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The Use of The Make A Match Method In Improving Learning Outcomes in Mathematics Learning at State Primary School 136541 Tanjungbalai City

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Abstract

The problems found in this research were: low student mathematics learning outcomes, feeling bored while studying, lack of interest and attention of students towards the teacher during learning. This research aims to determine the learning outcomes of students at SD Negeri 136541 Tanjungbalai City for the 2023/2024 academic year learning mathematics on fractions, decimal and whole numbers. In cycle I, meeting I, there were no students who got a very high category score (0%), 2 students (8%) got a high category score, 11 students (40%) got a low category score, and 13 students (52%) got a very low category value. In cycle I, meeting II, there were no students who got a score in the very high category (0%), 7 students (24%) in the high score category, 9 students (36%) in the low score category, and 10 students (40%) in the very score category. low. There was an increase in the completeness of student learning outcomes in cycle II. This can be seen in the data from cycle II of meeting I, as many as 5 students (20%) were in the very high score category, 11 students (40%) got a score in the high score category, 8 students (32%) were in the low score category, and 2 students (8%) fall into the very low score category. In cycle II, 20 students (76%) got a score in the very high category, 5 students (20%) were in the high score category, 1 student (4%) had a low score, and there were no students who were in the very low category (0%). For the teacher's ability in the learning process in cycles I and II, the results were 2.4 and 2.7 in the quite good category. Meanwhile, in cycle II, meetings I and II obtained scores of 3.6 and 3.8 in the very good category. So it can be concluded that using the Make A Match method can improve the learning outcomes of class V students at SD Negeri 136541 Tanjungbalai City for the 2023/2024 Academic Year. The Make A Match learning method can make students active in thinking when doing assignments and more enthusiastic in learning.

Keywords: Critical thinking, English language teaching, reading

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INTRODUCTION

Primary school education as the most basic level of formal education has a big role in the continuity of the subsequent educational process. This is in accordance with Republic of Indonesia Law Number 20 of 2003 article 17 paragraph 1 which states that "Basic education is the level of education that underlies the level of secondary education." In the Education Unit Level Curriculum for Basic Education Units it is explained that "The aim of Basic Education is to lay the foundations of intelligence, knowledge, personality, noble morals, and skills for living independently and pursuing further education." Mathematics is a very important lesson for students as knowledge and

skills to improve their quality of life. This is stated in Law no. 20 of 2003 concerning the National Education System Article 37 which confirms that mathematics subjects are mandatory subjects at primary and secondary school levels.

In the initial observations in this research, it was seen that SDN 136541 Tanjungbalai City faced problems in learning mathematics. Not all students show interest in this lesson, which causes them to be less enthusiastic in doing the assignments given by the teacher. Some of the reasons why many students don't like mathematics include the difficulty of the material, boring teachers, and pressure to complete assignments. Sometimes teachers only focus on completing assignments without considering students' abilities. As a result, students' interest in learning mathematics decreases.

As a result, student learning outcomes at SDN 136541 Tanjungbalai City in mathematics learning are still low. This can be seen from the unsatisfactory average score of students. These low student learning outcomes make teachers confused about how to overcome this problem. Therefore, new ways are needed to increase students' interest in learning mathematics. One way that can be done is that teachers must get closer to students and create ideas as creative as possible so that they attract students' attention. Apart from that, teachers must also consider students' interests in teaching and provide directions slowly.

As an effort to solve the problem of students' low interest in learning mathematics, the researchers took action to teach mathematics using the make a match type cooperative learning method. The make a match method is a learning method that involves students working actively. The make a match method is a method that motivates all students to be active and gives students the opportunity to think, freely express opinions according to the results of the thoughts they get. The make a match method contains game elements so it is fun, increases students' understanding of the material being studied and can increase students' learning motivation.

The reason researchers chose the make a match learning method is because this learning method requires students to be actively involved during the learning process and involves students to think and freely express their opinions. Apart from that, this method also has game elements so that the learning process will be fun so this method is expected to be able to foster students' interest in learning mathematics.

Many researchers have studied the Make A Match method. However, each researcher has his own characteristics in his research theme. Starting from the learning outcomes, who was involved, what stages were passed during the research, what obstacles occurred when researching, and the focus of what was researched.

There is an element of novelty in the research carried out by researchers, namely that at SD Negeri 136541 school, no research has ever been carried out using the Make A Match Method. So the researcher was the first person to conduct the research. This can be supported by interviewing the class teacher.

RESEARCH METHODS

This type of research is Classroom Action Research (PTK) using the Make A Match learning model (looking for a partner) as the learning method applied. This research seeks to explain the application of the Make A Match model which aims to determine student learning outcomes using the Make A Match model in Mathematics learning at SD 136541 Tanjungbalai City for the 2023/2024 academic year. The subjects of this research were 26 class V students, consisting of 111 female students and 15 male students.

In this PTK research, two cycles were used. Where each cycle has four stages, namely: planning, implementation, observation and reflection.

To calculate student learning completeness, the formula is used:

$$\mathbf{P} = \frac{f}{n} \text{ x } 100\ \%$$

Information:
P = achievement number
f = number of students who experienced changes
n = total number of students

RESULTS AND DISCUSSION

Based on the research, data was obtained regarding Mathematics learning in Decimal and Count Numbers using the Make A Match method to determine the learning outcomes of class V students at SD Negeri 136541 Tanjungbalai City. This research takes the form of Classroom Action Research which is carried out in two learning cycles, where each cycle consists of four stages, namely planning, action, observation and reflection.

Learning is carried out using the Make A Match method. This research is equipped with student and teacher observation sheets to determine student learning outcomes, to find out whether the class has been completed or not, and to find out the use of the Make A Match method.

A. Description of Cycle I

a. Action Planning

Based on the difficulties experienced by students during initial observations, the researcher designed alternative problem solving using the Make A Match method used in the learning process. This is done so that student learning outcomes increase. What the researcher did in the planning stage was that the researcher created a scenario/learning design related to improving student learning outcomes using the steps of the Make A Match method in learning.

a. Implementation of Actions

(1) Meeting I

Before the lesson begins, the teacher selects students who will ask pre-designed questions. The teacher gives each one an index card that has been made and explains the demonstration. The teacher assures students that these questions are not known to other students. In the initial activity before starting the lesson the teacher opens the lesson by saying hello to the students, arranging the students' seats and praying, and taking attendance of the students. The teacher invites students to sing the song "It's Happy Here, It's Happy There" so that students are more enthusiastic about learning. Then the teacher provides apperception, and informs the learning objectives to be achieved, the teacher conveys learning material or problems to students according to the basic competencies to be achieved

In the core activity, the teacher gives students cards made from orange paper and each student gets 1 card containing a question or answer. Researchers explain the steps in carrying out learning activities. When the student already holds 1 answer/question card, the researcher instructs the student to think about what answer/question is suitable for the student's card. Then, after students have mastered the questions/answers, students are asked to start looking for pairs of answers/questions from the cards they hold within 2 minutes. Then students who have found their partner, read the questions and answers they got, and other students listen to whether the answers and questions match or not. The teacher rectifies if a student's answer is incorrect and the teacher provides feedback and reinforcement of the student's learning outcomes.

In the final activity, the teacher and students conclude the learning material and present the learning plan at the next meeting. Then direct the students to pray and say hello.

(2) Meeting II

The activities carried out at the second meeting were not much different from the first meeting. At the second meeting before starting the lesson the teacher opens the lesson by saying hello, arranging seats, taking attendance and conveying the learning objectives to be achieved. At the second meeting, the teacher conveyed the obstacles/problems experienced by students at the previous meeting, namely the low student learning outcomes in decimal numbers and whole numbers and the teacher invited students to be more serious and focused and confident in determining answers in the learning process. In learning activities, the teacher conducts apperception and informs about the learning objectives to be achieved, the teacher explains how important activeness is in the learning process. The teacher explains the material to be studied, namely whole numbers, whole numbers, and students are asked to listen and pay attention to the teacher's explanation before using the Make A Match method. The teacher guides students and gives students the opportunity to ask questions that are not understood in the learning material.

b. Observation/Observation Stage

Observations were carried out by researchers and assisted by the class teacher starting from the beginning of implementing learning actions using the Make A Match method in Mathematics lessons on Decimal Numbers and Whole Numbers in improving student learning outcomes. This observation was carried out during the learning process in order to observe two things to what extent teachers and students were successful in learning using the Make A Match method.

Observations of teachers were carried out to determine the extent of success of researchers in implementing the Make A Match method in the learning process. Starting from the initial activities, core and closing activities. PenelIti is quite good during the learning process. Observations given to students were carried out to find out how enthusiastic the students were in the learning process, such as enthusiasm for learning, students' responses to the teacher, and students' attention to the teacher, student activities were classified as good. Then, students' activeness in terms of courage and self-confidence in asking questions or expressing opinions is considered good. Furthermore, students are able to answer questions based on the material, and students are able to be directly involved in concluding answers in their own language which is quite good. The observation results obtained by students were 40 and 50 which was low. However, in the meantime, the results of the researchers' observations went quite well.

The teacher's attitude in planning the implementation of learning is made, such as teacher preparation before teaching, carrying out apperception, guiding students in asking questions using the Make A Match method, carrying out tests, and concluding that the material taught is classified as good. From the results of teacher observations, such as explaining learning materials and arousing students' enthusiasm for learning, explaining procedures for using the make a match method, guiding students in asking questions, the teacher's attitude in providing opportunities for students, and responding to answers given by students are still quite good.

c. Data Analysis Stage I

At the end of cycle I, the researcher gives a test which aims to see the success of the action given, if the student gets a minimum completeness criterion of 70. The test results can be viewed as follows:

1) Student Activities

Based on the results of extensive teacher observations of students regarding improving student learning outcomes, the percentage score for the level of completeness of student learning outcomes can be seen:

Table 1. Criteria for assessing student success levels in cycle I, meeting I classically

Tingkat Keberhasilan	Tingkat Hasil Belajar	Banyak Siswa	Presentase Jumlah Siswa
85 – 100	Sangat Tinggi	0	0%
75 – 84	Tinggi	2	8%
55 – 74	Rendah	11	40%
0 – 54	Sangat Rendah	13	52%
	Jumlah	**26**	**100%**

To analyze observation data based on categories, the following formula is used

P = f/n x 100%

Information

P = achievement number

f = number of students who experienced changes

n = total number of students

Table 2. Student Learning Completeness Level in the Results of Cycle I, Meeting II Classically

Tingkat Keberhasilan	Tingkat Hasil Belajar	Banyak Siswa	Presentase Jumlah Siswa
85 – 100	Sangat Tinggi	0	0%
75 – 84	Tinggi	7	24%
55 – 74	Rendah	9	36%
0 – 54	Sangat Rendah	10	40%
	Jumlah	**26**	**100%**

P $= \frac{f}{n}$ x 100 %

Information:

P = achievement number

f = number of students who experienced changes

n = total number of students

From table 1.2, it can be seen that the students' learning completeness level is classically achieved, where there is a very high category of 0 (0%), students who are included in the high category are 7 (24%), students who are included in the low category are 9 people (36%) and the number of students in the very low category was 10 people (40%). Thus, there was a slight change in the level of students' mathematics learning outcomes using the Make A Match method.

a. Reflection Stage

In the ongoing teaching and learning process, there are certainly those who experience success and there are also those who experience failure. As for the successes and failures that occurred in the implementation of actions in cycle I, data was obtained on the average scores of students in cycles I, meetings I and II with a classical average of 57.5 and 60 in the low category. At the first meeting, 2 students (8%) got high scores and 13 students (52%) got very low scores. Meanwhile, at meeting II, there were 7 students who got high scores (24%) and 10 students who got very low scores (40%). Researchers were not able to optimally manage the class in carrying out learning activities on the material Decimal Numbers, Whole Numbers.

To correct deficiencies and improve learning outcomes in cycle I, the researcher took action to hold cycle II, namely:

4.1.1 Description of Cycle II

a. Action Planning

Based on the results of observations in cycle I, there were still many students whose learning outcomes were said to be still low. For this reason, researchers carry out planning in cycle II to improve the weaknesses found in cycle I. In cycle II, efforts are made to improve student learning outcomes, teachers must arouse more enthusiasm for learning, student enthusiasm and attitudes to dare to do things. activity. This is done to motivate students to be more active and understand the subject matter better, as well as to determine student learning outcomes.

b. Implementation of Actions

The actions taken by researchers in cycle II by paying attention to the results of observations in cycle I, obtained data that there were still students who did not understand the learning process. The results obtained by students have not yet reached the existing level of completeness.

(1) Meeting I

The actions carried out in the implementation of cycle II of meeting I are as follows: first, the teacher opens the lesson by greeting the students, arranging the students' seats, inviting the students to pray, taking attendance, conducting an apperception and informing them of the learning objectives to be achieved. The researcher first discusses the results of the learning process or tests that have been carried out previously, so that students' understanding of learning becomes better, the teacher reminds them of the lesson at the previous meeting, then provides direction and input to students so that they can concentrate more in listening and paying attention to the material presented by the teacher. Teacher. Then the teacher prepares new material, namely fractions. The teacher explains the material about fractions carefully. After the material has been explained, the teacher invites students to ask questions until all students have a turn to ask questions.

(2) Meeting II

Before starting the lesson the teacher opens the lesson by saying hello to the students, arranging the students' seats and praying, taking attendance of the students and informing them of the learning objectives to be achieved. To make the atmosphere more pleasant, the teacher invites students to sing the song "Here is Happy, There is Happy" so that students are more enthusiastic about learning. The actions taken at meeting II were as follows: The teacher continued the lesson material until the discussion was finished, then the teacher gave questions based on the questions asked by the students to see whether the learning was complete or not and to see how far the student learning outcomes had improved. The teacher asks the students to do/continue working on the assignment that has been given by the teacher. The teacher asks the students to do the assignment carefully and not cheat. After that, the teacher assesses the students' work using an observation sheet. After the lesson is finished, the teacher closes the lesson by praying and saying hello.

c. Observation

Observations were carried out by researchers and assisted by the class teacher starting from the beginning of implementing learning actions that applied the Make A Match learning method on decimal numbers, whole numbers and

fractions. Observations made by researchers in collaboration with class teachers on students have increased.

In cycle II, the teacher guides to determine students' enthusiasm in the learning process, such as enthusiasm for learning, students' responses to the teacher, and students' attention to the teacher. Student activities are classified as very good. Students are also active in class, as seen from their confidence and courageI ask questions and express my opinion which is good. Furthermore, even though students do not use media, they begin to understand and understand the mathematical material, which can be seen in completing the assignments given using their thoughts and work results.

Based on observations of students, data from cycle II, meeting I, showed that students were classified as skilled with a score of 67 and at meeting II were classified as very skilled with a score of 80. Thus, there was an increase in mathematics learning outcomes which were classified as good after the actions in cycle II using the Make A Match method.

From the results of observations made on teachers in the implementation of the learning process, teachers are classified as good at planning before implementing learning. The teacher has also been very good at opening lessons, conducting apperception and motivating students before the lesson starts. The teacher's skills in providing opportunities to deliver material are considered very good. The teacher's attitude in responding to students' questions, providing opportunities for students to express opinions, and carrying out tests at the end of each lesson is quite good. And the teacher's attitude in concluding the lessons that have been learned and closing the lesson is classified as very good. As for the results of observations made on teachers, results were obtained with grades.

1) Student Activities

Furthermore, based on the results of observations in cycle II, meetings I and II regarding the level of completeness of student learning outcomes in the learning that had been carried out in the action process in cycle II for students using the Make A Match method, the data in table 3 was obtained as follows:

Table 3. Level of Completeness of Student Learning Outcomes Based on Categories in Cycle II, Meeting I Classically

Tingkat Keberhasilan	Tingkat Hasil Belajar	Banyak Siswa	Presentase Jumlah Siswa
85 – 100	Sangat Tinggi	5	20%
75 – 84	Tinggi	11	40%
55 – 74	Rendah	8	32%
0 – 54	Sangat Rendah	2	8%
	Jumlah	**26**	**100%**

To analyze observation data based on categories, the following formula is used.

P $= \frac{f}{n}$ x 100 %

Information,

P = achievement number

f = number of students who experienced changes

n = total number of students

From table 1.3, data on the level of completion of classical student learning outcomes is obtained, where the very high category is 5 people (20%), the students in the high category are 11 people (44%), the students in the low

category are 8 people (32%) and there were 2 students in the very low category (8%).

Furthermore, based on the results of cycle II, meeting II, there was an increase in learning outcomes from the previous meeting in the learning process, data can be obtained in table 4

Table 4. Level of Completeness of Student Learning Outcomes Based on Categories in Cycle II, Meeting II Classically

Tingkat Keberhasilan	Tingkat Hasil Belajar	Banyak Siswa	Presentase Jumlah Siswa
85 – 100	Sangat Tinggi	20	76%
75 – 84	Tinggi	5	20%
55 – 74	Rendah	1	4%
0 – 54	Sangat Rendah	0	0%
	Jumlah	**26**	**100%**

To analyze observation data based on categories, the following formula is used.

$\mathbf{P} = \frac{f}{n}$ x 100 %

Information,

P = achievement number

f = number of students who experienced changes

n = total number of students

From table 1.4 data is obtained on the percentage level of students' classical mathematics learning results. There are still students whose learning outcomes are classified as quite low, namely 1 student (4%), 5 students who are classified as getting high scores (20%), and 20 students who are in the category of getting very high scores (70%).

Thus, it can be said that students experienced a very significant increase in learning outcomes after being given action using the make a match method.

DISCUSSION

Based on the research results, in initial observations of 26 students who met the student learning outcomes criteria, only 3 students (10%) were declared to have received high scores and 23 students (90%) had received low scores. After providing action for 2 cycles (4 meetings) through the Make A Match method. In the first cycle of the first meeting, data was obtained at 57.5 in the quite capable but still low category. Meeting II, the average class score increased slightly to 60, with the category quite capable but still classically low. In cycle II, meeting I, the average class score increased, namely 75 in the High category. Meeting II, the average class score also increased quite significantly to 85 with a very high category level.

If the success determined by the researcher is "High", namely students who are in the very high and high categories, then the total number of high students in cycle I is 2 students (8%), cycle I meeting II is 7 students (24%). Meanwhile, in cycle II, meeting I, there were 16 students (60%) and at meeting II there were 25 students (96%). So it can be stated that all 26 students scored in the High category in the learning process. Thus, classically the completeness of student learning outcomes has increased and is categorized as High, so that the learning process using the Make A Match method to improve student learning outcomes can be said to be successful.

Based on observations made during the research using teacher observation sheets, it can be seen that using the Make A Match method and actions as appropriate teacher

efforts to generate active student enthusiasm in the classroom can have a significant influence on student learning outcomes. The better the application of the Make A Match method in the learning process, the more student learning outcomes will improve, and conversely, if the application of Make A Match in learning is not appropriate then it will not be able to have an impact on improving student learning outcomes. This means that the teacher's ability to apply Make A Match in learning is really needed to be able to improve student learning outcomes as expected.

Even though it is an engineered question or a question that the teacher deliberately creates for certain students, the Make A Match method used by the teacher includes helping students to be active in class.

By taking action to improve student learning outcomes in Decimal Numbers, Whole Numbers and Fractions material using the Make A Match method in class V of SD Negeri 136541 Tanjungbalai City, you can improve student learning outcomes in Mathematics learning.

Based on the explanation above, it can be concluded that the use of the Make A Match learning method in improving mathematics learning outcomes has a great influence on Mathematics learning outcomes at SD Negeri 136541 Tanjungbalai City.

CONCLUSION

The use of the Make A Match method can improve student learning outcomes, this can be seen from the average value of the initial observation data obtained in the first cycle of the first meeting, no students got a very high category score (0%), 2 students (8) got a score in the high category, 11 students (40%) got a low category score, and 13 students (52%) got a very low category score. In cycle I, meeting II, there were no students who got a score in the very high category (0%), 7 students (24%) in the high score category, 9 students (36%) in the low score category, and 10 students (40%) in the very score category. low. There was an increase in the completeness of student learning outcomes in cycle II. This can be seen in the data from cycle II of meeting I, as many as 5 students (20%) were in the very high score category, 11 students (40%) got a score in the high score category, 8 students (32%) were in the low score category, and 2 students (8%) fall into the very low score category. In cycle II, 20 students (76%) got a score in the very high category, 5 students (20%) were in the high score category, 1 student (4%) had a low score, and there were no students who were in the very low category (0%). So, using the Make A Match method can improve the learning outcomes of fifth grade students at SD Negeri 136541 Tanjungbalai City for the 2023/2024 academic year in mathematics lessons on decimal numbers, whole numbers and fractions. The Make A Match learning method can enable students to be active in thinking when carrying out assignments and able to answer questions given spontaneously.

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