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The Mind Mapping Learning Model on Student Learning Outcomes Subtema 2 Togetherness in Diversity Class IV UPTD SD 122365 Pematang Siantar

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ABSTRACT

This study aims to determine the influence of the mind mapping learning model on student learning outcomes, subtheme 2, togetherness in diversity, class iv uptd sd 122365 pematang siantar. The method in this research is a quantitative experimental type method whose research design is pre-experimental, one group pretest-posttest type. The population and sample used was saturated sampling with a sample of 23 people with two research variables: the dependent variable (x) in the form of learning outcomes, and the independent variable (y) in the form of mind mapping learning . The data collection technique is the test technique. Test results using the T-test with the help of the SPSS version 21 program, based on calculation results obtained tcount = 23.182 with a significance level (2-tailed) 0.000, significant probability < 0.005, tcount> ttable = 23.182 > 2.069 then H o is rejected and Ha a is accepted. This explanation shows that there is an influence of the Mind Mapping Learning Model on the Learning Outcomes of Class IV Students, Subtheme 2, Togetherness in Diversity, SD Negeri 122365 Pematang Siantar.

INTRODUCTION

Education is defined as one of the most important efforts and keys to realizing the nation's ideals. Education plays a role in the development of a nation, namely creating a generation that is intelligent, broad-minded, qualified, skilled, competent in all fields and can make changes to the nation for the better. Therefore, to achieve educational goals, teachers need conscious efforts in the learning process and cooperation in all related fields to achieve educational goals.

Moh Surya (Siti Marifah, 2018: 32) learning is a process of effort carried out by an individual to obtain a completely new change in behavior, as a result of the individual's own experience in his interaction with the environment. Learning and teaching are two interrelated things, the teaching process of a teacher in student learning activities greatly influences student learning outcomes, therefore an effective learning process is needed to achieve student learning outcomes. To find out learning outcomes, a learning process is needed, of course there are obstacles in it, especially in thematic subjects, learning is one that links several subjects.

After observing the learning, it can be seen that the learning model used by the teacher is still conventional because teaching and learning activities are still teacher-centered which causes students to be less interested in the learning process. There are even some students who still don't respond to the teacher when given the opportunity to ask questions about things they don't understand in the lesson material and there are some students who sit at the back or in the middle who are less focused on the lesson in progress, apart from that there are also a number of students talking to their classmates about things outside the material.

The content of the Social Sciences (IPS) subject obtained information that the Minimum Completeness Criteria (KKM) in this subject is 70. Based on the monthly report card, there are 10 students whose grades are above the KKM (pass) and 13 students whose grades are below the KKM (not pass). This shows that the learning outcomes achieved by students are still low. The content of the Indonesian language subject was obtained by information that the Minimum Completeness Criteria (KKM) in this subject was 70. Based on the monthly report card, there were 9 students whose scores were above the KKM (passed) and 14 students whose scores were below the KKM (did not pass). This shows that the learning outcomes achieved by students are still low.

The application of *mind mapping* is taking creative and effective notes and mapping thoughts in an interesting and easy way. The use of mind mapping in learning is expected to be able to foster high interaction between teachers and students. And students are able to show their potential to the maximum by carrying out various learning activities which are demonstrated through various activities during the learning process. Learning activities demonstrated by students can form new knowledge and skills that can increase student activity in learning.

THEORETICAL FRAMEWORK

A conceptual framework is a relationship or connection between one concept and another concept of various problems to be researched. This conceptual framework is useful for connecting or explaining broadly a topic that will be discussed.

In learning activities teachers also need to change the way they teach, such as changing teaching methods, the media does not only focus on textbooks, involves students such as asking several questions to explain the material, as well as providing several questions or tests on student worksheets so as to make students more active.

To achieve student learning outcomes, the researcher first gave a pretest to class IV in the form of multiple choice questions to determine the student's initial abilities. Next, the researcher applied the mind mapping learning model to this class.

The steps used in mind mapping are, explaining the problems that arise during teaching and learning activities, solving problems, comparing and discussing answers. Next, the author gave a posttest with the same questions to determine the effect of the mind mapping model on student learning outcomes. After the writer got the students' pretest and posttest scores, the writer carried out data analysis to get conclusions.

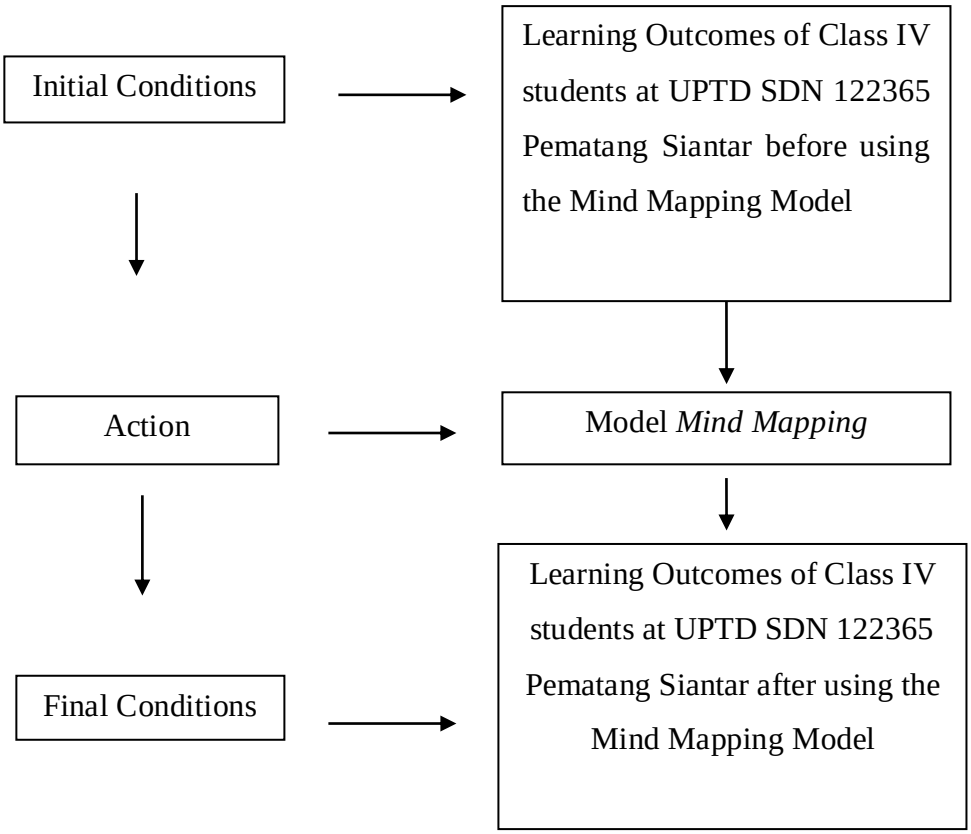

Figure 1 CONCEPTUAL FRAMEWORK

METHOD

The research used is quantitative research. With a pre-Experimental Design type. Where the researcher used a One-group Pretest-Posttest Design. Quantitative traditional methods, because this method has been used for a long time so it has become a tradition as a method for research. This method is also called a positivistic method because it is based on the philosophy of positivism . (Sugiyono: 20 21).

$O_1 X O_2$

Information:

O1 = Initial test (pretest) before using the mind mapping model
X = Mind mapping model treatment
O2 = Final test (posttest) after using the mind mapping model

The population in the research were all students at UPTD SD Negeri 122365 Pematang Siantar, and the sample taken by class IV students was 23 students. This research uses a test instrument in the form of multiple choices with the aim of measuring learning outcomes. Before it is used for data collection, the data testing stage uses validity testing, reliability testing, difficulty level testing, and differentiating data testing. In data analysis, the Normality Test, Homogeneity Test, and T-Test were used.

RESULTS AND DISCUSSION

Results

This research was carried out at SDN 122365 Pematang Siantar which is located at Jl. Ade Irma Suryani, North Siantar District, Pematang Siantar City, from 27 October to 09 October 2023. This research was conducted to find out how much influence the Mind Mapping Learning Model has on student learning outcomes.

Instrument Trial Results The research conducted a trial of the question instrument in class IV Negeri 094105 Panombeian, Panombeian Panei District, Simalungun Regency, on September 30 2023. There were 23 students who were given the trial. Trials were carried out to determine validity and reliability as well as test the level of difficulty and differentiability of questions.

1. Validity Test

Validity is a measure that shows the levels of validity of an instrument. For validity, it was carried out using SPSS Version 26 of 2023, a question item was said to be valid if the rcount > rtable value, with a significance level of 5% or 0.05. It can be seen that there are 20 valid questions, namely (question 1, question 2, question 3, question 4, question 5, question 6, question 7, question 8, question 9, question 10, question 11, question 13, question 14, question 15, question 19, question 20, question 21, question 22, question 27, question 29). Valid questions can be used for the next test.

2. Reliability Test

It can be seen that the Cronbach's Alpha value obtained is 0.843, then this value is compared with the reliability coefficient criteria, namely if the Cronbach's Alpha value is > 0.7 then the questions are said to be reliable, so it can be concluded that 0.843 > 0.7, so the questions on this test instrument are very reliable.

3. Difficulty Level Test

shows that the 30 questions tested were classified as easy, 12 questions, namely (question 1, question 2, question 3, question 4, question 5, question 6, question 7, question 8), 17 questions with a moderate level of difficulty. questions namely (question 9, question 10, question 11, question 13, question 17, question 18, question 19, question 20, question 21, question 22, question 24, question 25, question 26, question 27, question 28, question 29 , questions, 30) and 1 question item with a difficult level of difficulty, namely (question 11).

4. Differentiating Power Test

there are 8 items categorized as good, namely (question 1, question 2, question 3, question 4, question 5, question 6, question 7, question 8, question 9, question 10, question 11), categorized as sufficient, there are 2 items saol namely (question 27, question 29), categorized as bad (question 12, question 16, question 17, question 23, question 24, question 25, question 26, question 28), categorized as very bad as 2 (question 18, question 30 no can be used in pretest posttest).

DATA ANALYSIS

1. Normality Test

The normality test is carried out to determine whether the pretest and posttest of the sample are normally distributed or not. Normality test results using the Kolmogrov-Smirnov method in the SPSS Version 26 program

Table 1 normality test

Tests of Normality

			Kolmogorov-Smirnov [a]			Shapiro-Wilk		
Class	Statistics	Df	Sig.	Statistics	Df	Sig.		
Student learning outcomes	Pretest	,159	23	.136	,938	23	,161	
	Posttest	.173	23	.073	,947	23	,255	

a. Lilliefors Significance Correction

Based on the table above in the output of the one sample Kolmogrov-Smirvow test, it can be seen that there were 23 students. Sig (2-Tailed) shows the pretest value in the normality test, namely 0.136. Meanwhile, the posttest value for the normity test is 0.073. If the probability is >0.05, it means the data is said to be normal.

2. Uji Homogenitas

Tabel 2 uji homogenitas

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Hasil Belajar siswa	Based on Mean	.159	1	44	.692
	Based on Median	.240	1	44	.627
	Based on Median and with adjusted df	.240	1	43.969	.627
	Based on trimmed mean	.153	1	44	.698

Based on the results of the homogeneity test above, it can be seen that the significance value for the homogeneity test is 0.692. The significance criterion is > 0.05 , so it can be concluded that the pretest and posttest scores have the same homogeneous variance.

3. Hypothesis Test (T-Test)

Table 3 t test

Paired Samples Test

		Paired Differences					Q	Df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Student Learning Outcomes – Class	66,543	19,468	2,870	60,762	72,325	23,182	45	,000

Based on table 4.11. above, tcount = 23,182 with a significance level (2-tailed) 0.000, significant probability < 0.005, tcount> ttable = 23.182 > 2.069, so Ho is rejected and Ha is accepted. This explanation shows that there is an influence of the Mind

Mapping Learning Model on the Learning Outcomes of Class IV Students, Subtheme 2, Togetherness in Diversity, SD Negeri 122365 Pematang Siantar.

DISCUSSION

This research was carried out in class IV at SDN 122365 Pematang Siantar in the 2023/2024 academic year from September 27 to October 9 2023. The population used was all class IV students at SDN 122365 Pematang Siantar with a sample of 23 class IV students.

In this section, the results found in the research that have been carried out will be described. The intended results are conclusions drawn based on the data collected and data analysis that has been carried out. This research aims to determine the influence of the Mind Mapping Learning Model on the Learning Outcomes of Class IV Students, Subtheme 2, Togetherness in Diversity, Pematang Siantar, as many as 23 people. Before carrying out the research, first carry out a trial of the instrument at the same level with a different school, namely at SDN 094105 Panombeian. This trial was carried out in order to determine the number of questions out of 30 questions that would be tested in multiple choice form, namely 20 questions.

Based on the pretest results, the average student learning outcome score was 50 with all students scoring below the KKM. Looking at the existing percentages, it can be said that the level of student learning outcomes before using the mind mapping learning model was relatively low. Furthermore, the average value of the posttest results was 86.08. So after using the mind mapping learning model, learning outcomes are better than before using the mind mapping learning model. After carrying out the pretest and posttest normality tests, a homogeneity test was carried out. Based on the homogeneity test, a significant value of 0.692 was obtained. Based on the criteria that have been determined, if the sig value is> 0.05, it is said to have homogeneous variation. In this case it can be seen that 0.692 > 0.05. So it can be concluded that the data has the same characteristics or is homogeneous.

After the normality test and homogeneity test have been fulfilled, proceed to hypothesis testing. From the student test results, tcount was 23.182 and ttable was 2.069. Thus, tcount > ttable= 23.182 > 2.069, which means that HO is rejected and Ha is accepted, which indicates that there is an influence of the Mind Mapping Learning Model on the Learning Outcomes of Class IV Students, Subtheme 2, Togetherness in Diversity, SD Negeri 122356 Pematang Siantar for the 2023/2024 Academic Year.

The findings of this research are in line with previous research conducted by Nela Adriani Tuto, et al (2020), testing a correlation coefficient of 3.480, meaning rcount (3.480) ≥ rtable (1.70), Amanda Octavianingrum, et al (2019) obtained a t test of 2.445 > t table 2.064 with a significance of 0.022 < 0.05, then HO is rejected and Ha is accepted, and Rahmi Nazlah, et al (2019) obtained t count = 17,947 and t table list = 1.686, so t count ≥ t table (17.947 ≥ 1.686) so that Ha accepted and Ho rejected. Meanwhile, in this research, the use of the mind mapping model has an effect on student learning outcomes because Ho is rejected while Ha is accepted, which shows that tcount > ttable 23.182 > 2.069.

This model is considered quite good in learning, especially for children because this model helps students to understand the material by making concept maps where this model teaches learning while drawing concept maps. Students like coloring concept maps which makes students not easily bored in learning. Based on the explanation above, it can be concluded that the mind mapping model has a significant effect on the learning outcomes of fourth grade students in elementary school seen

from the percentage between pre-test and post-test scores and is supported by relevant theories.

CONCLUSION

Based on the results of research conducted on class IV students at SDN 122365 Pematang Siantar for the 2023/2024 academic year. The data obtained can be concluded that in general the use of the mind mapping model has a great influence on the learning outcomes of class IV students at SDN 122365 Pematang Siantar. The increase in learning outcomes can be seen from the increase in student learning outcomes which were initially measured before going through the learning process through a pretest average of 50. After going through the learning process using the mind mapping learning model, another posttest was given to determine the students' final abilities, the average score increased to 86 .08.

Based on hypothesis testing with a significance level = 0.05 and t table of 2.069. Thus tcount > ttable 23.182 > 2.069, it can be concluded that the influence of the mind mapping learning model on the learning outcomes of class IV students in subtheme 2 is the beauty of togetherness at SDN 122365 Pematang Siantar. So, based on the results of the hypothesis test, HO is rejected and Ha is accepted, which indicates that there is an influence of the mind mapping learning model on the learning outcomes of class IV students, subtheme 2, the beauty of togetherness in diversity at SDN 122365 Pematang Siantar.

ADVANCED LESSONS

The data from the research shows that the influence of the mind mapping learning model on the learning outcomes of class IV students with subtheme 2 togetherness in diversity at SDN 122365 Pematang Siantar for the 2023/2024 academic year, the researcher provides the following suggestions:

1. For students, they can use the mind mapping learning model in this research as a way to develop students' abilities.
2. For teachers, they can use the mind mapping learning model in this research as an alternative way of learning to improve student learning outcomes.
3. For researchers, they can apply this model in learning as an effort to improve student learning outcomes when they become teachers.
4. For schools, they can improve the model in this research on different materials or lessons.

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