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THE EFFECT OF PICTURE AND PICTURE MODELS ON LEARNING RESULTS COMPARING IN NUMBERS CLASS II STUDENTS OF SDN 101 KOTA UTARA THE CITY OF GORONTALO

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ABSTRACT
The purpose of this study is to determine the effect of using the picture and picture model on student learning outcomes in comparing whole numbers in grade II students of SDN 101 Kota Utara Kota Gorontalo. This type of research is quantitative descriptive research design with pre-experimental design, one group pretest posttest design. Sampling was done by saturated sampling where the sample was taken based on the entire population used. So that the sample in this study were all students of class II as many as 23 students. The data collection technique is done with the prerequisite ice: validity test, reliability test, normality test and hypothesis testing using tests.
The results showed the average value before using the Picture and Picture model was 42.75 and after using the Picture and Picture model was 67.03. This is shown by the results of the t test, it is obtained tcount = 7,712 and ttable = 2,074 means tcount> ttable, H0 is rejected and Ha is accepted. Thus it is concluded that there is an effect of the use of the picture and picture model on student learning outcomes in comparing whole numbers in class II SDN 101 Kota Utara Kota Gorontalo.

KEYWORDS: picture and picture model, learning outcomes, comparing, whole numbers.

INTRODUCTION
Learning mathematics is one of the basic sciences that is applied at the elementary school level (SD). Mathematics needs to be given so that students are able to solve problems such as solving calculations, comparisons and equations. Besides that, learning mathematics in elementary school will determine the success of students at the next level of education.
To determine the success of students at the next level is that they have been able to solve problems or problems as intended above such as comparisons. This is due to the lack of student attention during the learning process. So that students see that learning mathematics is a subject that is so difficult, boring, and scary that it causes students to not actively learn mathematics.
Besides the importance of learning mathematics in elementary school. In fact, in the field there are 15 students who do not like learning mathematics, especially the second grade students of SDN 101 Kota Utara Kota Gorontalo.
In the process of implementing mathematics learning, especially in the material comparing whole numbers, the learning is still abstract, causing some students to not be able to determine the use of comparison symbols appropriately and determine which numbers are said to have a greater, smaller number, and numbers that have the same number. So that in learning to compare counted numbers children need to be assisted by the use of appropriate learning models to be able to help students understand the lessons given in order to attract students' attention during learning.
Based on the results of preliminary observations made by researchers in the field, it was found that when the learning process was taking place, especially in the material comparing whole numbers, students experienced difficulties in determining the comparison and when learning took place, the material presented did not attract students' attention and caused some students to feel bored, resulting in a lack of mastery of the material that students have. This is because students pay less attention to what is explained by the teacher and they prefer to tell stories with peers, sleep, eat without the teacher's knowledge, and there is even one student who likes

to disturb his classmate who is studying. So when the teacher gives the evaluation the student cannot answer it and during the evaluation process they prefer to be silent and some even choose to regret the answer from their friend. So that the learning outcomes of these students are classified as low.

The learning outcomes that are owned are below the expected completeness value. because of the total number of 23 in total there are 15 students who still experience learning difficulties and that is the main factor for the low learning outcomes of students. It is known that the value of KKM = 65. Therefore, in learning mathematics, especially in comparing whole numbers in class II SDN 101 Kota Utara Kota Gorontalo. It would be best done by applying the use of an attractive learning model in order to be able to foster student interest and motivation in the learning process to compare whole numbers.

The picture and picture learning model is carried out by using the media of pictures which are the main factors in the learning process, the image media to be used are prepared before learning. In doing the picture and picture learning model students are required to be responsible for everything that is done by their respective groups and by using the picture and picture model students find it easier to compare whole numbers using the pictures provided and students are able to determine and compare which ones numbers that are said has a larger number, a smaller number, and a number that has the same number.

Based on this description, the researcher took the title "The Effect of Picture and Picture Model on Learning Outcomes Comparing Count Numbers in Class II Students of SDN 101 Kota Utara Kota Gorontalo".

Definition of Whole Numbers

A whole number is a number consisting of the set of numbers 0 (Zero) and the set of natural numbers. The set of whole numbers consists of {0, 1, 2, 3, 4, 5,…} and the set of natural numbers consists of {1, 2, 3, 4, 5 ...}. The set of whole numbers consists of all the set of natural numbers plus 0, this number is denoted by the letter C which means count, Sutan (2015: 06). The set of whole numbers is a cardinal number, the set of whole numbers is a set of positive numbers starting from 0 to infinity, Prastowo (2014: 11).

According to Ariani (2008: 2) number is a unit of quantity used to describe a certain amount of an object. Meanwhile, the set of whole numbers is the closest relative to the set of natural numbers, and the difference is only in zeros which are only owned by the set of whole numbers. According to Saputra (2009: 2) before getting to know the set of whole numbers humans used certain objects to show the symbols of numbers, numbers are usually written using the symbol of numbers which are described in written form, namely in the form of numbers.

Understanding Learning and Learning Outcomes

According to the law in the book Rahmat (2015: 02) defines learning as a relatively permanent change that occurs in all kinds / overall behavior of an organism as a result of observations. Learning is a change in a person's behavior towards a situation caused by repeated experiences.

According to Suprijono in the book Thobroni (2016: 20) learning outcomes are a learning activity related to patterns of actions, values, understandings, attitudes, appreciation, and skills. According to Bloom in the book Thobroni (2016: 21) learning outcomes include three aspects of knowledge, namely cognitive, affective, and psychomotor knowledge. As for cognitive knowledge, namely in the form of knowledge and values, affective in the form of attitudes and behavior, while psychomotor is in the form of skills.

Definition of Picture and Picture Model

Picture and picture learning model is a cooperative learning model using media in the form of pictures related to the material to be taught. In this picture and picture model, students are divided into several small groups and indirectly the students are invited to be able to interact with their group of friends in solving existing problems. This model emphasizes the activeness of the students themselves and students get new, different knowledge and information and always attracts interest from students to follow it, Kurniansih (2015: 44)

This learning model uses image media which is the main factor in the learning process, the image media to be used are prepared before learning. In doing this model students are required to be responsible for everything that is done by the group. In these groups students equate their perceptions of the pictures shown by the teacher so that each group has the same goal. In this learning, students must divide their duties and responsibilities into groups, and can provide evaluation to each group, Kurniansih (2015: 44-45).

RESEARCH METHODS

This type of research is a quantitative descriptive study using a pre-experimental design "One Group Pretest - Postest Desigsn." and in this study using only 1 experimental class (Picture and Picture Model) which was given 2 different treatments, namely pretest O1 (before using the picture and picture model) and postest O2 (after using the picture and picture model). The population that will be used by the researcher is all grade II students of SDN 101 Kecamatan Kota Utara Kota Gorontalo with a total population of 23 students. In the sampling technique using saturated sampling where the sampling technique is all the population is used as the sample. Data collection techniques in this study used observation, tests, and documentation.

The research instrument used by the researcher was an objective test. The testing instruments used in this study were field validity. This data normality test is conducted to determine whether the data distribution is normally distributed or not. In this study, the normality test used was the Liliefors test.

Testing the research hypothesis using the t test. This test is conducted to determine whether the results of this study are in accordance with the proposed hypothesis or not. The test criteria are as follows:

1. The hypotheses are converted into pairs of statistical hypotheses as follows:

The statistical hypotheses to be tested in this study are as follows:

H0: $\rho = 0$ (There is no effect of using the picture and picture learning model on student learning outcomes in comparing whole numbers in class II SDN 101 Kecamtan Kota Utara Kota Gorontalo).

Ha: $\rho \neq 0$ (There is an effect of using the picture and picture learning model on student learning outcomes in comparing whole numbers in grade II SDN 101 Kecamtan Kota Utara Kota Gorontalo).

2. Hypothesis testing

The hypothesis is tested using the t test formula, as follows:

$$t = \frac{Md}{\sqrt{\frac{\Sigma X^2 d}{N\,(N-1)}}}$$

(Arikunto, 2014:349)

Information:

Md = Mean of difference between pretest and posttest

xd = Deviation of each subject (d-Md)

ΣX ^ 2 d = Sum of squares of deviations

N = Subject in the sample

d.b. = Determined by N-1

With the test criteria:

The hypothesis is tested with levels α - 5 and db = n-1

H0 is accepted if tcount ≤ ttable Ha is rejected, it means that the result is not significant.

H0 is rejected if tcount ≥ ttable Ha is accepted, it means that the result is convincing or significant.

DISCUSSION OF RESEARCH RESULTS

This research was conducted with the aim of knowing the effect of using the Picture and Picture model in comparing whole numbers in grade II students of SDN 101 Kota Utara Kota Gorontalo. The number of samples used in this study were 23 students who were in one class with the research design used was one group pretest-posttest design.

In comparing whole numbers it is measured using a test instrument. To be able to determine the validity and reliability of the instrument, an instrument trial was conducted on the second grade students of SDN 84 Kota Tengah Kota Gorontalo. In the test validity test of the 20 question numbers tested, there were 12 valid numbers and 8 invalid numbers. While the reliability test obtained r 0.69 which means the test instrument is reliable.

The research was conducted twice, namely the pretest research where the researcher did the learning without using the Picture and Picture model and posttest research conducted using the Picture and Picture model. In the pretest research, the results were obtained with the lowest score of 8 and the highest score of 67. While the posttest data, the lowest score was 42 and the highest score was 100. In processing the pretest and posttest data, the researcher used descriptive statistical data analysis techniques. Based on the data analysis technique,

the pretest average value was 41.67 and the standard deviation was 11.91. While the posttest data obtained an average value of 67.03 and a standard deviation of 16.725. The difference in the mean score of students and the standard deviation between the pretest and posttest was influenced by the use of the Picture and Pictur learning model. Based on data processing carried out to test the hypothesis, the research carried out obtained significant results with an error level of $\alpha = 0.05$ and db (n-1) so that tcount $\geq$ ttable, (tcount = 7.712 and ttable = 2.074) then H0 is rejected and Ha be accepted.
So it can be concluded that there is an effect of using the Picture and Picture model on learning outcomes in comparing counted numbers in grade II students of SDN 101 Kota Utara Kota Gorontalo.

CONCLUSION

In comparing whole numbers it is measured using a test instrument. To be able to determine the validity and reliability of the instrument, an instrument trial was conducted on the second grade students of SDN 84 Kota Tengah Kota Gorontalo. In the test validity test of the 20 question numbers tested, there were 12 valid numbers and 8 invalid numbers. While the reliability test obtained r 0.69 which means the test instrument is reliable.
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SUGGESTION

From the conclusions that have been described, the suggestions are:
1. For students, the picture and picture learning model can become a student's need in comparing whole numbers.
2. For teachers, teachers should use the picture and picture learning model especially in the material comparing whole numbers,
3. For schools, the picture and picture learning model is used as a model in learning to compare whole numbers so that it can improve student learning outcomes.
4. For researchers, the picture and picture learning model is used as reference material for advanced researchers to be applied to other materials and subjects.

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