

Think Pair Share in Learning Operations Count Grade II Elementary School Students

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Abstract. The research was motivated by the low activity of students in learning and student learning outcomes regarding counting operations that were still low. The purpose of the study was to determine the application of the Think Pair Share (TPS) type cooperative learning model in an effort to improve the quality of learning shown through student activeness in learning so that later student learning outcomes will be able to increase as well. The type of research used is Classroom Action Research. Each cycle consists of 4 stages, namely planning, implementing actions, observation, and reflection. Data collection techniques use test, observation, and documentation techniques. The validation technique used in research is triangulation. Data analysis techniques use descriptive analysis. TPS involves active student participation in learning so as to improve student learning processes, motivation and outcomes. Teachers must master the learning flow in the TPS method before applying it so that learning can be interactive and achieve the expected learning objectives.

Keywords: Motivation, Learning Outcomes, Think Pair Share

1. Introduction

The implementation of the teaching and learning process always aims so that the learning objectives that have been prepared by the teacher before can be achieved. Teachers always try to make learning interesting and fun for students. As written by Dimiyati and Mudjiono that learning outcomes are the result of an interaction between learning and teaching [1]. Especially in mathematics subjects that are considered difficult by students.

Mathematics is learning in which there are abstract concepts arranged hierarchically and reasoning deductively. Hudojo stated mathematics with regard to ideas, abstract concepts that are arranged hierarchically and reasoning is deductive [2]. Student activeness in learning is student activity in the learning process that involves students emotionally to master the material they learn, so that students can achieve maximum learning results. Student activeness plays an important role in the learning process because the level of student learning activity both physically, mentally and socially is a benchmark of the quality and success of the learning process.

One factor that affects student success in learning mathematics is the monotonous delivery of teachers (lecture method) so that students become passive and the atmosphere of learning mathematics becomes boring. Adang argued that when students learn passively,

students experience the learning process without curiosity, without questions and without any attraction to student learning outcomes [3]. Mathematics is one of the basic sciences that is very important to learn in the world of education. Mathematics is also seen as one of the difficult and scary subjects, so that students' mathematics learning achievement is still low [4]. To improve learning practice, student activeness in learning must also be increased.

Observation of mathematics learning activities in grade II SD Negeri Gunungsimping 04, several problems are still faced by teachers in classroom learning activities including (1) the learning process in class still uses expository methods that are teacher-center so that students become passive learners, (2) students are still confused about using mathematical concepts because students only memorize concepts not understand them, (3) lack of student interest in learning mathematics so that student absorption is low, (4) less optimal student involvement in the learning process so that student motivation is low, (5) teachers lack learning innovations such as the use of learning resources that are only oriented to textbooks and provide few opportunities for students to construct their own mathematical ideas. Learning conditions like this will not develop aspects of student abilities, resulting in low learning outcomes.

The preliminary study conducted showed that only 8 students completed learning outcomes from 27 students who obtained scores of 68 and above, while the rest were incomplete. This shows that student learning outcomes are still below the specified KKM, which is to obtain a minimum score of 68.

The alternative learning model to solve this problem is to use the Think Pair Share (TPS). This learning model is one of the models that is expected to involve students actively in learning mathematics and be able to understand the concepts of the material taught. Trianto concluded think pair share or think pair sharing is a type of cooperative learning designed to influence student interaction patterns [5]. TPS can be interpreted as a type of cooperative learning designed to influence student interaction patterns.

Think-Pair-Share (TPS) have affected the pattern of interaction that occurs between students in teaching and learning activities. In this case, students are expected to work to help each other in small groups and are more identified with cooperation patterns than individuals. Students share the knowledge they have gained with the whole class so that students will become more understanding of the material being studied. Knowledge will be easier to understand if taught or shared with others. According to Trianto, the procedures used in Think Pair Share can give students more time to think, to respond and help each other [5].

The advantage of the TPS type cooperative learning model with other cooperative learning models is to form individual and group responsibilities, because in this model there are individual tasks and group tasks [6][7]. Each student will think and have their own opinion in completing independent tasks related to partner tasks. So before students enter their partners already have opinions about the material studied, so they will cooperate with each other and help each other in the members of the pair to understand the material and complete their tasks.

2. Research Methods

Research by applying the Think Pairs Share (TPS) learning method was carried out with a systematic procedure. The research procedure refers to classroom action research which

consists of several cycles and each cycle consists of four repetitive activities. The research procedure starts from planning, implementing actions, observation and evaluation, to analysis and reflection that is recycled or action cycle. This research was designed in two cycles with the subject of research of students of Class II SD Negeri Gunungsimping 04 Cilacap Tengah, Cilacap Regency. Data were obtained from a review of documents and tests. The validation technique used in this study was triangulation. The first stage of data analysis techniques uses percentage descriptive analysis techniques. The second stage is by comparing the results of the recapitulation of cycle I values with cycle II recapitulation.

3. Results and Discussion

Research conducted by researchers in grade II SD Negeri Gunungsimping 04 described in this section includes learning outcomes both in cycle I and cycle II. Learning results are in the form of assessment of test results at the end of each cycle based on formative test scores conducted by researchers in the form of multiple-choice questions, while non-test results are in the form of student observations in the form of qualitative data.

3.1. Cycle I

Planning

Action planning in the first cycle is carried out in collaboration with partner teachers. The next activity is the researcher discusses with the principal and partner teachers / observers to determine the time or schedule of research. Cycle I is carried out in 2 meetings.

Implementation

The implementation of cycle I actions lasted for two meetings. This research is participatory, so the researcher acts as a teacher and is assisted by one of the teachers as an observer. The first meeting (2 x 35 minutes), the teacher explained the material of the operation of calculating time, length, weight of objects and money clearly, and told students to practice working with the think-pairs system, which is thinking about solving themselves and then exchanging opinions with their deskmates to solve problems. In the second meeting (2 x 35 minutes), students and their respective partners were asked to share the results of solving the questions that had been given at the first meeting in front of the class. Every implementation of the researcher's actions also remains to carefully observe the motivation of student learning.

Observation

The percentage of student mastery of the operation material of calculating time, length, weight of objects and money has increased. Data is obtained by giving tests to students after students get action on the teaching and learning process. The results showed that the percentage of students who completed the class was 62.96% or as many as 17 students scored above the completeness score of 68. In addition, because the learning model applied uses a group learning system (ie with seatmates as partners or pairs), researchers also obtain data for the role of students in group assignments. The score for the assessment of students' roles in working on group assignments is calculated by four indicators, namely: Cooperation with pairs (pairs), Timely in collecting assignments, Accuracy in work, and added value.

Reflection

An analysis of the first cycle of actions shows that the stages of applying the cooperative

learning model of the think pair share technique with reference to RPP and observation sheets for the implementation of the think pair share technique in general have gone quite well, but there are indications of student deviations that demand improvements in the next action. In addition to the completeness of the learning has not been achieved, in the implementation of the learning process there are still some shortcomings.

Shortcomings / obstacles faced in the initial activity: (1) Students are still not used to thinking independently and discussing with deskmates, some students still look confused to discuss answers with other friends. Even discussions tend to be less focused. (2) There is no courage for students to convey their ideas to other friends either on one bench or in another group. (3) There are some students who lack responsibility so as to interfere with the smooth learning process.

Suggestions for improvement: (1) Explanation of implementation procedures with the think pairshare technique is conveyed first in detail, before learning is carried out, and students need to be motivated by the importance of discussion with deskmates and other friends. (2) Students are given explanations and guidance in expressing opinions. In addition, it also provides rewards in the form of additional value for students who are active in expressing opinions. (3) Students who lack responsibility by making noise, are given strict sanctions, namely placed in separate buildings together with other friends who both lack responsibility, and closely monitored, both the discussion process and the results achieved.

Shortcomings/obstacles faced in post theest activities include: (1) Siswa accustomed to having discussions with other friends, so that the learning results obtained are less objective. (2) The teacher does not have time to discuss the answers to the test questions.

Suggestions for improvement: (1) The teacher gives explanations and affirmations about the evaluation, and students are asked to distinguish the atmosphere of discussion and evaluation. (2) The teacher provides regulations in the implementation of the evaluation, and conveys the follow-up of the evaluation results.

3.2. Cycle II

The application of the Think-Pairs-Share model cooperative learning in cycle II by carrying out improvements from the record of obstacles faced in cycle I. Cycle II activities include planning, implementation, observation, and reflection.

The results of the second cycle reflection include:

- a. The implementation stage of both think, pair and think is quite smooth, this is because students have already carried out, and students who are less responsible for learning awareness has increased.
- b. Students already have the courage to ask questions or ideas well
- c. Discussion activities both in pair and share activities are quite conducive.
- d. The implementation of the Cycle II test post is smoother than Cycle I.
- e. The implementation of learning has been in accordance with the allocation of time.

Some shortcomings in between: there are students who are less active in discussions, both discussions with seatmates (pairs) and group discussions (share), there are students who have not been able to absorb the material as a whole, so that the scores obtained have not been able to reach the KKM scores (have not passed).

The application of TPS type cooperative learning model can increase student learning motivation. Learning motivation observed in this study includes 8 types of learning motivation,

namely 1) diligent in facing the task; (2) tenacious in the face of adversity; (3) show interest in a variety of issues; (4) prefer to work independently; (5) quickly get bored on routine tasks; (6) be able to defend his opinion; (7) it is not easy to let go of what is believed; (8) enjoy finding and solving problems.

Based on the results of the implementation of actions in cycles I and II, it can be stated that with the application of TPS, there is an increase in the quality of the learning process, especially on the increasing student learning motivation during learning. And there is an increase in the quality of results in the form of increased mastery of material for mathematics subjects.

The implementation can improve learning outcomes. Before giving action, where learning only used the lecture method, from of 27 students, there are only 8 students were declared complete for mathematics subjects. The average of the students' test scores was 57.44. The test results given by students reached 62.96% or 17 students with an average of 68.15. Then the increase also occurred in cycle II, there were 24 students have completeness the task. The average for students also increased to 80.56. Data on improving student learning outcomes and completeness can be clearly seen in the **Table 1**.

Table 1. Pre-Cycle Learning Completeness

No	Cycle	Average Grades	Complete		Unfinished	
			Frequency	%	Frequency	%
1	Beginning	57,44	8 students	29,63	19 students	70,37
2	Cycle I	68,15	17 students	62,96	10 students	37,04
3	Cycle II	80,56	24 students	88,89	3 students	11,11

Table 1 indicated there is an increase in the number of students who complete KKM in each cycle, and the average grade point has increased. This result of student learning is due to student activeness during the learning process with a cooperative learning model with the Think Pair Share technique. The implementation this model makes students feel more organized in learning.

Cooperative learning with the Think Pair Share requires students to be active in building their own knowledge and then developing the knowledge they get through information obtained from other friends, both benchmates and classmates. Students who have understood the lesson can develop their abilities by helping their friends understand the subject matter, so that students will better understand the material learned. The application of the cooperative learning model with the Think Pair Shere technique will also help students understand the material more deeply by not just memorizing.

Cooperative type Think Pair Share (TPS) is a learning model that provides positive benefits for students and teachers. Improving the quality of learning is reflected in increased motivation and student learning outcomes. The application of the learning model can link four abilities, namely listening, reading, writing, and speaking. In addition, by using study groups in pairs, it is able to teach students to share opinions or arguments and be able to accept differences.

4. Conclusion

The conclusions of the research that have been carried out include:

- 1) The Think Pair Share learning model can increase the learning motivation of grade II students of SD Negeri Gunungsimping 04. Before using Think Pair Share, the average score of student learning motivation observations has not shown learning motivation.
- 2) The results of learning by applying TPS model to the operation material calculate time, length, weight of objects and money proved to increase. This is evidenced by the improvement of student learning outcomes in solving operation problems to calculate time, length, weight of objects and money for grade II students of SD Negeri Gunungsimping 04 for the 2021/2022 academic year.
- 3) Students responded positively to the application of this learning model. This is evident from the results of research obtained from the value of learning outcomes and learning completeness that increases in each cycle. In the initial condition of 27 students, there were 8 students who were declared complete with an average learning outcome of 57.44. In the first cycle after the action was carried out, the percentage of student completeness increased to 17 students with an average score of 68.15 and in the second cycle student learning completeness of 88.89% or 24 students with a classical average score of 80.56.

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