

Increasing Students' Learning Effort Results by using Learning Pair Checks Model of Five Grade of SD Negeri 173299 Paniaran in Academic Year 2017/2018

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Abstract— *This study aims to determine whether there is an increase in student learning outcomes by using pair of learning models on the subject of fractions with the material change the fraction of the form of percent and vice versa in class V SD Negeri No.173299 Paniaran in academic Year 2017/2018. This study was conducted using Classroom Action Research. And the subject of this research is all the students of class V SD Negeri No. 173299 Paniaran totaling 36 people while the object in this study is the result of student learning. Before the test is used as a data collecting tool in this study, first test done to students of grade V SD Negeri No. 173299 Paniaran. The test results show that the test is valid because the coefficient is high and sufficient and has a high reliability of 0.794. Similarly, the differentiating power of each test item is very good, good, and sufficient and the degree of difficulty that is so that every test item is considered good to be tested. From the preliminary test results obtained that the results of student learning is lower because there are 27 students from 36 students have not achieved mastery learning with an average of 27.97 and 25% complete classical learning. After giving the action on the first cycle student's learning completeness level is 61% classical or there are 22 students who complete the study individually with an average value of 65.08. After the implementation on the second cycle students' learning completeness level to 88.89% or there are 32 students who complete the study individually with an average score of 70.83. Then it can be concluded that by using pair checks learning model can improve student learning outcomes.*

Keywords — *Learning Outcomes; Learning Pair Checks Model.*

I. INTRODUCTION

In the world of education and teaching of mathematics is a field of study studied by all students ranging from elementary to high school and even also in university, because mathematics is one of the fundamental knowledge that can foster students' reasoning abilities.

Mathematics in schools is part of the chosen field of study based on the interests of developing the ability and personality of learners and the development of science and technology, in line with the demands of the interests of learners in the face of the future. From this it means that some mathematical things need to be learned by the whole Indonesian nation, both the application and the mindset. The phrase shows that mathematics has a very important role in every aspect of life. Correspondingly, Concroft (in Abdurahman, 2012: 204) suggests the need to learn mathematics:

- a) Always used in all aspects of life
- b) All fields of study require appropriate mathematical skills
- c) It is a powerful, short, and clear communication tool
- d) Can be used to present information in various ways
- e) Improve the ability to think logically, precision, and awareness of the room and providing satisfaction to solve challenging problems". But in fact, mathematics education in Indonesia is still apprehensive when viewed from the low student learning outcomes.

II. LITERATURE REVIEW

Cooperative Learning

The low learning outcomes and the ability of mathematics is due to the many students who have difficulty in learning mathematics, less interest, and always regard mathematics as a difficult science, causing fear to learn mathematics. This is in accordance with the opinion of Abdurahman (2012: 202) which states that "From the field of study taught in school, mathematics is a field of study that is considered the most difficult by both students who are not learning disabilities and moreover learning disabilities". Difficulties in learning mathematics can also be caused by the view that mathematics is a set of facts that must be memorized. Cooperative learning has been developed intensively through various studies, aimed at improving cooperation between students, building positive relationships, develop self-confidence, and

improve academic skills through group activities. In cooperative learning positive interdependence among students to achieve learning objectives. Every student has the same chance to succeed. Student-centered learning activities in the form of discussions, doing joint tasks, supporting each other in solving problems. Through effective learning interactions, students are more motivated, self-confident, able to use high-level learning strategies, and able to build interpersonal relationships. The cooperative learning model enables all. Students can master the material at a relatively equal or parallel level of mastery. Learning system Cooperative learning can also be defined as a structured group learning system where in cooperative learning students can be expected to discuss lessons with friends in their respective groups in relation to the Lie (2004: 12) states that "cooperative learning is a system of lessons that give students the opportunity to working with fellow students in a structured task ". Learning in small groups is part of cooperative learning. Thus in the learning group students are expected to actively express opinions so that in solving problems they can dialogue not only with teachers but also their fellow. Characteristics of cooperative learning model according to Sanjaya (2011: 247) are:

- a) Learn with friends.
- b) During the learning process occurs face to face between friends.
- c) Listen to opinions among group members.
- d) Learn from your own friends in groups.
- e) Learning in small groups.
- f) Speaks productive or mutual opinion.
- g) The decision depends on the student itself.
- h) Student is active.

Cooperative learning aims to harmonious and dynamic cooperation between teachers and students or among fellow students involved in the learning process.

Learn about Fractions by Using the Pair Checks

Learning Model

- a) The teacher formed a pair of two students. The teacher gives practice questions about the subject of fractions to the students, and each partner does the fractional exercise problem, the couple checks the teacher's practice.
- b) After 20 minutes, the teacher checks the answers about the fractions made by the students. Then if the student is right, the teacher gives the coupon or the value. All couples who have not worked on fractions swap roles and repeat steps a-c.
- c) After all the teams completed the exercises on the fractional subject, the entire team paired up and compared their respective answers.
- d) After all is done, the teacher directs the answers / ideas according to the concept of a fractional subject.

III. FRACTIONAL MATERIALS

A fraction is a number representing the whole, part of an area, part of an object, or part of a set. Fractions may also be denoted by a / b denoting a pair of integers or consecutive integer pairs, and representing rational number. This is reinforced by Underhill (Malau, 1995: 10) defines the rational number as the division of two integers a / b, b ≠ 0. At a / b fractions, a is called the numerator and b is called denominator, has different values. Generally, the names for rational numbers are fractions and fractions are generally associated with non-negative rational numbers, since negative rational numbers are generally absent in basic mathematics. N, C is the set of nonnegative integers and N is the set of natural numbers. ∈ C, b ∈ the fraction of the form a / b, this fraction is called an ordinary fraction. Example: $\frac{3}{4}$, $\frac{19}{3}$, $\frac{1}{6}$ is an example of a fraction in the above sense, whereas $-\frac{3}{4}$ is a fractional number that is not introduced in SD. From the above description can be concluded that the fraction is a rational number, but any rational number should not be partial. Example $\frac{0}{5}$, $\frac{8}{8}$.

1. Various forms of fractions, are as follows

Ordinary fractions: $\frac{a}{b}$, Usually a < b.

Example : $\frac{2}{3}$, $\frac{3}{5}$, ...

2. Fractional mixture: a $\frac{b}{c}$, a Integer, b Numerator, c

Denominator

Example : $3\frac{2}{5}$, $4\frac{2}{3}$, ...

3. Fractional decimal is a fraction with the decimal name, with the writing a, b (a comma b), where a and b are chunk numbers.

Example :1) 6,5 3) 0,50

2) 0,32 4)0,165 and etc.

IV. METHODOLOGY

In accordance with the title of research, the location of this study was conducted in SD Negeri No. 173299 Paniaran in academic year 2017/2018. The reason for choosing the location of this research because in SD Negeri no. 173299 Paniaran has never done research on Pair Check learning model on fractional subject. Subjects in this study were all students of class V SD Negeri No 173299 Paniaran, total students are 36 students. Objects in this study is the result of student learning and students activity in learning mathematics by using Pair Checks learning model on the subject of fractions in class V SD Negeri No. 1.323299 Paniaran. This type of research is a classroom action research that is learning by using Pair Checks learning model on fractional subject. The result of

mathematics learning in this study is the score achieved by the students in each cycle. Learning is designed using the Pair Checks model implemented from simple to more effective levels to deliver more optimal results. At the end of the learning test. After the completion of learning activities, reflections on the implementation of learning and overview results. Observations were made to see how student activity during the learning took place and how the results of the tests were obtained. From the reflection results of the teacher, cycle I design more effective lessons for further learning, and so on for the next lesson.

V. RESULT AND DISCUSSION

This research is used classroom action research (PTK) conducted with two cycles that include planning, implementation, observation, and reflection. Each cycle consists of two meetings and contains one topic. This research was conducted in class V SD Negeri No. 173299 Paniaran. Before conducting cycle I, the first researcher gives explanation to the principal and teacher of mathematics on how to implement the learning on fractional subject with pair check learning model. Can be concluded mastery / success of student learning in fractional learning, that is there are 32 students got 88, 89% who finish the study, and 4 students from 36 students got 11,11% who have not completed research.

Table.1.1: A Brief Summary of Student Learning Element Classically

No	Percentage of Criteria	Level of Criteria	Number of Students	Number Percentage of Students
1	< 65	Unfinished	4 Persons	11,11%
2	> 65	Finished	32 Persons	88,89%
Amount			36 Persons	100%

VI. CONCLUSION

- Based on the results of the discussion of research data, it can be concluded that: The result of student's mathematics learning by using pair checks learning model in class V SD Negeri 73299 Paniaran on fractional subjects in the first cycle had an average of 65.08 individuals and a classical student graduation rate of 61% or 22 of 36 students solved separately. While in the second cycle of student achievement level becomes 88.89% classically or there are 32 of 36 students who completed the study individually with an average score of 70.83. So in the second cycle can be stated to have fulfilled the completeness criteria that have been determined by the researcher.
- Student learning activities in solving math problems on fractional subjects in class V SD Negeri 173299 Paniaran, in the first cycle with an average score of 47.25 individuals and the level of classical mastery learning activity 50% whereas in the second cycle the average score of activity score increased to 62.5 individually and the percentage of student learning activities by 80% Classical so that it can be concluded that the completeness criteria of individual and classical student learning activities determined by the researcher has been achieved.

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