



The Influence of The Jigsaw Model on The Learning Outcomes of Class V Tema 1 Subtema 1 SD 091254 Batu Onom T.A 2023/2024

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ABSTRACT

The aim of this research is to find out whether the Jigsaw model has an effect on the learning outcomes of class V students in theme 1 subtheme 1 at SD Negeri 091254 Batu Onom. There are 2 hypotheses in this research, namely (1) there is an influence on the learning outcomes of class V students in theme 1 Subtheme 1 at SD Negeri 091254 Batu Onom (H_a) and (2) there is no influence of the jigsaw model on the learning outcomes of class V students in theme 1 subtheme 1 at State Elementary School 091254 Batu Onom(H₀). This research method is an experimental method with a Pre-Experiment Design type of research according to the number of samples to be studied. The research design used was a one-group pretest-posttest design which only involved one class, namely the experimental class without a comparison class. The population of this study was 30 grade IV students at State Elementary School 091254 Batu Onom. Data collection was carried out using text techniques, observation, documentation. Then, the total pretest score in the experimental class was obtained, namely with an average score of 48.16 and posttest 89.5. So it can be concluded that there is an influence of the Jigsaw model on the learning outcomes of class V students in theme 1 subtheme 1 at SD Negeri 091254 Batu Onom. This H_a is accepted and H₀ is rejected

INTRODUCTION

Educational problems are always an interesting topic to discuss and find solutions for. Among the various problems that exist, the problem of learning outcomes is a very interesting topic and is never discussed in the world of education because learning outcomes are an indicator of the success of the teaching process applied to students in particular and also an indicator for assessing the quality of the education system implemented in general. Before learning is carried out in the classroom, it is necessary to plan the implementation of the learning before the teaching and learning process is carried out, such as including preliminary activities, core activities and closing activities.

Teachers develop knowledge and skills and innovate the management of learning so that students do not get bored and are always motivated and interested in participating in the learning process.

The learning process of the 2013 Curriculum provides opportunities for students to develop their potential into abilities that increasingly increase in attitudes (spiritual and social), knowledge and skills that are needed for life and society, as a nation, as well as contributing to the welfare of human life. The learning concept of the 2013 Curriculum aims at the process of developing students into individuals and citizens who are faithful, productive, creative, innovative and affective, and able to contribute to the life of the nation and state and world civilization as a result of education that takes place in schools, families and communities, The development of the 2013 Curriculum requires various educational challenges, both internal and external, in facing the demands of the times, there is a need to refine mindsets and strengthen curriculum governance as well as deepening and expanding the material.

In practice, teachers still use monotonous learning methods such as lectures and which are centered on the teacher, some students even become sleepy while following the ongoing learning process. Many students' activities are still just listening to the teacher and taking notes on what is in their textbooks. Students are increasingly less motivated to participate in the learning process, and no students even want to ask questions after completing the learning process.

Seeing the low completion of learning outcomes with data on monthly test scores for science subjects with a KKM of 70, only 13% of students completed, 17% of students did not complete and for Indonesian language subjects with a KKM of 70, only 10% of students completed and 30% of students did not finish. For this reason, it is necessary to apply the *Jigsaw model*.

Jigsaw learning model is a variation of the cooperative learning model consisting of several group members, who are responsible for mastering the learning material and are able to teach that part to other members in their group. This learning model is implemented by forming small groups consisting of 4-6 students. where each member contributes information, ideas, attitudes, opinions, abilities and skills to jointly improve the understanding of all members. They must also work together in positive interdependence and be responsible for the completeness of the subject matter that must be studied and be able to convey the material. to other group members .

Jigsaw Model is learning that directly involves students in understanding the material and improving thinking and linking this learning to everyday life which can improve student learning outcomes. Especially in learning 'Animal Movement Organs' in class V of SD Negeri 091254 Batu Onom. T.A 2023/2024

THEORETICAL REVIEW

The conceptual framework is the relationship between one concept and another of the problem to be studied, so a conceptual framework can be prepared for the influence of the Jigsaw Model on the Learning Outcomes of Class V Students at State Elementary School 091254 Batu onom.T.A 2023/2024. The efforts that can be made to overcome some of the problems that have been found are implementing the Jigsaw learning model . This learning model prioritizes activities that involve interaction between students in study groups. Students are encouraged to help each other in studying academic material or in carrying out group assignments because the success of the group depends on the individual learning of all group members so that with this Jigsaw learning model it is hoped that increase student activity and foster student enthusiasm and interest as well as improve student learning outcomes in thematic learning theme 1 subtheme 1 SD Ngeri 091254 Batu Onom .

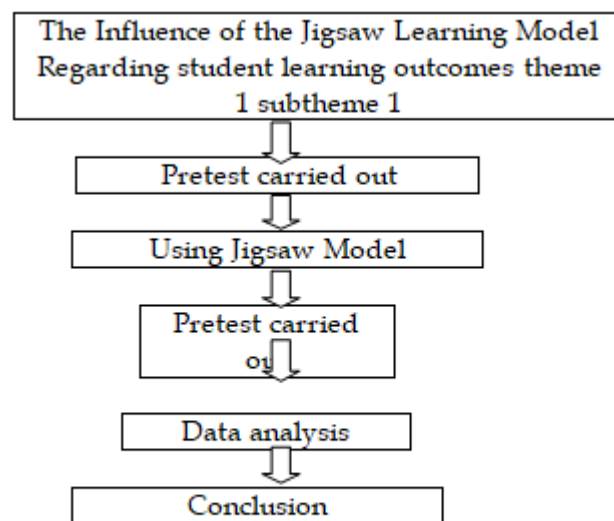


Figure 1. Conceptual Framework

METHODS

The research used is quantitative research. With a pre-Experimental Design type. Where the researcher used a One-group Pretest-Posttest Design . In research, the results of the treatment will be known more accurately because you can compare the conditions before the treatment was given. (Sugiyono: 2018).



Figure 1 One-Group Pretest-Posttest Design

Information:

O 1 = pretest score

O 2 = posttest score

X = treatment given

The population in the research were all students at UPTD SD Negeri 122337 Pematang Siantar, and the sample taken by class V students was 30 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.

RESULTS & DISCUSSION

In this research, instrument testing was carried out on class V students at SD Negeri 091254 Batu Onom, totaling 30 students. The instruments in this research include multiple choice tests to measure student learning outcomes. The instrument trial results data consists of 30 questions. Before conducting research, a validity test, reliability test, level of difficulty test, and discrimination test are first carried out.

Test instrument

1. Validity test

An instrument is said to be valid if $r_{count} > r_{table}$ and if it is not valid then $r_{table} > r_{count}$ of 30 questions. After testing the instrument at another school, there were 20 valid questions and 10 invalid questions, so that what was distributed were questions with a total of 20 valid statements.

2. Reliability Test

The question reliability test aims to see the accuracy of the tool in assessing what it assesses. Based on the results of the validation calculations that have been carried out, reliability calculations are then carried out on the 20 question instrument. Calculation of the reliability of the formula discovered by Kuder Ricahardson with the overall reliability stated. Because the calculated $r > r_{table}$, the question as a whole is declared reliable, because the calculated r is $0.856 > 0.36$.

3. Test Difficulty Level

The difficulty level test is carried out to see the level of difficulty of each question that has been distributed and determine whether the question is too easy or too difficult. that question category. , There are 2 questions, namely (question 2 and question 26), 27 questions with a medium level of difficulty, namely (question 1, question 3, question 4, question 5, question 6, question 7, question 8, question 9 , question 10, question 11 question12, question 13, question 14, question 15, question 16, question 17, question 18, question 19, question 20, question 21, question 22, question 23, question 24, question 25, question 26 , question 27, question 28, question 29,) and the question item with a difficult level of difficulty is 1 question, namely (question 30)

4. Discriminating Power Test

The test is carried out by computing the coefficient between the scale score distribution itself, which has a very good classification of differentiating power of questions, namely (question 2, question 4, question 5, question 9, question 10, question 11, question 12, question 13, question 14, question 15, question 16, question 17, question 18, question 19, question 20, question 21, question 22, question 24, question 28) categorized as good, there are 3 questions, namely (question 11, question 26, and question 30) categorized as good, there are 9 questions, namely (question 1, question 3, question 6, question 7, question 8, question, question 23, question 25, question 29,) and has 3 very good categories, namely (question 7, question 14 and question 17)

Data analysis

5. Normality test

The data normality test for the experimental class was carried out to test whether the pre-test and post-test data were normally distributed or not. The condition in this test is that if the sig level is > 0.05 then the data is said to be normally distributed. The normality test is carried out with the help of the SPSS program and can be determined using the Kolmogrov-Simirno v test. The table below is a normality test. :

Table 1 Normality Test

Table 1. Normality Test

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistics	Df	Sig.	Statistics	df	Sig.
Pretest	,142	30	.127	,954	30	,218
Posttest	,170	30	,027	,929	30	,047

a. Lilliefors Significance Correction

Based on the table above, it can be seen that the value (Mean) in the trial class shows that the effectiveness of student learning outcomes is 0.6726. It can be concluded that the effectiveness is $0.7 > 0.6726 > 0.3$, which means the results are in the medium category .

6. Hypothesis testing

Hypothesis testing (t test) was carried out to determine the positive and significant influence between the use of the Jigsaw learning model and learning outcomes. Guidelines for making decisions in the paired sample t test based on the significance value (sig) as follows:

- a) If the significance value (2-tailed) <0.005, then Ho is rejected and Ha is accepted.
- b) If the significant value (2-tailed) is > 0.005, then Ho is accepted and Ha is rejected.

Table 2 Anova test
Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pretest - Posttest	35.66667	7.15991	1.30722	38.34022	32.99311	27,284	29	,000

Based on the table above, it can be seen that the results of the pretest and posttest comparison have a sig value of 0.000, which means it is smaller than the value of 0.05 and t has a value of 27.284. This means that there is an influence of the Jigsaw model on learning outcomes.

Discussion

Based on the test results that have been described, there is a significant influence on the use of the Jigsaw learning model on student learning outcomes for subtheme 1 Animal and human movement organs at SD Negeri 091254 Batu Onom. In this research, researchers used a type of experiment using a One Group Pretest-Posttest Design research design. In this research, the researcher first conducted a trial of the instrument before giving it to the experimental class to be studied. The questions whose validity was tested were 30 questions. After testing, you can find out whether the questions are valid or invalid. There are 10 invalid questions. Then valid questions will be given to the experimental class with a total of 20 questions for class V, totaling 30 students. The multiple choice questions test includes a pre-test and post-test which will be tested on class V.

Pretest and posttest questions for class V of SD Negeri 091254 Batu Onom with a total of 30 students. Before being given treatment, the results of the pretest multiple choice questions showed that the average score was 48.16 before using the jigsaw learning model . Meanwhile, the posttest multiple choice questions had an average score of 89.5 after using the jigsaw learning model. Examiners also carry out data analysis requirements tests including, normality test, homogeneity test, and t test to determine the results of the analysis requirements test, research using SPSS22 For Windows.

The normality test on the SPSS 25.0 results showed that the significance value of the pretest results from Kolmogorov-Smirnov was 0.166 while the posttest from Kolmogorov-Smirnov was 0.098. So it can be concluded that in the experimental class the results were significant > 0.05 so that the normality test had a normal distribution shows that the significant value is $0.367 > 0.05$, so it can be concluded that the Pretst and Posttest are homogeneous or have the same variance. After testing the data analysis requirements, the researcher finally carried out a hypothesis test, namely the t test. The hypothesis test was used to determine the effect of the jigsaw learning model (x) on student learning outcomes (Y) by comparing the calculated t number with the t table . Based on table 12, it can be seen that the results of the pretest and posttest comparison have a sig value of 0.000, which means it is smaller than the value of 0.05 and the t value has a value of -33.918. Artinta can be influenced by the Jigsaw Learning Model.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Based on the results of the data presented in the previous section, the researcher concluded that the student learning outcomes before being given treatment, all students still had not reached the KKM, namely 20 students (100%) and after being given treatment, student learning outcomes increased, namely 20 students (100%) has a value above the KKM and is based on the results of hypothesis testing with a significance level = 0.05 and a t table of 2.093, a calculated t of 27.284. Thus, $t_{count} > t_{table}$ $27.284 > 2.093$), it can be concluded that there is an influence of the Jigsaw learning model on the learning outcomes of Subtheme 1 Animal and Human Movement Organs of class V students at SD Negeri 091254 Batu Onom.

So, based on the Hypothesis test, H_0 is rejected, H_a is accepted, which indicates that there is a significant influence of the Jigsaw Model on learning outcomes in subtheme 1 Animal and Human Movement Organs, class V, SD Negeri 091254 Batu Onom.

Recommendations

Based on the research results obtained by the author, the research can put forward several suggestions as follows.

1. To educators, especially teachers at SD Negeri 091254. Batu Onom, to be able to develop learning models in the ongoing learning process by making the Jigsaw model an alternative choice to be applied in learning strategies in schools.
2. Researchers are aware of the lack of student learning outcomes regarding learning in the world of education so that in its implementation it still requires attention and supervision by teachers in schools.
3. Researchers should be expected to be able to develop this research by studying the Jigsaw model in more detail and in greater depth.

4. To the students of SD Neferi 091254 Batu Onom to be more enthusiastic in learning and train themselves to adapt to each new learning model in order to create a comfortable, engaging and enjoyable learning atmosphere.

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