

INCREASING THE ABILITY TO CONVERT FRACTIONS TO PERCENT AND DECIMAL FORM WITH THE PLAYING METHOD OF THE V STUDENTS OF CLASS V SDN PERSIL

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Article Info

Article history:

Received: 11-05-2022

Revised: 15-05-2022

Published: 31-05-2022

Keywords:

Decimal

Fraction

Percent

ABSTRACT

The objectives of this research are: (1) to reveal the ability to convert fractions into percent and decimal forms and vice versa with the play method; (2) to reveal an increase in the ability to convert fractions into percent and decimal forms and vice versa by applying the playing method. This research is a qualitative research with the type of Classroom Action Research (CAR). Data was collected using the test method to collect data on student abilities and observation sheets were used to measure the effectiveness of the teaching and learning process. Based on the research results, the application of the play method can optimize teacher participation, student participation and the ability to convert fractions into percent and decimal forms and vice versa. The results of the ability to convert fractions into percent and decimal and vice versa in the first cycle reached 74.17 and reached 82.23 in the second cycle. By applying the play method in learning, it can increase the ability to convert fractions into percent and decimal forms and vice versa, this is indicated by an increase in students' abilities by 8.06.

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1. INTRODUCTION

The first goal in learning mathematics at the elementary school level is to emphasize the arrangement of reasoning and the formation of attitudes, which is then expected to emphasize the skills of applying mathematics in students' daily lives. Further, the standard of competence in mathematics in elementary schools in Leyton-Román et al. (2020), includes: numbers, geometry and measurement, as well as data processing. For class V, numbers are taught which include: (1) performing integer arithmetic operations in problem solving, and (2) using fractions in problem solving. For geometry material, it includes: (1) using time, angle, distance, and speed measurements in problem solving; (2) calculate the area of a simple flat shape and use it in problem solving; (3) calculate the volume of cubes and cubes and use them in problem solving; and (4) understand the properties of shapes and the relationship between shapes (Berizzi, Di Barbora, & Vulcani, 2017).

One of the competency standards for grade 5 elementary school mathematics is to use fractions in problem solving, with basic competence converting fractions into percent and decimal forms and vice versa (Cook-wallace, 2018). These basic competency indicators include interpreting common fractions to percent,

interpreting percent to common fractions, interpreting common fractions to decimal fractions, and interpreting decimal fractions to common fractions. From these indicators, students are expected to be able to interpret ordinary fractions into percent form, interpret percent form to ordinary fractions, interpret ordinary fractions to decimal fractions, and interpret decimal fractions to ordinary fractions. However, in reality, the learning ability of fifth graders at SDN Persil I in basic competence in converting fractions into percent and decimal forms and vice versa is still low. This is due to the lack of student learning motivation (Kochemasova, 2018).

One way that can increase learning motivation is the play method. Huffalo Panyio (2011), explained that "The playing method is interpreted as a way of presenting lessons through a game in the learning process to gain an understanding of the nature of a particular concept, principle, or skill." By using the play method, it is hoped that students can learn in a happy and comfortable atmosphere. Doing play activities that contain learning values can change the tense and rigid atmosphere in learning activities in the classroom to be more relaxed and fun. It is supported by Jhurree (2005), who gave the statement "The learning process should be conducted in an interactive, fun, challenging, and motivating the students to participate actively." That during the learning process, between students and teachers there must be a fun and challenging interaction that creates motivation for students to actively participate in learning. The purpose of this study was to describe the ability to convert fractions into percent and decimal forms and vice versa with the play method in the first cycle and second cycle of fifth grade students at SDN Persil.

2. RESEARCH METHOD

Research Subjects and Setting The subjects of this study were the fifth grade students of SDN Persil I, Batuk Liang District, West Lombok Regency, totaling 30 children, consisting of 18 female students and 12 male students. The place of this research was carried out at SDN Persil which is located in Karang Sidemen, North Batukliang, Central Lombok Regency, West Nusa Tenggara.

This research is a Classroom Action Research (CAR) which is carried out in several cycles. Each cycle in this classroom action research consists of 2 meetings, each with a time of 2 x 35 minutes. At the end of each cycle, evaluation questions are given to determine the extent to which students' ability to convert fractions into percent and decimal forms and vice versa. The cycle consists of 4 stages, namely: planning, action, observation and reflection (Sugiyono, 2016).

The planning stage consists of: (1) determining collaborators; (2) making learning tools; and (3) developing research instruments. The action stage consists of: (1) the teacher delivers learning materials in accordance with lesson plan that has been prepared; (2) the teacher prepares a game card containing the concept of changing fractions; (3) each student gets one card; (4) students think of answers; (5) students look for pairs of cards; (6) students who can match their cards before the time limit are awarded points; (7) the cards are shuffled again; and (8) conclusion or conclusion.

The observation stage is carried out by collaborators simultaneously with the implementation of learning by the teacher, consisting of: observations of students and observations of teachers. The reflection stage is carried out at the end of the cycle to find out the advantages and disadvantages of the learning activities that have been carried out and then make improvements if necessary.

The instruments used in this research are as follows: (1) teacher observation sheet, serves to determine the teacher's ability to manage learning; (2) student observation sheets, used to obtain data on student activity during learning activities; (3) game questions, used to obtain data on students' ability to convert fractions into messages and decimals and vice versa at each meeting; and (4) evaluation test questions, used to obtain data on students' ability to convert fractions into messages and decimals and vice versa in each cycle.

3. RESULT AND DISCUSSION

The result of the ability to convert fractions into percent and decimal and vice versa in the first cycle was 74.17, with a percentage of classical completeness of 60%. While in the second cycle, the result of the ability to convert fractions into percent and decimal and vice versa was 82.23 with a classical mastery percentage of 80%. From the learning outcomes of cycle I and cycle II, there is an increase in the ability to convert fractions into percent and decimal forms and vice versa by 8.06 and an increase in the percentage of classical completeness by 20%. The increase in the ability to convert fractions into percent and decimal forms and vice versa is supported by data on student learning mastery, student observations in learning, and teacher observations in learning.

In the first cycle there were 18 students who finished studying, then increased to 24 students in the second cycle. While the number of students who did not complete learning in the first cycle was 12 students reduced to 6 students in the second cycle. So that the learning mastery in the first cycle is 60% and the learning mastery in the second cycle is 80%, there is an increase of 20%.

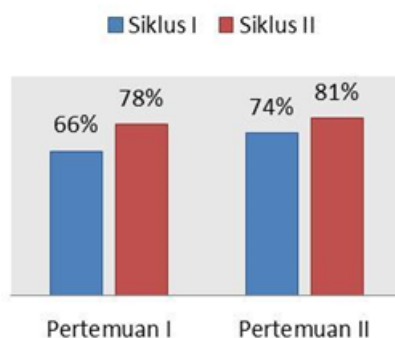


Figure 1. Results of Student Observations in Learning

The results of student observations at the first meeting of the first cycle was 66%, and at the first meeting of the second cycle it was 78%, there was an increase of 12%. While the results of student observations at the second meeting of the first cycle was 74%, and at the second meeting of the second cycle it was 81%, there was an increase of 7%.

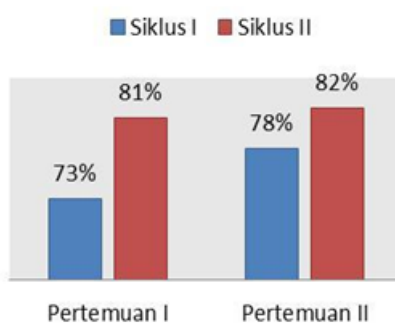


Figure 2. Teacher's Observation Results in Learning

The results of teacher observations at the first meeting of the first cycle was 73%, and at the first meeting of the second cycle it was 81%, there was an increase of 8%. While the results of teacher observations at the second meeting of the first cycle was 78%, and at the second meeting of the second cycle it was 82%, there was an increase of 4%. The teacher's efforts to be researched are efforts to improve students' ability to convert ordinary fractions to decimals. Based on the interview process with the fifth grade teacher, the efforts made by the teacher in improving students' ability to convert ordinary fractions to decimals were using cardboard media, explaining the material for converting ordinary fractions to decimals, how to change the denominator to 100, by means of tiered division. Vary the question and answer methods and exercises, and use the assignment method. Media is one of the teaching aids that are needed in the learning process. Cardboard media is one of the traditional teaching aids. According to Dewi (Dewi, 2019), In explaining how to convert a common fraction to a decimal fraction, you can do this by first changing the denominator to 100. The numerator and denominator must be multiplied by the same number to make the denominator 100, and so on. The second way is by sequential division (Wijaya, 2012).

4. CONCLUSION

Based on the results of interviews between teachers and students it was found that it was found that efforts to improve the ability to convert ordinary fractions to decimals, namely by using a hundred-based denominator, were not carried out by the teacher. This is because the teacher is not ready to teach material about converting ordinary fractions to decimals based on one hundred so that there are still difficulties for students in converting ordinary fractions to decimals and the value obtained is still unsatisfactory. From the teacher's point of view, the teacher is not ready to explain the material using a hundred-based denominator so that students still have difficulty converting ordinary fractions to decimals. Factors from students, namely the power of concentration of students is very low and students do not ask questions about the material being studied.

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