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THE EFFECT OF THE NUMBERED HEAD TOGETHER (NHT) LEARNING MODEL AND THE USE OF THE KAHOOT INTERACTIVE APPLICATION ON STUDENT LEARNING OUTCOMES IN THE CITIZENSHIP EDUCATION SUBJECT IN GRADE XI

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ABSTRAK

Rumusan masalah yang ingin dijawab melalui penelitian ini adalah: (1) Bagaimana Pengaruh Model Pembelajaran Numbered Head Together (NHT) dan Penggunaan Aplikasi Interaktif Kahoot terhadap Hasil Belajar Siswa pada Mata Pelajaran Pendidikan Kewarganegaraan Kelas XI SMA Negeri 2 Pematangsiantar. Tujuan penelitian ini adalah: (1) Untuk mengetahui Pengaruh Model Pembelajaran Numbered Head Together (NHT) dan Penggunaan Aplikasi Interaktif Kahoot terhadap Hasil Belajar Siswa pada Mata Pelajaran Pendidikan Kewarganegaraan Kelas XI SMA Negeri 2 Pematangsiantar Tahun Ajaran 2025/2026.Jenis penelitian ini adalah kuantitatif dengan desain Quasi eksperimental pretest-posttest dengan populasi penelitian adlah siswa kelas XI SMA Negeri 2 Pematangsiantar yakni 358 orang. Sedangkan yang menjadi sampel dalam penelitian ini ada 2 kelas yaitu kelas XI-2 sebanyak 36 siswa dan kelas XI-6 sebanyak 36 siswa, total populasi sebanyak 72 siswa. Instrumen yang digunakan dalam penelitian ini adalah tes yang dipakai merupakan tes pilihan berganda (Multiple Choice). Hasil penelitian nilai posttest kelas kontrol untuk nilai terendah adalah 50 dan nilai tertinggi 75 dan nilai rata-rata posttest 63.33. Sedangkan nilai posttest kelas eksperimen untuk nilai terendah adalah 65 dan nilai tertinggi adalah 90 dan nilai rata-rata posttest 80,83. Hasil penelitian menunjukkan bahwa perbandingan kategori hasil belajar terlihat bahwa frekuensi Nilai posttest eksperimen dengan rata-rata 80,83 nilai minimal yaitu 65 dan maksimal yaitu 90. Hasil yang diperoleh dari uji-t menggunakan diperoleh bahwa t_hitung 8,490 t_tabel 0,329 dan Sig. (2-tailed) 0,000 < 0,05.Berdasarkan Uji hipotesis yaitu uji signifikan yaitu uji signifikan pengaruh (uji t) Hasil ini H_0 ditolak dan H_a diterima maka diperoleh:Pengaruh Model Pembelajaran Numbered Head Together (NHT) terhadap Hasil Belajar Siswa pada Mata Pelajaran Pendidikan Kewarganegaraan Kelas XI SMA Negeri 2 Pematangsiantar. Bagaimana Pengaruh Penggunaan Aplikasi Interaktif Kahoot terhadap Hasil Belajar Siswa pada Mata Pelajaran Pendidikan Kewarganegaraan Kelas XI SMA Negeri 2 Pematangsiantar. Bagaimana Pengaruh Model Pembelajaran Numbered Head Together (NHT) dan Penggunaan Aplikasi Interaktif Kahoot terhadap Hasil Belajar Siswa pada Mata Pelajaran Pendidikan Kewarganegaraan Kelas XI SMA Negeri 2 Pematangsiantar.

Keywords:
NHT Learning Model; Kahoot Interactive Application

ABSTRACT

The research problem addressed in this study is: (1) What is the effect of the Numbered Head Together (NHT) learning model and the use of the interactive Kahoot application on students' learning outcomes in Civic Education for Grade XI students at SMA Negeri 2 Pematangsiantar. The objective of this study is: (1) To determine the effect of the Numbered Head Together (NHT) learning model and the use of the interactive Kahoot

application on students' learning outcomes in Civic Education for Grade XI students at SMA Negeri 2 Pematangsiantar.This study uses a quantitative approach with a quasi-experimental pretest-posttest design. The population consists of all Grade XI students at SMA Negeri 2 Pematangsiantar, totaling 358 students. The sample consists of two classes: class XI-2 and XI-6, each with 36 students, resulting in a total sample of 72 students. The research instrument used is a multiple-choice test.The posttest results in the control class show a minimum score of 50, a maximum score of 75, and an average score of 63.33. In the experimental class, the minimum posttest score is 65, the maximum is 90, and the average score is 80.83. The comparison of learning outcome categories shows that the experimental class has a higher frequency of better scores, with an average of 80.83, minimum 65, and maximum 90.The t-test results indicate that the calculated t-value (t_count) is 8.490, while the critical t-value (t_table) is 0.329, with a Sig. (2-tailed) value of 0.000 < 0.05.Based on hypothesis testing using a significance test (t-test), the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted. Therefore, the following conclusions are drawn:There is an effect of the Numbered Head Together (NHT) learning model on students' learning outcomes in Civic Education.There is an effect of the use of the Kahoot interactive application on students' learning outcomes in Civic Education.There is a combined effect of the NHT learning model and the Kahoot application on students' learning outcomes in Civic Education for Grade XI students at SMA Negeri 2 Pematangsiantar.

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1. Introduction

Education is the process of transformation into an educated person, helping humans to increase their human potential. Education is a process that involves experience and knowledge, which are known as learning outcomes. This includes understanding and the ability to adapt to various stimuli received, with the aim of achieving growth and development. Education is also very important and always related to human life. The importance of education is used as a benchmark for a nation's progress. As Erlianti (Vivi Muliandari, 2019) states, education is considered a crucial foundation for a nation's development, not only providing the foundation for sustainable societal progress but also demonstrating the nation's progress in the face of the ever-changing dynamics of the times (Nurwadani et al., 2021).

The government has set the objectives of National Education as stated in Article 3 of Law Number 20 of 2003 concerning the National Education System Law (UU SISDIKNAS) which states that: "National education functions to develop abilities and shape the character and civilization of the nation that are useful in order to enlighten the life of the nation, aiming to develop the potential of students to become human beings who believe in and are devout to God Almighty, have noble morals, are healthy,

knowledgeable, capable, creative, independent, and become democratic and responsible citizens."

Education to date does not have a definition that is fully adequate to describe its meaning in its entirety, because of its very complex nature, as humans are its main subject. This complexity is often the main study in educational science, which was born as a continuation of educational practice itself. Educational science places more emphasis on a scientific approach to educational theory and practice. So the existing theories and findings are still relevant to be used as a reference.

According to Mandiong (Erfan et al., 2020) "Citizenship Education is a subject that is a series of processes to direct students to be responsible so that they can play an active role in society in accordance with the provisions of Pancasila and the Law of the Unitary State of the Republic of Indonesia (UUD 1945)". Therefore, the existence of the subject of Civics Education is very significant in contributing to forming students who are intelligent, democratic, have character and have good morals. To achieve this, teacher professionalism is very necessary.

A teacer's success can be seen from teaching methods that improve student learning outcomes. Teachers are expected to shape a generation that is faithful, devout, morally upright, proficient in communication, and competent in their fields. The teacher's role as an educator, mentor, facilitator, and motivator is crucial to developing quality students. One of the skills that teachers must have is designing learning and media that are in line with technological developments, in order to create innovation and creativity in learning. With creativity, teachers can optimize learning strategies, models, and methods, so that students are motivated and enthusiastic to improve student learning outcomes in class. However, the facts on the ground show that some teachers still cannot create an engaging learning environment. This can cause students to become inactive, or even lazy, during the learning process (Chamalia, 2016).

Based on the above, the Numbered Heads Together (NHT) Learning Model and the use of the interactive Kahoot application have never been implemented in the Civics subject at SMA Negeri 2 Pematangsiantar. This is evident from the results of previous observations and field studies conducted by the researcher. Other information obtained includes that in the teaching and learning process in the classroom, teachers only use textbooks , employ lecture methods, which students find boring due to their monotony and lack of interaction, and teachers do not use learning media that can support learning activities. These conditions cause the learning process to be less interesting and less creative. Less creative learning can result in low student interest and learning outcomes.

Integrated learning models with the use of appropriate learning media can increase students' interest and enthusiasm to participate in complete learning activities. This can lead to better student responses to the concepts or material presented and easier understanding of the learning material. Using the right learning model will result in effective learning outcomes (Wilanda & Iman, 2018).

A learning model is a learning process that describes learning methods, the learning environment, and the use of other learning tools in an orderly manner. This aims to demonstrate a gradual learning activity (Hendracita, 2021:2). One learning model

presented as a solution to monotonous learning processes is the Numbered Heads Together (NHT) learning model.

The Numbered Heads Together (NHT) learning model is one of a series of cooperative learning models or can be said to be a learning method that emphasizes cooperation between students in small groups to achieve common goals and help each other understand the learning material. The Numbered Heads Together learning model or numbering thinking together is a learning model prepared to influence student interaction patterns in discussion activities during the learning process. Cooperative learning has indeed improved learning in the classroom, but in this study the researchers tried to use the help of the interactive Kahoot application as an alternative to improve learning. Kahoot is an interactive learning platform that allows teachers and students to participate in real-time quizzes, surveys, and discussions. Using Kahoot, teachers can create engaging and challenging questions that students can access through their devices, such as smartphones, tablets, or computers (Febrianti, 2019).

One of Kahoot's strengths is its ability to create a competitive and enjoyable learning environment. Students can compete with each other in answering questions, which not only increases their engagement but also encourages collaboration and discussion among them. Furthermore, Kahoot provides instant feedback, allowing students to see their results immediately and understand areas for improvement (Murwanto, 2020). Integrating Kahoot with the Numbered Heads Together (NHT) learning model can enhance the learning experience. In the NHT model, students work in small groups and discuss their answers with each other before providing a final answer. Using Kahoot, each group can participate in quizzes designed to test their understanding of the material being taught. This not only increases interaction between students but also helps them learn from each other and support each other in the learning process (Kistian, 2018).

Thus, the use of Kahoot in the context of NHT not only makes learning more engaging but is also effective in improving comprehension and retention of the material. This approach creates a dynamic and collaborative learning environment, where students feel more motivated to learn and actively participate in the learning process (Ertin et al., 2021). Based on the description above, the researcher is interested in seeing "The Effect of the Numbered Head Together (NHT) Learning Model and the Use of the Kahoot Interactive Application on Student Learning Outcomes in the Civics Subject of Class XI SMA Negeri 2 Pematangsiantar

2. Method

The type of research used is quantitative. This research method is essentially a scientific method for obtaining data for a specific purpose and purpose. It is a scientific procedure used in the research process to obtain valid data. According to Sugiyono, quantitative research methods are called traditional methods because they have been used sufficiently long to become established as research methods. This method is called a positivistic method because it is based on the philosophy of positivism. This method is considered a scientific method because it meets scientific principles, namely

concrete/empirical, objective, measurable, rational, and systematic (Saeputri et al., 2019). This method is also called discovery, and this method is called quantitative research because the research data is in the form of numbers and the analysis uses statistics.

Furthermore, Arikunto stated that quantitative research, as the name suggests, requires a lot of numbers, starting from data collection, interpretation of the data, and presentation of the results. The research design used Pre-Experimental/Quasi-experimental pretest-Posttest, Pre-Experimental is an experimental research with a relationship between independent and dependent variables (Restikawati et al., 2020) . Quasi-experimental pretest-posttest is one type of research design used to emit the effects of an intervention or treatment by measuring the results before and after the treatment is given. At the time the pretest (initial test) was given before learning began, while the Posttest (final test) was given after using the NHT model and the use of Kahoot. The series of designs developed in the study can be described as follows:

The reasons why researchers chose this location are:

a. This school is where the researcher conducted Field Experience Practice (PPL) for approximately 4 (four) months, so the researcher has analyzed the Teaching and Learning Activities (KBM) at the school.
b. The school is easily accessible by public transportation and has a strategic location.
c. The school is willing to allow researchers to collect data in this study.
d. Researchers want to know to what extent the Numbered Head Together Learning Model and the Use of the Kahoot Interactive Application influence student learning outcomes.
e. The population and sample sizes meet the research requirements.

The population in a study is explicitly stated, including the size of the population and the research area covered. This is done to determine the sample size to be taken from the population and to limit the scope of generalizations.

In line with Arikunto's opinion (Allathifah et al., 2019) , the population is the entire research subject. Based on the research above, the population in this study was 11th-grade students of SMA 2 Negeri Pematangsiantar, there are 10 11th-grade students with a total of 358 students. In quantitative research, a sample is a part of the population that is truly representative and relevant. If the sample is not representative, conclusions cannot be drawn about the population. According to Sugiyono (Nourhasanah & Aslam, 2022), a sample is a subset of the population's size and characteristics. If the population is large, it is impossible for researchers to use all of it. The purpose of the sample is to obtain information from the object being studied which is part of the population. According to Arikunto (Agustina et al., 2020) , a sample is a portion of the population's size and characteristics. If the number of subjects is less than 100, the entire population becomes the research sample. But if the subjects are more than 100, then 10-15% or 15-25% or more is taken depending on the researcher's ability.

Based on the expert opinion above, and the relationship with the size of the observation area, the researcher determined the sample using simple random sampling, namely 20% of the population or 20% x 358 people = 71.6 (rounded to 72), so the researcher determined 72 people as a sample. Then the sampling was taken randomly

with the assumption that the selected sample could achieve the objectives (Na'im & Oktiningrum, 2019) . According to Ary et al (Sakban & Wahyudin, 2019) random sampling is divided into 3 types, namely simple random sampling, stratified sampling, and cluster sampling, because the population of class XI of SMA Negeri 2 Pematangsiantar is divided into several groups, namely classes XI-1 to XI-10. So the researcher randomly selected one class as an experiment and one class as a control class. The researcher chose class IX-2 as the control class and class IX-6 as the experimental class (Hanafiah et al., 2021).

To determine the sample in this study, the researcher used a random sampling technique, namely simple random class selection. Before conducting random sampling, the researcher first tested the homogeneity of the classes taken from the odd-numbered UAS score data for the Civics subject from all class XI students of SMA Negeri 2 Pematangsiantar in the 2025/2026 academic year, then the researcher took two classes as research subjects (Fajriyati et al., 2019).

In determining which class will be the experimental class and the control class, the researcher used a lottery, by assigning a number to each class, then using a lottery method (by taking the class name from a container) to randomly select two classes. Data collection techniques are a very important step in research, because the main goal is to obtain data. Without an understanding of data collection techniques, researchers will not be able to collect data that meets the established standards. Data collection can be done in various contexts, sources, and methods

3. Result and Discussion

This research is an experimental research conducted at Pematangsiantar State Senior High School, Jl. Patuan Anggi No. 8, North Siantar District, Pematangsiantar City, North Sumatra Province. This research was conducted on August 11, 2025, to August 23, 2025, in the 2025/2026 academic year. The purpose of this study was to see the effect of the Numbered Head Together (NHT) learning model and the use of the Kahoot interactive application on learning outcomes in Civics subjects. The type of research used was Pre-Experimental Quasi-experimental Pretest-Posttest, using two classes as samples, namely Class XI-2 and XI-6 consisting of 72 students. The classes used as research subjects were class IX-2 as the Control class and class XI-6 as the Experimental class.

The research was conducted in 2 meetings for each class. The researcher administered a pretest to students in class XI-2 to determine their learning outcomes. After that, the researcher began the learning process by explaining the learning material and administered a posttest to students. The control class did not use the Numbered Head Together (NHT) learning model and the use of the Kahoot interactive application. The researcher then administered a pretest to students in class XI-6 as an experimental class that used the Numbered Head Together (NHT) learning model and the use of the Kahoot application. After the treatment, the researcher administered a posttest to students, aiming to determine the learning outcomes of students after the treatment. The

research instrument that will be used to obtain data in this study, before being administered in the study, the instrument will be tested first. (Hidayah, 2019) .

This research was conducted to determine the feasibility of the instrument to be used in the research. The instrument was piloted to 36 students in grades XI-3 at SMA Negeri 2 Pematangsiantar. The data was used to obtain results for the upcoming instrument testing. The research instrument was piloted to determine its quality, through validity and reliability tests.

Validity testing is a test of the accuracy or precision of a measuring instrument in measuring the levels of validity of an instrument. To test the validity of the questions completed by respondents, researchers used the Excel application. (Nurdiansyah et al., 2021) . After the researcher corrected the questions that had been worked on by the students, the researcher input the data in Excel. The question items are said to be valid if the calculated r value> r table with a significance level of 5% or 0.05, and vice versa if the calculated r < r table then the question items are said to be invalid (Inayah et al., 2023) . In determining the calculated r can be seen from the r product moment table with N = 36, then obtained = 0.329.

***N-Gain* Test**

N-gain test is to measure the increase in student understanding after participating in learning in both the control class and the experimental class. The *N-Gain test* aims to see the effectiveness of a learning method or media in improving student learning outcomes (CHRISTIANA, 2022) . Researchers input data on learning outcomes from the learning using the SPSS 26 application to obtain the *N-Gain value* as a benchmark for the extent of the effectiveness of *the Numbered Head Together* (NHT) Learning Method and the Use of the *Kahoot Interactive Application* on Student Learning Outcomes in Civic Education Subjects with the material "Embodying Pancasila" at SMA Negeri 2 Pematangsiantar in the 2025/2025 academic year. The level of effectiveness of the N-Gain value based on percentages and values can be seen with N-Gain> 0.7 (70%) including high, 0.3 <N-Gain < 0.3 (30%-70%) including moderate/sufficient and N-Gain < 0.3 (less/low than 30%) (Siahaan et al., 2024) .

The N-Gain test show that the increase in learning outcomes of the NHT model and the use of *the Kahoot interactive application* in the experimental group is at a value of 60.38 . Based on the criteria for obtaining the N-Gain score test, the increase in student learning outcomes in the experimental group is in the moderate category (0.30 $\leq$ N-Gain <0.70) (Perdana et al., 2020) . While the *N-Gain test* in the control class shows that the increase in learning outcomes using conventional learning methods/models is at a value of 27.06 and based on the criteria for obtaining the *N-Gain* score test, the increase in student learning outcomes in the control group is in the low category (N-Gain <0.30). So there is a significant difference in student learning outcomes between the experimental and control groups, where the use of the NHT learning method and *the Kahoot* Interactive Application in the experimental class is said to be quite effective in improving student learning outcomes. The results of *the N-Gain data* can be seen in the following table:

Table 1. *N-Gain* Score

escriptives					
_GainPercent	xperiment	lean		0.38	,140
		5% Confidence Interval or Mean	ower ound	4.00	
			pper ound	6.76	
		% Trimmed Mean		1.68	
		ledian		2.50	
		ariance		55,033	
		tandard Deviation		8,842	
		linimum		3	
		laximum		5	
		ange		2	
		nterquartile Range		7	
		kewness		751	93
		urtosis		61	68
	ontrol	lean		7.06	,712
		5% Confidence Interval or Mean	ower ound	1.55	
			pper ound	2.56	
		% Trimmed Mean		6.82	
		ledian		6.14	
		ariance		64,793	
		tandard Deviation		6,272	
		linimum			
		laximum		2	
		ange		2	
		nterquartile Range		4	
		kewness		39	93
		urtosis		562	68

Test Test (t)

The t-test is used to compare the means of two samples to determine whether there is a statistically significant difference between the two groups. So to test the data obtained, the Independent t-test formula is used. The independent t-test was used to determine the difference in means between two unrelated groups. The analysis results obtained data in Table 4.9 as follows:

Table 2. t-test

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
hasil_belajar	Equal variances assumed	.001	.975	8.490	70	.000	15.278	1.800	11.689	18.867
	Equal variances not assumed			8.490	69.973	.000	15.278	1.800	11.689	18.867

From the t-test results, it can be seen that t_{hitung}8.490 and t_{tabel}0.329 with a significance value of p of 0.000. Because t_{hitung}8.490 > t_{tabel}0.329, and a significance value of 0.000 < 0.05, these results indicate that there is a significant difference between the NHT learning model and the use of the *Kahoot application* , with the conventional learning model.

Hypothesis

In this study, a test sample was used to determine the significant positive influence of the NHT Learning Model and the Use of the *Kahoot Interactive Application* on Student Learning Outcomes in the Civics Subject of Class XI of SMA Negeri 2 Pematangsiantar, as can be seen in the following table:

Table 3. Hypothesis Testing

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	33.317	4.028		8.272	.000
	Eksperimen	.350	.060	.573	5.854	.000

a. Dependent Variable: Kontrol

Based on the table above, it can be seen that the significant value (2-tailed) is 0.000, namely 0.000 < 0.05, which proves that there is an influence of the Numbered Head Together learning model and the use of the Kahoot interactive application on student learning outcomes. If explained, it $H_a$is accepted H_0or rejected.

Discussion of Research Results

The discussion of this research was conducted at SMA Negeri 2 Pematangsiantar involving class XI-2 as a class that was not given treatment (control) and class XI-6 as a class that would be given treatment (experiment) of *the Numbered Head Together* (NHT) Learning Model and the Use of the *Kahoot Interactive Application*. This study was conducted to determine the effect of the Numbered Head Together learning model and the use of the interactive Kahoot application on the learning outcomes of class XI students in Citizenship Education lessons. The researcher chose NHT and the use of the Kahoot application because it can build good cooperation between students and other students,

and can encourage student activity in learning. (Downie et al., 2021) . In this learning model, the students dominate, while the teacher only acts as a facilitator (Perdana et al., 2020) .

In this study, in this process the researcher gave an initial test, namely *a pretest,* to students in class XI-2 to find out their learning outcomes, after that the researcher started the learning by explaining the learning material and conducting a final test, namely *a posttest* to students, where the control class did not use *the Numbered Head Together* (NHT) Learning Model and the Use of the *Kahoot Interactive Application* . The researcher then gave *a pretest* to students in class XI-6 as an *Experimental class* that used *the Numbered Head Together* (NHT) Learning Model and the Use of the *Kahoot Application* , after being given treatment the researcher gave *a posttest* to students (Lin et al., 2018) . Based on the results of the study regarding the comparison of statistical values, it shows that the number of samples is 72 people. The lowest *posttest* score for the control class was 50, the highest score was 75, and the average *posttest score* was 63.33 (Kohnke & Moorhouse, 2022) . Meanwhile, the lowest posttest score for the experimental class was 65, the highest score was 90, and the average posttest score was 80.83 .

After conducting research at SMA Negeri 2 Pematangsiantar, it was very clear that there were changes experienced by each student before and after the implementation of the NHT learning model and the use of the interactive *Kahoot application* , namely students who were less active became active, cooperation between students increased, students who did not understand became understanding which was evident in student learning outcomes, where learning outcomes are knowledge or abilities acquired by students after carrying out learning activities (Pintor Díaz, 2017) .

The results of the study show that the comparison of learning outcome categories shows that the frequency of the experimental posttest value with an average of 80.83 minimum value is 65 and the maximum is 90. So it can be said that after the use of the *Numbered Head Together learning model* and the use of *the Kahoot interactive application* , there are changes that occur in student learning outcomes, namely student learning outcomes are more improved than before the application of *the Numbered Head Together learning model and the use of the Kahoot* interactive application . The results obtained from the t-test using obtained that t_{hitung}8.490 t_{tabel}0.329 and Sig. (2-tailed) 0.000 < 0.05 .

From these results, it can be seen that Ha is accepted, meaning that there is an influence of the use of *the Numbered Head Together learning model* and the use of the interactive *Kahoot application* on student learning outcomes in the subject of Civics Education for class XI of SMA Negeri 2 Pematangsiantar (Basuki & Hidayati, 2019) . Based on the results of the study, it was found that *the Numbered Head Together* learning model and the use of the interactive *Kahoot application* on student learning outcomes can improve student learning outcomes in the subject of Civics Education

4. Conclusion

Based on the research results that the researcher has conducted, it can be concluded that there is an influence of the Numbered Head Together (NHT) model and the use of the interactive Kahoot application on student learning outcomes in the subject of Civics Education for class XI of SMA Negeri 2 Pematangsiantar in the 2025/2026 academic year. This is proven by the results of the hypothesis test using the t formula (t-

test). The results obtained were that H_0it was rejected and H_aaccepted with a significance value (2-tailed) of 0.000 ($p < 0.05$). This means that there is a difference between the scores before and after using the Numbered Head Together learning model and using the Kahoot interactive application.

It can be concluded in this study, the Numbered Head Together (NHT) model and the use of the interactive Kahoot application on student learning outcomes in the subject of Civics Education for class XI of SMA Negeri 2 Pematangsiantar. Learning models integrated with the use of interactive applications are one of the factors that can influence improving learning outcomes. Learning models can help teachers to achieve predetermined learning objectives.

Suggestion

Based on the research findings that have been conducted, the researcher can provide suggestions related to the NHT learning model and the use of the interactive Kahoot application which can influence student learning outcomes in the Civics subject for class XI of SMA Negeri 2 Pematangsiantar in the 2025/2026 academic year, namely:

1. For teachers, it is hoped that they will use creative learning models more often when teaching in class, especially Civic Education teachers, so that students do not get bored easily while learning is taking place.
2. For students, it is hoped that they will be more active in class, both in asking and answering questions given by the teacher.
3. For schools, schools should consider the NHT learning model and the use of the interactive Kahoot application as an appropriate model for implementing learning, to improve students' understanding and learning outcomes.
4. For Future Researchers: The results of this study can be used as a source of literature for developing further research. Future researchers can examine the effect of the duration and frequency of NHT and Kahoot use in learning to determine how long and how often these methods are effective.

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