model in Social Sciences subjects Class IV at SDN Kembangan Utara 01, West Jakarta (2) there was an increase in social skills from each meeting with the acquisition of an average value of social skills of 83.86% with a good category, (3) there was an increase in learning outcomes towards the NHT model based on the results of the hypothesis test with the Mann Whitney-U test obtained by the level signifikansi of 0,000 and it is known that the significance value is less than 0.05. (4) the NHT model is effective against learning outcomes, which is based on the average value of N-Gain for the experimental class is 74.16%, which means the application of the NHT model is quite effective because it is in the category of interpretation of the effectiveness of N-Gain between 56% - 75%.

Furthermore, there are several recommendations made by the relevant researchers of this study, namely NHT can be an alternative for teachers to develop learning material IPS with economic activity in the Primary School. The teacher can also add interesting media in learning and give prizes to students as rewards for the winning group. Learning with NHT be interesting and fun class because in the learning process makes students active, enthusiastic and the motivation.

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