Improvement of Mathematical Comprehension Ability with Applying Make a Match Learning Model in Students IV in SDN Ciganjur 02 Jakarta

Rizka Khairunnisa¹, Wardani Rahayu² and Totok Bintoro³
Program Pascasarjana Dasar Universitas Negeri Jakarta
Indonesia

ABSTRACT
The purpose of this study is to improve the students' mathematical comprehension of grade IV SDN Ciganjur 02 Pagi South Jakarta. The method used is action research. Methods of data collection are using observation sheets, test questions, interviews and documentation. The result of data analysis is known that: (1) reiterating a verbal concept and in writing (2) applying algorithm concept with certain procedures and operation (3) applying concept in the form of mathematical representation (4) applying concept by linking various concepts. Suggestions that can be recommended is an effort that can be done to improve students' mathematical comprehension ability one of them is using make a match learning models.

Keywords: Mathematical comprehension ability, Make a match learning model.

1. INTRODUCTION
Education is a learning process that can develop the potential of learners to become a quality person has a broad view. The process of education in schools is not a process that is carried out at random, but education should be planned with the best possible for the desired learning objectives are achieved. Therefore, learning activities in schools are endeavored to create a conducive and fun atmosphere. In preparing the lesson, the role of the teacher is very important that is understanding the subject matter that will be delivered and the condition of the classroom situation.

To improve the quality of education in Indonesia is also reflected from the mastery of mathematical material concepts. Mathematics is one of the important branches of science and also the most often perceived benefits in all walks of life, especially through learning mathematics in schools. Mathematics can stimulate the logic of human thinking, train students to solve problems so that math becomes very important in an effort to improve the quality of education. Therefore, students must be able to understand the mathematics and be able to re-explore the learning of mathematics.

Mathematics in primary school is one of the lessons given in elementary school. Mathematics education in elementary school will give a very meaningful contribution to the students because in the daily life of the students certainly will never be separated from mathematics. Through mathematics learning students can think logically, systematically, critically, and practically, along with positive and creative spirits.

Mathematics learning taught in elementary school (SD) aims to assist students in solving a problem related to everyday life. Mathematics is one of the most important lessons because the daily life experienced by students is inseparable from the existence of mathematics. Mathematics learning materials taught to students in Primary School are about rounding and assessment so that students can understand and understand the meaning of rounding and assessment.

The importance of studying mathematics one of them is to emphasize students to master mathematical understanding. Mathematical understanding of mathematics learning activities is needed, because mathematics is an ongoing science. Ratna Sariningsih (2014: 151) states that the ability of mathematical understanding is a prerequisite for someone to have the ability to solve mathematical problems. Ruminda Hutagalung (2017: 71) states that the ability of mathematical understanding has several indicators, among others, as follows: (1) verbally reevaluate the concept that has been studied; (2) Classify objects based on
whether or not the requirements for forming the concept are met; (3) Applying the concept algorithm; (4) Present the concept in various forms of mathematical representation; and (5) Linking various concepts (internal and external mathematics).

INAP (2016: 1) states that in June-July 2016 in 256 districts throughout Indonesia, discussions and analysis are underway and the results will be a teacher training referral. Nizam presented the findings of a misconception in mathematics learning in grade IV elementary school students about the introduction of the wrong numbers. Like the number 476, according to the students the position of the value of these numbers is 3 hundreds, 16 tens, and 16 units. This is where concept errors occur in the position of numbers and units (hundreds, tens and units).

Based on the results of the survey above, shows that the ability to understand the concept of mathematics students is still low. Because the students have not understood the concept of the value of the number where the number 476 is supposed to have, the value of place number four hundred, 7, and 6 units. Yet the student misrepresented each of the values of place numbers in 476. It was a misconception of understanding of mathematics learning about the value of place numbers.

It also occurs in the fourth grade at SDN Ciganjur 02 Jakarta, where the initial test of students' mathematical comprehension ability is done on September 27, 2017. The test consists of 4 questions concerning rounding matter and number estimation. The initial test questions are made according to mathematical understanding indicators.

Initial test results of students' comprehension skills at SDN Ciganjur 02 Jakarta can be seen that students are still lacking in understanding the concept of mathematical understanding. Students are still having difficulties when applying the concept they know to the problem solving presented on the evaluation sheet. In the cognitive domain, students must have the ability to understand mathematically.

In the make a match model that will be applied in this study has an alternative way for students. The alternative is to facilitate students in understanding the concepts of mathematics on the material rounding and assessment. In addition, the make a match model conveys a learning message in a fun way. It enables students to accept mathematical understanding when the learning process process uses the Make a Match learning model, thus providing confidence that the model can produce positive results on mathematical understanding.

Ability is a major factor that can affect success in learning. One of the objectives of learning is the ability that is expected to be possessed by students after they have done certain learning process.

David Lazear (2012: 21) states that there are seven abilities that can be categorized as high clues to the low intelligence of a person: 1) verbal ability, 2) ability to observe, 3) kinetic-physical ability, 4) logic / math skills, 5) in interpersonal relationships, 7) Ability in music / rhythm.

Mathematics goes into the group of abilities students must possess to improve their intelligence, the ability of mathematics requires that students not only have the ability to answer practical problems. However, the ability of mathematics requires students to improve the intelligence of these students.

Based on some of the above opinion, it can be concluded that the ability is a person's ability to achieve its goals that include from knowledge, values, and attitudes. Mathematical ability is one of seven abilities that can improve one's intelligence.

In mathematics lesson a concept is very necessary to be mastered by students, so that students are able to master other science in higher level math. Students are said to have understood a concept if the student can explain an information with his own opinion but the content of the meaning remains the same.

There is no denying that every student has different abilities, there are students who have high ability and there are also students whose ability is low. Highly skilled students are usually shown by high motivation in learning, attention, and seriousness in following the lesson. Conversely, students who belong to the low ability is characterized by a lack of learning motivation, lack of seriousness in following the lesson, including completing the task. Therefore, teachers play an important role to help students develop their capabilities.

One of the levels of ability students must possess is understanding. Students are required to understand and understand about the material presented by the teacher. During learning, a teacher must give a good explanation to his students, so that they can easily understand it. Understanding is very important to be implanted to the students, because with a good understanding of the knowledge obtained students will increase.

Understanding is one of the psychological factors that must be possessed by students as stated by Staton outlines six kinds of psychological factors, one of which is the understanding that states that comprehension can be interpreted to master something with the mind. This is very important for students who are learning. It means understanding and capturing its meaning, is the ultimate goal of every study. Therefore, students should be able to understand something with the thoughts they have in order to facilitate the student in learning activities.

Oemar Hamalik (2014:80) states that understanding is seen when a material is translated from one form to another and interprets it. For example, interpreting the chart, translating verbal materials into mathematical formulas, so Oemar Hamalik argues that understanding is the ability to see relationships between various factors, or elements in problematic situations.

Based on the above opinion it can be concluded that understanding is a person's ability to be able to describe something with his own language and also can explain something what we understand to others, with language and a shorter picture can make a person understand what we utarakan.
Ernest Hilgard (2010:21) states that there are six characteristics of learning that contain understanding, namely: (1) Understanding influenced by basic skills, (2) understanding influenced by past learning experience, (3) understanding depends on the rules of the situation, (4) understanding is preceded by experimental attempts, (5) learning with comprehension can be repeated, (6) an understanding can be applied to the understanding of other situations.

Based on the above opinion, it can be concluded that understanding is the way a person understands a fact according to the intellectual ability of each. Achieving an understanding can be seen from previous knowledge. Students can understand a concept well after they have knowledge. For example, if the student has acquired knowledge, then the student can be said to understand if he is able to provide an example of the knowledge he gets, usually understand it in a repetitive way. This causes the stage of understanding is a continuous stage with the stage of knowledge.

Bloom (2010:55-56) states a higher-level understanding of knowledge. Understanding shows the ability to memahm learning materials. These abilities involve: (a) interpreting, (b) exemplifying, (c) classifying, (d) summarizing, (e) arguing (inerring), (f) comparing , and (g) explain (explaining).

With the ability of understanding that can describe something with its own language and also can explain something what we understand to others, by using language and a shorter picture can make a person understand that we say it can be said that we have understood about it.

NCTM (2012:20) states that the ability of mathematical understanding is the ability of students to link events / events in everyday life with the subject matter (internal context relationship) contained in the indicators: (1) defining the concept of verbal and written; (2) identifying and creating examples and not examples; (3) using models, diagrams and symbols to represent a concept; (4) converting a form of representation to another; (5) recognize the various meanings and interpretations of concepts; (6) identify the properties of a concept; (7) compare and differentiate the concepts.

Ratna Sariningsih (2014: 154) shows that there are seven aspects contained in the ability of mathematical understanding, namely to interpret, give examples, classify, summarize, guess, compare, and explain.

Based on some opinions from experts, the indicators of mathematical comprehension ability used in this research, among others are: (1) to reiterate a concept verbally and in writing, (2) apply the concept algorithm with certain procedures and operations; (3) apply the concept in the form of mathematical representation; (4) applying concepts by linking various concepts. The ability of mathematical understanding in this research is the ability of students to do an algorithmic mathematical problem, perform mathematical calculations correctly and meaningfully, students know how and why to do a mathematical calculation and use a concept, rules and formulas, and can interpret every step of completion to find solutions to such mathematical problems and at the level of other mathematical problems. Students understand the concept of learning mathematics can be seen from the indicators of the ability of understanding. For example, students can give examples and not examples, and re-explain a concept in their own words.

So, it can be concluded that, the ability of mathematical understanding is one of the abilities that must be owned by students in learning mathematics. The ability of understanding is the basic ability associated with the mastery or understanding of something. The most important foundation in understanding is remembering and repeating the material that the student has learned, making it easier to solve the problem. An understanding will be achieved by the student, when there is something that is the background of the understanding, such as understanding the concept that relates to the material being studied, then the students understand the problem at hand. If students do not master the ability to understand it is likely that students will experience difficulty at a higher level of ability.

Applying the learning model in teaching and learning activities is a pattern that teachers apply in planning and managing learning. With the learning model, the learning process becomes smooth and the students are easy to understand.

Nur Hamiyah and Mohamad Jauhar (2014: 57) stated that the learning model is "the way / presentation technique used by teachers in the learning process in order to achieve the learning objectives.

Dahlan (2014: 55) states that the learning model is a plan or pattern used in compiling the curriculum, organizing teaching materials, and giving instruction to teachers in the classroom in teaching settings or other settings.

Based on the two opinions above, it can be concluded that the learning model is a way of presenting the learning process that will be done by the teacher and planned to achieve the goals of learning in the classroom. Teachers should design the course of learning activities so that students can easily understand the material presented. Learning model can also be said as the pattern of choice, where teachers can choose the learning model that will be used in accordance with the material to be delivered efficiently to achieve learning objectives.

In order to achieve the learning objectives, the teacher is expected to use the learning model related to the subject matter. This is in line with the learning process of students to easily understand the material presented by the teacher.

Asis Saefuddin and Ika Berdiati (2014: 48) state that the learning model is a conceptual framework that describes systematic procedures in organizing learning experiences to achieve specific learning goals and serves as a guide for learning designers and teachers in planning and executing learning activities.

Nana Syaodik (2012: 7) states that the learning model is a design that describes the process of details and the creation of an environmental situation that allows students or students to interact, resulting in changes or developments in students.
Based on the two opinions above, it can be concluded that the learning model is a picture of planning to achieve certain learning goals and serves as teacher guidance in planning and executing learning activities, thus allowing interaction in the classroom. Teachers must prepare learning materials to be delivered. Then, the teacher must also plan what materials are used to facilitate that will be delivered to students in the learning process takes place so that students understand the material presented by the teacher. Therefore, all the planning plans that have been prepared as a reference activity to facilitate the learning process.

Make a match learning model is a learning model that invites students looking for a card partner that contains questions with a card that contains answers through a game. Agus Suprijono (2013: 94) states that things that need to be prepared if learning is developed with make a match are the cards. The cards consist of cards containing questions and other cards containing answers to these questions. Model make a match has a characteristic that students are asked to find a partner card which is the answer or question of certain material in learning.

Based on the above opinion, basically make a match model involves learning materials as a tool for the delivery of teachers to students on the process of teaching and learning activities. During the activity process, students are required to actively ask questions and respond when discussions and teachers straighten the information for students to understand easily.

Eggen and Kauchak (2015: 59) define that cooperative learning as a set of teaching strategies used by teachers to help each other to learn something.

In relation to cooperative learning that the make a match model is one part of the cooperative learning model in which the student along with his team is required to solve a problem, complete a task, or do something for a common purpose. Cooperative learning model is a learning model that facilitates students where in this learning model more emphasis on cooperation among students to achieve the competencies that must be achieved by each student.

In this make-match learning model can provide an opportunity for teachers to be creative in reviewing learning materials to be delivered. This model uses a card game, where before the learning process begins the teacher must prepare several cards that contain learning materials as a tool delivery material. During the process of learning activities take place, teachers must also be creative in conditioning the class to remain conducive.

In addition, make a match learning model also provides an opportunity for students to play an active role during the process of learning activities take place. During the process of learning activities take place, students pay attention to teachers in the delivery of learning materials. Then, students do question and answer to teachers or peers if there is material that is not understood. Furthermore, students try as well as reasoning in doing exercise questions relating to learning materials that have been submitted by teachers. In addition to trying to do the exercise questions, the teacher has provided several cards for the game. During the game, students indirectly try and reason with regard to learning materials. Then, students are asked to make a presentation of what has been obtained during the game.

In the process of learning activities take place by using make a match learning model, students have applied the steps of scientific approach (scientific approach). Students play an active role in following the process of learning activities, while teachers only become facilitators. Teachers only prepare materials and learning tools that will be used. With the make a match learning model before the learning activities take place, the teacher prepares the materials to be used in the card game before. In addition, during the process of teaching activities, teachers only conditioned the class to remain conducive.

Miftahul Huda (2013: 251) states that the preparation steps for the use of the Make a Match learning model are as follows:

1) The teacher makes some questions and answers according to the material being studied, the number of questions and answers is adjusted to the number of learning objectives and number of students in the class, then written on the cards. It would be better if the question card and answer cards are different colors.

2) The teacher makes the rules of the game, for the students who get the award and for the failing students will get sanction. This game rule can be agreed with the students before the game begins.

3) Teachers prepare notes to record the scores of successful and failed group pairs. These notes can be written on the board before the game begins.

At the time of the making of the card, the teacher must be meticulous and meticulous in the making of the card which questions and answers will be given to the students. Questions can enable students to think and solve problems with groups so they can find answers appropriately.

Miftahul Huda (2013: 251) states that the steps of using make a match model of learning on learning activities are as follows:

1) The teacher delivers materials to students relating to the materials available on the cards.

2) Students are divided into two groups: groups A and B. Groups A and B are asked to confront.

3) The teacher distributes the card to each student with group A gets the question card and group B gets the answer card.

4) The teacher delivers the time limits given to the students during the game.

5) The teacher asks students to match cards held by students with other group cards.

6) If they have found their respective spouse, the student must report to the teacher and the teacher will record it.
7) If the time is up, then the teacher should inform the students that time is up. If there are students who have not found their partner then the students are asked to get together separately.
8) The teacher calls one pair for presentation in turn. Other couples and unmarried students pay attention and respond to the student whose presentation, whether the couple is suitable or not.
9) Teacher asks confirmation about truth and match between question and answer which have been presented.
10) The teacher calls the next couple, and so on until the whole couple makes a presentation.

In summary the steps of make a match model is the teacher must prepare first the cards that will be used when the game in the class takes place associated with learning materials. In the make a match model there is a matching element of the card exactly owned by each student. The make a match model is used to deepen or review students’ memories on the material that has been learned through the training questions presented by the teachers in the cards.

After the game is over, please note that not all students after getting the questionnaire pairs with the answers they have are suitable and correct. Here is the right time for teachers as facilitators to straighten the information on the discussion conducted by the students.

Aris Shoinin (2014: 99) states that every model of learning has advantages and disadvantages compared to other learning models. The advantages of make a match model are: (1) the atmosphere of excitement will grow in the learning process; (2) cooperation among fellow students manifested dynamically; (3) the emergence of the dynamic of mutual help-sharing among all students.

Based on the above opinion, make a match model has advantages of one of the students to be happy during the process of teaching and learning activities take place. With this model, students will be eager to participate in teaching and learning activities take place and can remember the material he learned.

Tri Muah (2016: 142) states that the use of make a match model in this learning process can build students’ activity and antiasisme, seen from the fun of students doing the problem and looking for the card partner. The drawbacks of the make a match model are: (1) the classroom becomes rowdy so it can interfere with other classes; (2) teachers need adequate preparation of materials and tools.

Based on the above opinion, make a match model has shortcomings, the shortage can be minimized one of them by the way the teacher must play an active role guiding the process of teaching and learning activities take place. Before the process of teaching and learning activities take place also teachers must prepare materials and tools that will be used.

1.1 Method

This research was conducted at SDN Ciganjur 02, located in Ciganjur Urban Village, Jagakarsa Sub-district, South Jakarta Municipality, DKI Jakarta Province. The study was conducted in class IV SDN Ciganjur 02 South Jakarta with the number of students as much as 32 students. The research time is planned in even semester of the 2017/2018 Lesson Year, precisely from March 2018 to May 2018. This research is action research conducted in the classroom. Action research is a research conducted by teachers in their own class by planning, implementing, and reflecting collaborative and participatory action with the aim of improving their performance as teachers, so that learners' learning outcomes can increase.

Many models can be used as guidelines for designing and conducting classroom action research. Researchers in this study using the concept of action research from Kemmis Taggart.

![Diagram of Action Research Kemmis Taggart Model](image-url)
Instrument data collection is to measure the ability of students to understand mathematically using the test. The assessment of mathematical comprehension ability is obtained from two assessments, namely the main assessment and the supporting assessment. The main assessment is obtained from daily observations written in daily journals. While the supporting assessment is obtained from the interview result to be used as a means of confirmation of the assessment results by educators. The data collection instrument to measure the knowledge aspect of the learner is assessed through a written test. Based on the Technical Guidance Guidance in Elementary School it is mentioned that the written test is a test that the questions and answers are written in the form of multiple choices, entries, and descriptions. The written test used in this study is a written test that measures the learner's knowledge of mathematics subjects.

2. RESULT AND DISCUSSION

2.1. Result

Action learning conducted in this study consists of two cycles, namely cycle I and cycle II. Implementation of learning in each cycle consists of three times of meeting, each meeting with a time allocation of 3x35 minutes.

After doing various activities from cycle I up to cycle II obtained data from observation result. From the results of the observations are then performed data analysis as a form of hypothesis testing action by using percentage increase to see the effect of giving action through Make a Match model to the ability of mathematical understanding of material rounding and assessment on fourth grade students SDN Ciganjur 02 South Jakarta.

Based on the data analysis of each cycle, the test results of students’ mathematical understanding on each cycle showed a good improvement. The analysis test results of mathematical comprehension ability can be seen in the table below.

In the implementation of action cycle 1 and cycle 2 researchers obtained data on the achievement of the test results of creative thinking ability as follows:

| Value | The number of students | Percentage | Percentage KKM |
|-------|------------------------|------------|----------------|
| Siklus I | Siklus II | Siklus I | Siklus II | Siklus I | Siklus II |
| > = 63 | 11 | 26 | 34,38% | 81,25% | 34,38% | 81,25% |
| < 63 | 21 | 6 | 65,63% | 18,75% | 65,63% | 18,75% |

The diagram below shows the data on the evaluation of the mathematical comprehension ability of rounding and estimation materials in cycle I and II.

![Diagram of Mathematical Understanding Math Test Results Rounding Material and Cycle I and II Assessments](image)

While the tables and diagrams below show teacher and student action monitoring data using learning model Make a Match of rounding and estimating materials in cycle I and II:

| Action Teachers and Students Use Model Make a Match |
|---------------------------------------------------|
| Aspect | Siklus I | Siklus II |
|---------|----------|-----------|
| > = 63  | 34%      | 81%       |
| < 63    | 66%      | 19%       |
Based on the above table, the mathematical comprehension ability of rounding and assessment materials from cycle I to cycle II increased by 12% for teacher action monitoring and 33% for student action monitoring.

![Picture 3. Master and Student Action Monitoring Diagram](image-url)

### 2.2. Discussion

Discussion of the results of this study is based on data that has been analyzed in the previous sub-chapter and findings obtained field. This research is also analyzed based on the factor that is learning process using Make a Match learning model with improvement of students understanding ability.

After analyzing the data by applying the Make a Match model, the result of data analysis shows that there is improvement of students’ mathematical comprehension ability. Differences increase based on the results of the test cycle I and cycle II which indicates a change. After the data postes and tested the results obtained research, then conducted a discussion of the results of these studies.

In the implementation of learning using the Make a Match model start with apersepi to know the initial knowledge of students before studying material pembulatan and assessment of class IV semester 2 for six meetings and three meetings for evaluation. Then, communicate the learning objectives. In the core activities, carried out the learning steps using the Make a Match model that some students are given a question card and some students are given an answer card. Students look for a mate in accordance with the right answer with a specified time limit. After getting a partner, then students present in front of the class by describing the reasons for choosing the couple. In addition, the other students rated the couple as suitable or not. Furthermore, each pair presented in turn. In the presentation, students reiterate the concept contained on the card. After that, students work on the concept algorithmically with certain steps and operations on the board. Then, the students re-explain the concept used to their friends in front of the class. Upon completion, students work on individual evaluation sheets with specified time limits. It is intended that students enjoy and understand mathematically the material of rounding and assessment in every learning, not passively just sitting listening to teacher explanation. After the implementation of Make a Match at meeting 1, students have started to like and understand mathematically the material rounding and assessment, but there are still students who are confused with the learning step with Make a Match because it was first applied. Meeting 2, students are familiar with the Make a Match learning model. Seen when the process of the problem, the whole student already has awareness of the task given. End of cycle I, ie after meeting 3, performed a cycle I test (post test 1) to measure the level of student understanding.

Cycle II was held in three meetings, 1st meeting continued cycle I, using make a match learning model. Some students are given a question card and some students are given an answer card. Students look for a mate in accordance with the right answer with a specified time limit. After getting a partner, then students present in front of the class by describing the reasons for choosing the couple. In addition, the other students rated the couple as suitable or not. Furthermore, each pair presented in turn. In the presentation, students reiterate the concept contained on the card. After that, students work on the concept algorithmically with certain steps and operations on the board. Then, the students re-explain the concept used to their friends in front of the class. Upon completion, students work on individual evaluation sheets with specified time limits. Meeting 2, learning begins with the delivery of learning objectives to be achieved, the teacher explains the material with learning model make a match. The results of observation cycle II, students are very enthusiastic and play an active role in the whole process of learning, it appears that students are engrossed in working on the problem and looking for a partner card. Students who were previously passive and lacked understanding of rounding and assessment materials, then had understood the material rounding and assessment and began to dare
to ask if there was material that had not been understood. End of cycle II, ie meeting 3, conducted a test cycle II (post test 2) to measure the level of student understanding.

At the end of each meeting 1 and 2 in each cycle, the teacher gives the exercise about 10 to 20 items. While at the end of meeting 3 in each cycle, the teacher gives post test. The activity is aimed to find out the students’ mathematical comprehension ability on rounding material and appraisal using the make a match learning model. The data of students’ mathematical comprehension ability can be from the same post test score of the item instrument. Grains of mathematical comprehension skills amounted to 10 items. This is based on the purpose of this study is to know the description of the difference of acquisition and improvement of students' mathematical understanding by applying make a match learning model, the indicator that researchers use is an indicator of the ability of mathematical understanding that is: (1) reiterate a concept verbally and written (2) applying algorithmic concepts with certain procedures and operations (3) applying concepts in the form of mathematical representation (4) applying concepts by linking various concepts.

Based on the results of descriptive analysis of the ability of mathematical understanding in kesuluruhan show there is an increase in learning to improve the ability of mathematical understanding. This is obtained from the analysis of post test data. Data analysis before applying the make a match learning model shows the results below the KKM before being given treatment with the make a match learning model. From the results of post test data, proving the hypothesis in research that is the application of make a match learning model to improve students' mathematical understanding.

From the post test score data obtained used to see the ability of mathematical understanding using make a match learning model. It is also to answer the research hypothesis listed in Chapter II. The ability of mathematical understanding on the learning model make a match score of 34% cycle and cycle II to 81%, then the increase can be said higher than cycle I. Improvement of score score of mathematical comprehension ability in cycle II is categorized high (result of data attached in attachment ) with 26 students from 32 students who achieve greater value and the same as 63, while the value of less than 63 there are 6 students means students have increased the value of the test of students' high mathematical comprehension skills compared to cycle I with a value greater and equal to 63 there are 11 students and less than 63 there are 21 students.

Based on the results of the above exposure and the results of improvements in the ability of mathematical understanding can be concluded that there is an increase in the ability of mathematical understanding with learning models make a match with high category compared to conventional learning.

3. CLOSING

Based on research conducted in class IV SDN Ciganjur 02 seeks to improve students' mathematical understanding of material rounding and assessment with the application of make a match learning model, and based on the results of data analysis and discussion that has been done, it can be concluded that: Match able to improve the ability of mathematical understanding in fourth grade student of SDN Ciganjur 02 Year Lesson 2017/2018, specially on subject of rounding and appraisal.

By implementing the steps of make a match learning model that includes learning that invites students looking for a card partner containing questions and answers through a game. Previously the teacher made several questions and answers according to the material being studied, the number of questions and answers adjusted to the number of learning objectives and number of students in the class, then written on the cards. It would be better if the question card and answer cards are different colors. After that, the teacher makes the rules of the game, for the students who get the award and for the failing students will get sanction. This game rule can be agreed with the students before the game begins. After preparing the use of make a match learning model, then make a match learning model is used in the process of learning activities. First, teachers deliver materials to students relating to the materials available on the cards. Students are divided into two groups: groups A and B. Groups A and B are asked to confront. The teacher distributes the cards to each student with group A getting the question card and group B gets the answer card. The teacher delivers the time limits given to the students during the game. The teacher asks students to match cards held by students with other group cards. If they have found their respective spouse, the student must report to the teacher and the teacher will record it. If the time is up, then the teacher should inform the students that time is up. If there are students who have not found their partner then the students are asked to get together separately. The teacher calls one pair for a presentation in turn. Other couples and unmarried students pay attention and respond to the student whose presentation, whether the couple is suitable or not. The teacher asks for confirmation of the truth and the fit between the questions and answers that have been presented. The teacher calls the next couple, and so on until the whole couple makes a presentation. After that, students work on individual evaluation sheets. By applying the make a match learning model with the enhancement of mathematical comprehension ability of students able to improve the quality of learning in SDN Ciganjur 02 especially about the concept of rounding and assessment in the academic year 2017/2018.

The advantages of make a match learning model is able to improve the ability of mathematical understanding, able to increase student activeness, learning to be happy and spirit, able to increase cooperation and mutual cooperation. The weakness of the make a match learning model is the need for guidance from the teacher to do the learning, the classroom becomes rowdy, the teacher needs the preparation of materials and adequate tools.
Based on the conclusion of the research, the formulation of the implication of this research is the application of the model the writer hopes the mathematics learning with the make-match learning model, the teacher who has difficulty in conveying the material as an alternative learning model. While the level of understanding that students have varied. Implementation of make a match learning model enabling students to develop students' mathematical understanding skills. Learning is meaningful because students understand concepts with a game and learn to represent a concept. Thus the application of learning model make a match material rounding and assessment can improve students' mathematical comprehension ability.

As for efforts to improve the application of make a match learning model so as to improve students' mathematical understanding, among others: (1) to reiterate a concept verbally and in writing (2) apply concept algorithm with certain procedure and operation (3) apply concept in form mathematical representation (4) applying concepts by associating various concepts. Through this activity, students can easily understand the material rounding and assessment using the make a match learning model.

REFERENCES

[1] Hamiyah, Nur dan Mohammad Jauhar. Strategi Belajar-Mengajar di Kelas. Jakarta: Prestasi Pustakaraya, 2014.
[2] Huda, Miftahul. Model-model Pengajaran dan Pembelajaran. Yogyakarta: Pustaka Belajar, 2013.
[3] Hutagalung, Ruminda. Peningkatan Kemampuan Pemahaman Konsep Matematis Siswa Melalui Pembelajaran Guided Discovery Berbasis Budaya Toba Di SMP Negeri Itukka. Journal of Mathematics Education and Science Sekolah Tinggi Ilmu Tarbiyah Hamzah Fansyuri Sibolga. Tapanuli Tengah, 2017.
[4] Ibrahim, R. dan Nana Syaodih S. Perencanaan Pembelajaran. Jakarta: Rineka Cipta, 2010.
[5] Jawa Pos. Pembelajaran Matematika Salah Konsep. Jakarta: 22 Oktober 2016.
[6] Kasmad, Mamad dan Suko Pratomo. Model-Model Pembelajaran Berbasis PAIKEM. Tangerang: Pustaka Mandiri, 2012.
[7] Malik, Oemar. Kurikulum dan Pembelajaran. Jakarta: Bumi Aksara, 2014.
[8] Muah, Tri. Peningkatan Hasil Belajar Matematika Melalui Model Pembelajaran Kooperatif Tipe Make a Match Bagi Siswa VIII SMP Negeri 2 Tuntang Kabupaten Semarang Tahun Ajaran 2015/2016. Jurnal Satya Widya Universitas Kristen Satya Wacana. Salatiga, 2016.
[9] Munir. Kurikulum Berbasis Teknologi Informasi dan Komunikasi. Bandung: Alfabeta, 2010.
[10] Murizal, Angga, et al. Pemahaman Konsep Matematis dan Model Pembelajaran. Jurnal Pendidikan Matematika Universitas Negeri Padang. Padang, 2012.
[11] Saefuddin, Asis dan Ika Berdiati. Pembelajaran Efektif. Bandung: PT Remaja Rosdakarya, 2014.
[12] Sariningsih, Ratna. Pendekatan Kontekstual Untuk Meningkatkan Kemampuan Pemahaman Matematis Siswa SMP. Jurnal Ilmiah Program Studi Matematika Sekolah Tinggi Keguruan Ilmu Pendidikan Siliwangi. Bandung, 2014.
[13] Shoimin, Aris. 68 Model Pembelajaran Inovatif dalam Kurikulum 2013. Yogyakarta: Ar-Ruzz Media, 2014.
[14] Suatri. Pemahaman Konsep Perubahan dan Kegunaan Benda Dengan Metode Smart Game & Pembelajaran Kooperatif Tipe Make a Match Dalam Mata Pelajaran IPA di SDN 12 Nan Sabaris. Jurnal Konseling dan Pendidikan Indonesian Institute for Counseling, Education and Therapy (IICET). Padang, 2015.
[15] Suharsimi. Dasar-dasar Evaluasi Pendidikan. Jakarta: Bumi Aksara, 2012.
[16] Suprijono, Agus. Cooperative Learning Teori dan Aplikasi PAIKEM. Yogyakarta: Pustaka Pelajar, 2013.