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The Effect Of The Talking Stick Type Cooperative Learning Model On The Geography Learning Outcomes Of Grade XII Students Tembilahan 2nd High School

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ABSTRACT

This study aims to determine the effect of the Talking Stick learning model on the geography learning outcomes of class XII students of SMAN 2 Tembilahan. This type of research is quantitative with a quasi-experimental approach. The population of this study comprised all class XII students (N = 90), with the research sample consisting of class XII A (experimental; N = 30) and XII B (control; N = 30). The research instrument was a multiple-choice test. Before the test instrument was used in the research, a pretest was conducted to assess its quality and feasibility. The instrument test was conducted to determine the difficulty of the questions and the discriminative power. The data analysis techniques used in the study included the difference power test, difficulty level test, normality test, homogeneity test, t-test, and N-Gain test, using SPSS Version 20. From the results of data analysis on the effect of the application of the Talking Stick learning model on the Geography learning outcomes of class XII students of SMAN 2 Tembilahan, it can be concluded that the Geography learning outcomes of students in the Experimental class, which was taught using the Talking Stick learning model with a sample of 30 students had an average Posttest value of 80.22. With. The Geography learning outcomes of students in the control class, taught using the Conventional learning model with a sample of 30 students, had an average posttest score of 75.60. Based on the results of the t-test above, the results were obtained that t count> t Table, namely 4.697> 1.69 and a significance level <0.05, namely 0.000, so it can be concluded that the hypothesis H1 is accepted or H0 is rejected. It can be concluded that there is a significant difference between the experimental class using the Talking Stick learning model and the control class without the Talking Stick learning model.

Keywords: Learning outcomes, Learning model, Talking Stick

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INTRODUCTION

Education is a highly dynamic manifestation of human culture and a prerequisite for its Development. Therefore, developments in education should align with changes in cultural life. Education plays a crucial role in advancing human welfare and resources, including teaching and learning, both within and beyond schools. This statement aligns with the mandate of the 1945 Constitution, paragraph 4, which outlines the goals of education: to advance general welfare and enhance the nation's intelligence. Education enables individuals to develop cognitive patterns, determine the direction and purpose of their lives, address and resolve various challenges, and improve their standard of living (Kadi & Awwaliyah, 2017).

Learning is a necessity for every individual. Learning is a process and effort undertaken by each individual to achieve behavioral changes, whether in the form of knowledge, skills, attitudes, and positive values, derived from various materials studied (Wayong & Asnita, 2021). Learning aims

to shape a person to be better than before. Learning is a change in a person that can be expressed as the mastery of new response patterns, in the form of understanding, skills, and attitudes, resulting from experience (Suardi 2018). Meanwhile, learning is an effort that deliberately draws on teachers' professional knowledge to achieve curriculum objectives (Dimyati and Mudjiono 2015).

Problems often encountered after teaching and learning activities concern the evaluation of learning outcomes. Learning outcomes are the results obtained by students after the learning process, reflecting their understanding of the material taught (Purbiyanto & Rustiana, 2018). Learning outcomes are the experiences students or learners acquire after participating in learning activities. The experiences obtained include the cognitive domain, which refers to the student's ability to work through questions posed after participating in learning activities (Asriyanti & Janah, 2018). Many factors influence the success of the learning process, including the learning model. Selecting the right learning model can engage students and help them actively participate in the learning process, thereby effectively achieving learning objectives. A learning model is a conceptual framework that describes strategies for achieving specific learning objectives and serves as guidance for teachers in outlining and implementing learning activities (Mirdad, 2020). Based on the results of observations made by researchers regarding students' geography learning outcomes, this can be seen in the following Table;

Table 1.1: Daily Test Scores I in Geography Subject

Class	Students Who Complete	Students Who Did Not Finish	% Completion	
			Completed	Not Completed
XII Geography A	12	18	40%	40%
XII Geography B	14	16	47%	53%

Source: Teacher of SMA N 2 Tembilahan

Based on the data above, the average student exam score remains low and below the school's Minimum Completion Criteria (KKM) of 75. From the results of observations and discussions with colleagues in class XII Geography B SMA N 2 Tembilahan, the low student results in the learning process are caused by several factors, namely teacher factors consisting of: (1) the role of teachers who are still dominant in the learning process, (2) teachers still use the lecture method a lot, (3) the role of teachers is only as someone who transfers knowledge, while student factors are: (1) lazy to read (2) lazy to ask, (3) reluctant to answer questions from teachers, (4) embarrassed to express their opinions, (4) students come in and out of class, and (5) ignore the teacher when explaining the lesson. So this is what causes learning outcomes to be low.

To address this issue, teachers should implement a solution during class. Therefore, teaching and learning require specialized skills and expertise to foster a more active, creative, and innovative classroom environment, thereby preventing monotony, which negatively affects student comfort and makes it difficult for them to understand the material. Education is a crucial element in human life.

This can be supported by Constructivist Learning Theory, an educational theory that prioritizes the Development of learners' logical and conceptual understanding. One constructivist learning theory that stimulates the Development of student learning values is the Active Learning Approach. Therefore, a learning model that supports improving student learning outcomes is needed. One example is the Talking Stick learning model, a group learning method that uses a talking stick.

The Talking Stick learning model can quickly develop students' reading and understanding of lesson materials, encourage them to speak up and express their opinions, and strengthen their memory, thereby increasing students' cognitive abilities and leading to optimal learning outcomes (Wijayanto, 2019). The application of the Talking Stick learning model begins with the teacher's explanation of the primary material to be studied. Students are formed into small groups to discuss, study, and understand the lesson material. Then, using a stick or rolling it, students are asked to reflect on the material learned by answering the teacher's questions. The student holding the stick is the one who has the opportunity to answer the question (Effi, 2018).

METHOD

This research uses a quantitative approach. The research design used in this study is causal (cause-and-effect). Data are obtained from survey responses, in which questionnaires are distributed to participants. Causal research aims to determine the cause-and-effect relationship between the independent variable and the dependent variable (Sugiyono, 2018). The population in this study comprised all employees of the Agam Regency Land Office (n=70) and was sampled using a saturated sampling technique. A saturated sample is a sampling technique in which the entire population is used as the sample (Sugiyono, 2018). Based on the description above, the researcher treated the whole population of 70 people as the sample in this study. In this study, Structural Equation Modeling (SEM) was conducted using the Partial Least Squares (PLS) approach. PLS is a component-based approach to testing structural equation models (SEM). PLS is based on two iterative procedures that use least-squares estimation for single- and multi-component models. By applying the procedures, the algorithm aims to minimize the variance of all dependent variables; therefore, the causal relationships and directions among all variables must be clearly defined. PLS is divided into measurement models and structural models.

FINDING AND DISCUSSION

Findings

This study aims to analyze the extent to which the application of the Talking Stick model in geography learning influences the learning outcomes of class XII students. This study was conducted in class XII of SMAN 2 Tembilahan. The sample size in this study was 60, comprising 30 students in class XII A and 30 in class XII B. To calculate the average value for the experimental class, data were obtained for a class of 30 students; the learning outcomes for all students totaled 2560, and the average for the experimental class was 80.22. While the average for the control class of 30 students was 75.60, the learning outcomes for all students totaled 2380. Based on the research results, a t-test was conducted to evaluate the hypothesis. Before performing the t-test, conditional tests were first conducted, namely a normality test and a homogeneity test on the final test results.

Normality test was conducted on variables manually and using SPSS 20 for Windows program using the Kolmogorov-Smirnov test (Ks test) with the criteria of Kolmogorov-Smirnov Z Asymp. Sig. (2-tailed) 0.05, then the data come from a normally distributed population, as follows: Based on the results of the normality test for data from 30 respondents (experimental and control), the normality test was calculated, yielding the Asymp. Sig (2-tailed) value of the experiment 0.868> 0.05 and the control class 0.687> 0.05. The value of Asymp. Sig (2-tailed) obtained is greater than the price of □ = 0.05. Thus, H0 is rejected, and all data groups in this study are drawn from a normally distributed population, allowing them to be used in further testing of the research hypothesis. A homogeneity test was conducted on the variables using SPSS 20 for Windows, employing the Levene statistical test (Ls test). Based on the Levene statistical homogeneity test (Ls test) for the research variables above, the p-value was 0.083 > 0.05. The Levene statistical test (Ls test) yielded a value greater than □ = 0.05. Thus, it can be concluded that all data groups in this study were drawn from a homogeneous population; therefore, they can be used to continue testing the research hypothesis. Hypothesis testing is conducted to answer research questions that were previously conjectural. In

this study, the research hypotheses are divided into two: the null hypothesis (Ho) and the alternative hypothesis (Ha), as described below:

H_0 = accepted if sig > 0.05 and t count □ t Table means there is no significant difference in character between the experimental classes that use the learning model. Talking stick compared to the control class without using the Talking Stick Model.

Ha = accepted if sig < 0.05 and t-count □ t-table means there is $_a$ significant difference in character between the experimental classes that use the learning model talking stick compared to the control class without using the learning model talking stick.

After the homogeneity and normality tests, a t-test was conducted to assess whether the two groups differed significantly in their scores. The following illustrates the data processing using the t-test:

Table 1: Calculation Results Data with t-test Values of Experimental Class and Control Class

Independent Samples Test		t-test for Equality of Means						
		t	df	Sig. (2-tailed)	Mean Difference	Standard Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
RESULTS	Equal variances assumed	4,697	58	.000	18,433	3,924	10,577	26,289
	Equal variances not assumed	4,697	52,574	.000	18,433	3,924	10,560	26,306

As seen in the t-table for df 58 at a significance level of 0.05 , it is 1.69. Based on the results of the t-test above, it was found that t count > t table, namely 4.697 > 1.69, and a significance level < 0.05, namely 0.000, so it can be concluded that the hypothesis H1 $_{is}$ accepted or H0 $_{is}$ rejected. It can be concluded that there is a significant difference between the experimental class that uses the talking stick learning model compared to the control class without using the Talking Stick learning model .

Discussion

This research was conducTed as an effort to improve student learning outcomes and interpersonal Communication skills in Geography learning through the application of the talking-stick learning model. By using this model, students not only listen to the teacher's explanations but also play a more active role in the learning process.

The research results indicate that student learning outcomes increased from cycle to cycle. This shows an increase in student learning outcomes in Geography over each cycle of the talking-stick cooperative learning model. In this study, the researcher chose to apply the talking stick learning model because this model has several advantages, namely: 1) Testing student readiness in learning, 2) Training students to understand the material quickly, 3) Encouraging students to be more active in learning, because students never know when the stick will arrive, and 4) Students dare to express their opinions (Shoimin, 2014).

The talking-stick cooperative learning model encourages teachers to be creative in designing varied and innovative questions. The talking-stick learning model helps students understand the material more effectively. The talking-stick learning model engages students and challenges them to delve deeper into the material, enabling them to answer questions correctly both individually and in groups.

Trianto (2007:41) states that the purpose of forming groups is to provide opportunities for all students to be actively involved in the thinking process during learning activities.
Student learning outcomes in this action research are cognitive domain scores obtained by students, namely in the form of test scores for the Class. These evaluation scores were obtained following effective and efficient implementation of the talking-stick learning model. Research by Astuti (2017) indicates that student learning outcomes improve when the talking-stick learning model is supplemented with images. This is because the talking-stick model provides opportunities for students to demonstrate their abilities and to participate in learning. In addition, the advantages of learning with this model include developing students' readiness, improving reading skills, and enhancing their understanding of the material. It also encourages students to remain prepared in any situation.

The above description is also supported by Widiastuti (2021), who states that the talking stick method is a group learning model that uses a stick. The group holding the stick must first answer the teacher's questions after studying the primary material. This activity is repeated continuously until all groups have had a turn to answer the teacher's questions. Talking stick is a simple type of cooperative learning. In implementing the talking-stick model, the teacher divides the class into heterogeneous groups of five or six students. Groups form based on familiarity, intelligence, friendship, or shared interests.

In the study, students in the experimental class using the Talking Stick learning model were more motivated to learn; their attention was also more focused, which improved concentration during lessons. In applying this model, the teacher uses a stick, running it along the students' arms in turn. The last student holding the stick may answer questions posed by the teacher on the material being studied. Using this Talking Stick learning model, the teacher provides students with the opportunity to speak up and express their understanding in response to the teacher's questions. While students in the control class who were taught using conventional learning, namely, students listening to explanations by the teacher, then discussing and taking notes on the learning material discussed in the meeting, it was seen that there were students who were less focused on listening to the material explained by the teacher in front of the class.

CONCLUSIONS

From the results of data analysis on the effect of the application of the Talking Stick learning model on the Geography learning outcomes of class XII students of SMAN 2 Tembilahan, it can be concluded that the Geography learning outcomes of students in the Experimental class, which was taught using the Talking Stick learning model with a sample of 30 students had an average Posttest value of 80.22. With. The Geography learning outcomes of students in the control class, taught using the Conventional learning model with a sample of 30 students, had an average posttest score of 75.60. Based on the t-test results above, t t-statistic exceeds t t-critical value (4.697 > 1.69), and the significance level is < 0.05 (0.000), so H1 is accepted, and H0 is rejected. It can be concluded that there is a significant difference between the experimental class using the Talking Stick learning model and the control class without the Talking Stick learning model.

REFERENCES

Asriyanti, FD, & Janah, LA (2018). Learning style analysis from the perspective of student learning outcomes. Educational Sciences: Journal of Educational Theory and Practice Studies, 3(2), 183-187

Astuti, S. (2017). Improving Elementary School Teachers' Ability in Developing Attitude Domain Instruments Through In-House Training. Kelola Journal of Educational Management, Pages: 37-47.

Dimyati and Mudjiono. (2015). Learning and Teaching. Jakarta: Rineka Cipta

Effi. (2018). Educational Research Methodology. Yogyakarta: K-Media.

Kadi, T., & Awwaliyah, R. (2017). Educational innovation: Efforts to resolve academic problems in Indonesia. Jurnal Islam Nusantara, 1(2).

Mirdad, J. (2020). Learning models (four groups of learning models). Sakinah Journal, 2(1), 14-23.
Purbiyanto, R., & Rustiana, A. (2018). The influence of learning discipline, family environment, and learning motivation on student learning outcomes. Economic Education Analysis Journal, 7(1), 341-361
Shoimin, Aris. (2014). 68 INNOVATIVE Learning Models in the 2013 Curriculum. Yogyakarta: AR-RUZZ MEDIA
Suardi, Mch. (2018). Learning and Teaching. Yogyakarta: Deepublish.
Trianto. (2007). Innovative Constructivist-Oriented Learning Models. Jakarta: Prestasi Pustaka.
Wayong, M. (2021). Illustrating Learning and Teaching Conditions. Instruction: International Journal for Islamic Education, 1(1), 1-8
Wijayanto, RR (2019). The Effectiveness of Applying the Talking Stick Model on Learning Outcomes on the Theme of My Ambition. Elementary School Scientific Journal, 3(2), 184-191.