



Efforts to Improve Math Learning Outcomes of Fraction Concepts Using Concrete Objects in Class III UPT SDN 59 Pinrang Students

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Abstrak

Penelitian ini bertujuan untuk mendeskripsikan proses pembelajaran menggunakan media ajar benda konkret yang dapat meningkatkan hasil belajar Matematika konsep pecahan siswa kelas III UPT SDN 59 Kab. Pinrang. Jenis penelitian ini adalah Penelitian Tindakan Kelas (PTK). Subjek pada penelitian ini adalah siswa kelas III UPT SDN 59 Kab. Pinrang tahun ajaran 2023/2024 yang berjumlah 25 siswa. Desain penelitian ini meliputi (1) tahapan perencanaan, (2) pelaksanaan, (3) pengamatan dan (4) refleksi. Metode pengumpulan data yang digunakan dalam penelitian ini adalah (1) tes, (2) observasi dan (3) dokumentasi. Instrumen penelitian yang digunakan adalah lembar observasi dan tes. Berdasarkan hasil penelitian menunjukkan bahwa penggunaan media ajar benda konkret dapat meningkatkan hasil belajar Matematika konsep pecahan pada siswa kelas III UPT SDN 59 Kab. Pinrang. Rata-rata hasil belajar pra siklus sebesar 57,4 dan sedikit mengalami peningkatan pada siswa secara keseluruhan pada siklus I sebesar 68,2, setelah dilakukan perbaikan dengan membagi kelompok sesuai hasil belajar siklus I, membagi tugas pada setiap anggota kelompok, memberikan waktu kepada siswa untuk melakukan proses pemahaman konsep pecahan menggunakan media ajar benda konkret dapat meningkatkan hasil belajar Matematika konsep pecahan pada siswa menjadi 81,8 pada siklus II.

Kata Kunci: Media Konkret, Hasil Belajar

Abstrack

This research aims to describe the learning process using concrete object teaching media which can improve the mathematics learning outcomes of fraction concepts for class III students at UPT SDN 59 Kab. Pinrang. This type of research is Classroom Action Research (PTK). The subjects in this research were class III students at UPT SDN 59 Kab. Pinrang for the 2023/2024 academic year, totaling 25 students. This research design includes (1) planning stages, (2) implementation, (3) observation and (4) reflection. The data collection methods used in this research are (1) tests, (2) observation and (3) documentation. The research instruments used were observation sheets and tests. Based on the research results, it shows that the use of concrete object teaching media can improve mathematics learning outcomes for the concept of fractions in class III students at UPT SDN 59 Kab. Pinrang. The average pre-cycle learning outcome was 57.4 and there was a slight increase in overall students in cycle I amounting to 68.2, after improvements were made by dividing groups according to cycle I learning outcomes, dividing tasks among each group member, giving time to students to carry out the process of understanding the concept of fractions using concrete object teaching media, it can increase students' learning outcomes in Mathematics on the concept of fractions to 81.8 in cycle II.

Keywords: Concrete Media, Learning Outcomes

Intrudiction

The success of the learning process is the main thing that is coveted in the implementation of education in schools. In this era of globalization, the application of science and technology must be supported by high-quality human resources. Mathematics as one of the basic sciences today has developed very rapidly, both material and usefulness. But unfortunately, until now math is still seen as a boring and uninteresting lesson. According to Herman Hudoyo in Karso (2019: 1.41) briefly states that mathematics is about ideas, abstract concepts that are arranged hierarchically and deductive reasoning.

To achieve this success, the teacher must fully understand the material being taught, the teacher is also required to know exactly where the "position" of student knowledge is at the beginning (before) following certain material lessons. Furthermore, based on the method chosen, the teacher is expected to help students develop their knowledge effectively. Problems that arise in learning mathematics always exist.

Many people dislike math, including elementary school students. They think that math is difficult, uninteresting and boring. In mathematics learning, especially in understanding the concept of fractions, which is carried out at UPT SDN 59 Pinrang Regency, the quality of learning is less. The learning that is carried out does not involve students.

Teachers assume that with a long explanation students will understand the material presented. Teachers who are talking about a mathematical concept often assume that students can follow and carry out their way of thinking to understand these mathematical concepts as they do. Something that is easy according to our logic of thinking as teachers is not necessarily considered easy by the logic of thinking of students, maybe even students consider something difficult to understand.

Therefore, the main task of the teacher is to help students develop students' intellect. In this case, the author raises fraction material to be used as research material because during the author's teaching in class III SDN 59 Pinrang Regency, it can be concluded that fraction material is less attractive to students. This is reflected in the lack of enthusiasm of students in participating in lessons, especially in fraction material, as well as the lack of positive responses and the learning outcomes of more than 50% of students who scored below the KKM (Minimum Completeness

Criteria) set by the school, which is 65.

This also shows that students do not understand the fraction concept material presented by the teacher. Therefore, it is necessary to improve learning in class III SDN 59 Pinrang Regency so that it can improve the ability to understand fraction concepts.

To achieve success in the process of learning mathematics in elementary education, it is very necessary to use mathematics teaching media or teaching aids, especially in the process towards students' understanding of abstract objects, so in this study the authors felt the need to use concrete objects to help provide understanding to students in appreciating abstract mathematical ideas.

Based on this, the author wants to spark an idea or idea as a step to improve student learning outcomes in mathematics, especially in fraction material, namely by bringing students closer to activities that occur and are experienced by students in everyday life by utilizing concrete objects found around them to help the learning process.

Hopefully it can meet its goals, especially in helping students to love math. According to Jean Peaget in Karso (2019: 1.6) that elementary school children (SD) aged between seven and twelve years basically their intellectual development is included in the concrete operational stage, because their logical thinking is based on physical manipulation of objects. In other words, the use of teaching aids in learning mathematics in elementary school is necessary, because it is in accordance with the child's stage of thinking.

By using concrete media / props, children will appreciate math in a real way based on clear facts that they can see. So that children more easily understand the topics presented. The use of props or media is also very important in learning, this is because by using props students are more interested, feel math lessons are fun and not boring.

Concrete props (media) have a very big role for teachers, namely to convey basic mathematical concepts and for students in receiving knowledge conveyed by the teacher to them. The utilization of concrete props in understanding the concept of fractions is expected to help students in its application in everyday life.

The things mentioned above are the reasons why the author conducted a study with the title "Efforts to Improve Mathematics Learning Outcomes on Fraction Concepts by Using

Concrete Objects for Third Grade Students of UPT SDN 59 Pinrang".

Problem Formulation Based on the background above, the problems that can be formulated are as follows: 1. Can the use of concrete objects media improve the learning outcomes of mathematics fraction concepts in Class III UPT SDN 59 Pinrang Students? 2. How can the implementation of the use of concrete objects media improve the mathematics learning outcomes of fraction concepts in Class III Students of UPT SDN 59 Pinrang?

Research Objectives Based on the formulation of the problem above, this study aims as follows: 1. To find out the use of concrete objects media can improve math learning outcomes of fraction concepts in Class III UPT SDN 59 Pinrang. 2. To determine the implementation of the use of concrete objects media can improve the learning outcomes of mathematics fraction concepts in Class III UPT SDN 59 Pinrang Students.

The benefits of this research include the following: 1. Theoretical Benefits a. Contribute to science to improve and develop the quality of education b. As a basis for conducting further research for other studies. 2. Practical Benefits a. Benefits for Teachers 1) Getting teachers used to using media in the math learning process and 2) Develop math learning activities that can arouse students' enthusiasm for learning by actively involving all students in the classroom. b. Benefits for Students 1) The use of concrete objects media allows students to improve math learning outcomes because the learning is contextual and participatory. 2) Improve students' understanding of the concept of fractions concretely and easily applied in everyday life. c. Benefits for Schools 1) Improve the quality of learning at school. 2) Creating an active student learning climate at school. 3) Creating fun learning in the classroom.

Method

This Classroom Action Research was conducted in class III UPT SDN 59 Kab. Pinrang in the even semester of the 2023/2024 school year for about three months, with eight meetings. The research subjects were 25 grade III students, consisting of 11 boys and 14 girls, who came from diverse economic backgrounds and statuses. The focus of the research was fraction material in mathematics. The population and sample of the study were the 25 students. This research data collection technique consists of several stages:

Pre-cycle Stage:

Observation: Researchers and colleagues observed, documented, and tested student learning outcomes to get an initial picture of student achievement in mathematics, particularly fraction materials.

Reflection: The researcher and observer assess the results of observations and tests, and formulate corrective measures for the next cycle.

Research Process in Cycle I:

Planning: Problem identification, lesson plan, and teaching aid design. Formative tests were also designed.

Action: Two meetings were conducted, including apperception, material explanation, fraction demonstration, and quiz. In the second meeting, students read fraction symbols and a formative test was conducted.

Observation: The researcher and a colleague observed the learning process and student engagement.

Reflection and Analysis: Assess the strengths and weaknesses of cycle I. Findings showed that student activeness was lacking due to the lack of variety in teaching.

Research Process in Cycle II:

Planning: Develop new teaching modules, add materials, and prepare more interesting teaching aids.

Action: Two meetings were conducted with apperception, re-explanation of the material, group demonstration with props, and formative tests.

Observation: Observe students' activeness and understanding, as well as interaction in the learning process.

Reflection and Analysis: Observing the improvement in student engagement and enthusiasm, and preparing for the next cycle.

Data Analysis:

Qualitative: Assessing improvement in learning outcomes and student motivation. And Quantitative: Calculating the average value and percentage of learning outcomes and student motivation, using descriptive statistics to support research objectives.

The steps taken in data analysis are as follows. a) Selecting data (data reduction) In this data selection step, relevant data is selected with the aim of improving learning. Irrelevant data can be discarded, and if deemed necessary, researchers

can add new data by recalling events or phenomena that occurred during the implementation of the action plan. b) Describing the data findings (describing data) In this activity, researchers make a description of the steps taken in activity a). c) Drawing conclusions from the description Based on the description that has been made in step b), conclusions can then be drawn on the results of the implementation of the action plan that has been carried out. The rules for calculating are as follows:

a) Learning Outcome Tests To determine the ability of students to solve problems, it is analyzed by calculating the average value of classical learning completeness. The tests used in this study were written tests (individual quizzes and final evaluations). Quizzes in cycle I are activity questions contained in LKPD and the final evaluation consists of 4 essay questions.

b) Individual Completeness It is said that learning is complete if students get a score of more than or equal to the existing KKM, namely 65. Tests are held at the end of each cycle, scoring guidelines and assessment criteria for analyzing data are contained in the rubric of test questions. The assessment criteria for using the data obtained are as follows:

$$Nilai = \frac{Skor\ Perolehan\ Sisw}{Skor\ Maksimal} \times 100.$$

c) Classical Completeness Data obtained from student learning outcomes can determine classical learning using percentage descriptive analysis, with calculations:

Ketuntasan belajar klasika

$$= \frac{\text{banyaknya siswa yang tuntas}}{\text{banyaknya siswa dalam kelas}} \times 100\%$$

The indicator of success for classical learning completeness is determined if individual completeness ≥ 65 and classical completeness ≥ 85 .

Result and Discussion

In the initial condition, the results of learning mathematics, especially in the material of fraction concepts, showed that most students still had difficulties. From the data obtained, 19 students scored below the Minimum Completion Criteria (KKM), indicating a significant challenge in understanding the concept of fractions in the class. This situation illustrates that students' understanding of fraction material has not reached

the expected level, and indicates an urgent need for more effective teaching approaches or additional learning methods to help them achieve better understanding.

In an effort to address this issue, it is important to further analyze the factors that may be influencing low student learning outcomes. This could include the teaching methods used, the teaching materials delivered, as well as the level of student engagement in the learning process. Intervention strategies such as the use of visual aids, additional practice, or a more interactive learning approach may be needed to improve students' understanding of the fraction concept and ultimately help them reach or even exceed the set KKM.

Data on the value of the ability to understand the concept of fractions in the initial conditions above are still many students who get scores below the Minimum Completeness Criteria (KKM). For more details, the initial condition of the ability to understand the concept of fractions of grade III students can be seen from table 1 below:

Table 1. Frequency Distribution of Data on Mathematics Values on Fraction Concepts

No	Value Interval	f	%	Ket.
1	20-31	0	0	-
2	32-43	2	8	Below KKM
3	44-55	9	36	Below KKM
4	56-67	11	44	Below KKM
5	68-79	2	8	Above KKM
6	80-91	1	4	Above KKM
Classical Completeness = 6 :25 = 24%				

From table 4.2 above, the mathematics value of fraction concept material in class III UPT SDN 59 Kab. Pinrang before the use of concrete objects teaching media can be presented in the form of the following diagram:



twice a meeting and each meeting with a time allocation of 2 x 35 minutes. c) Researchers made student worksheets for groups and independently at the end of each meeting. d) Provide teaching media for symmetrical concrete objects. In cycle I, the teacher used bread or cakes in the shape of a square and a circle. e) Make observation sheets for teachers and students.

2) Implementation of Action In this stage the researcher implements learning by using concrete objects teaching media according to the MODULE AJAR that has been prepared. Learning in cycle I was carried out 2 times a meeting. a)

Meeting I Meeting I was held on January 15, 2024 about recognizing the concept of fractions, presenting fractions in the form of pictures, reading fraction symbols and writing fraction symbols. Learning activities begin with prayer. After that the teacher took attendance. Before starting learning, the teacher motivates students by inviting students to sing a song. The teacher determines contextual problems related to fractions. The teacher gives questions and answers about students' understanding in everyday life such as cutting or dividing cakes to prepare students for learning by using concrete objects teaching media. Students are enthusiastic to answer the teacher's questions. The teacher directs students to look for objects in everyday life both at home and at school that can be cut or divided into several parts. The teacher conveys the learning objectives which are in accordance with the indicators in cycle I meeting I. Students pay attention to the teacher's explanation of the activities to be carried out. In the core activity, the teacher provides a symmetrically shaped cake such as a circle or square. With the guidance of the teacher, one of the students cuts the cake into two equal parts. Other students pay attention to their friend's demonstration. With this activity, the teacher introduces the fraction $\frac{1}{2}$. The teacher asks the students to present the fraction $\frac{1}{2}$ in the form of a picture. By demonstration, the teacher instructs the students on how to read and write fractions of $\frac{1}{2}$ and introduces the numerator and denominator. After the students can read and write the fraction $\frac{1}{2}$, the teacher asks the students to cut the cake into four equal pieces. From this activity, the teacher introduces the fraction $\frac{1}{4}$. Students find other fractions with denominator 4. The teacher introduces fractions with denominators greater than 4 e.g. 5, 6, 7, 8 and so on. The teacher organizes the class into groups and each group consists of 4-5 people. The teacher assigns group

Figure 1 Math Evaluation Results Before the Use of Concrete Object Teaching Media.

Based on data from the results of mathematics scores before applying concrete objects teaching media, the class average was 57.4. There were 19 students who scored less than 65 (KKM) and 6 students who scored ≥ 65 (KKM). This can be interpreted that the classical completeness of 24% is still below the specified learning completeness which is 70% of students get a score ≥ 65 (KKM).

Based on the results of low math scores and many students who have not reached the KKM, it shows that students' understanding of the concept of fractions itself is still low. Therefore, a learning innovation in mathematics is needed, namely by using concrete teaching media.

With the use of these teaching media, it is expected that student understanding, especially on the concept of fractions, will increase so that student learning completeness can be achieved.

a. Cycle I Cycle I actions were carried out for two meetings. Each meeting consisted of two lesson hours (2 x 35 minutes) which were held on January 15 and 18, 2024. The stages carried out are as follows:

1) Planning Stage The first action planning activity was carried out in classroom III UPT SDN 59 Kab. Pinrang on January 13, 2024. Researchers designed that the implementation of cycle I actions was carried out in 2 meetings with a time allocation of 2 x 35 minutes per meeting, namely on Monday, January 15, 2024 and Monday, January 18, 2024. Guided by the curriculum, researchers took steps to plan mathematics learning with the use of concrete teaching media as follows: a) Studying the Syllabus of Grade III SD and preparing learning resources consisting of several mathematics books for grade III semester 2. b) Researchers designed a Learning Implementation Plan (MODULE AJAR) with several indicators including, proving the value of simple fractions using concrete objects teaching media, reading fraction number symbols, writing simple fraction number symbols and identifying fractions worth. MODULE AJAR was carried out

tasks and monitors students' performance. The teacher asks representatives from several groups to present their work in front of the class, students from other groups pay attention and respond to their friends' work. After that, the teacher directs students to obtain the best strategy in solving the problem.

As a closing activity, the teacher guides students to conclude about what they have done and learned. The teacher gives students the opportunity to ask questions if there are things that are not clear and distributes evaluation questions about fractions for students to do. As a follow-up, the teacher assigns homework. The teacher delivers moral messages containing advice related to fractions. The teacher closes the math lesson. b)

Meeting II Meeting II was held on January 18, 2024 with simple fractions, namely about fractions worth. Learning activities begin with prayer. After that the teacher took attendance. Before starting learning, the teacher motivates students by inviting students to sing a song. The teacher provides apperception by exploring students' experiences at the last meeting with some oral questions that are

related to today's material. The teacher conveys the learning objectives, which are in accordance with the indicators in cycle I meeting II. Students pay attention to the teacher's explanation of the activities to be carried out. In the core activity, the teacher gives examples of fractions worth for example $\frac{1}{2}$ and $\frac{2}{4}$. Students prove by cutting bread as in the previous meeting. Students determine other equivalent fractions and prove it by cutting the cake. The teacher explains the material of equivalent fractions by equalizing the denominator. The teacher organizes the class into groups and each group consists of 4-5 people and provides group worksheets and monitors students' performance. The teacher asks representatives from several groups to present their work in front of the class, students from other groups pay attention and respond to their friends' work. After that, the teacher directs students to obtain the best strategy in solving the problem. As a closing activity, the teacher guides students to conclude about what they have done and learned. The teacher provides opportunities for students to ask questions if there are things that are not clear and distributes evaluation questions about fractions for students to do. As a follow-up, the teacher assigns homework. The teacher conveys a moral message containing advice related to fractions. The teacher closes the math lesson.

The data on the ability to understand the concept of fractions after using concrete teaching media in cycle I above has increased, but there are still many students who get scores below the KKM. For more details can be seen in table 4 below:

Table 4 Frequency Distribution of Mathematics Value Data After the Use of Concrete Object Teaching Media Cycle I

No	Value Interval	f	%	Ket
1	40-47	3	12	Below KKM
2	48-55	5	20	Below KKM
3	56-63	1	4	Below KKM
4	64-71	2	8	Above KKM
5	72-79	4	16	Above KKM
6	80-87	10	40	Above KKM
Classical Completeness = $16 : 25 = 64\%$				

From table 4 above, the results of mathematics findings on fraction material in class III UPT SDN 59 Kab. Pinrang after the use of concrete objects teaching media in cycle I can be presented in the form of a diagram in figure 2 below:

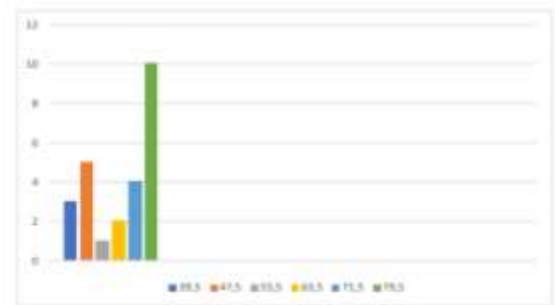


Figure 2 Results of Mathematics Evaluation After the Use of Concrete Object Teaching Media in Cycle I

3) Observation The researcher monitored the implementation of the action in accordance with the research objectives, namely improving understanding of the concept of fractions with the use of concrete objects teaching media. In this stage, the researcher collaborated with other teachers in monitoring the implementation of the learning process using an observation sheet. Observations were carried out to obtain data on the activities of researchers in the suitability of the Teaching Module prepared with the

implementation of the learning carried out. In addition, observations were also made to find out how much student activity in participating in learning to be able to improve the understanding of grade III UPT SDN 59 Kab. Pinrang students about the concept of fractions.

The observation results at the end of cycle I are as follows: a) preparation for starting the lesson is classified as good, the teacher has prepared the MODULE AJAR, but the teacher does not convey the length of the lesson; b) the ability to manage the class is classified as good, but the class is still noisy because the teacher does not control the attitude of the students; c) the ability to manage time is classified as poor, because there is no restriction on discussion time so that the implementation of learning is not according to plan; d) providing apperception is classified as very good in accordance with the material being taught; e) delivery of material with the use of teaching media concrete objects is classified as very good in accordance with the material; f) the teacher's skill of giving questions is classified as good, but the teacher does not provoke students to ask questions; g) the teacher's attention to students is only classified as good because it does not motivate students to work together; h) application development is low because the teacher does not motivate students to study hard; i) the ability to close the lesson is still not good because it does not motivate students to study hard at home and repeat the lessons that have been delivered; j) the average teacher activity in cycle I is classified as good.

Observation is not only carried out on the activities of researchers as teachers, but also aimed at students in every learning process. The results of observations of researcher activities in cycle I are as follows; a) student discipline is classified as very good so that learning can start on time; b) student readiness to receive learning is classified as good, but some students have not prepared textbooks and discussion tools; c) student activeness is not good because students still look afraid to argue and interact actively in their groups; d) student activeness is not good because students do not discuss actively with their groups, some students are busy playing; e) the use of concrete objects teaching media is classified as good by using concrete objects teaching media in doing group assignments; f) student activity in answering questions is classified as poor because students are still shy and afraid to answer questions; g) the situation of students with the learning environment

is classified as poor because students are still rowdy and create a less conducive learning atmosphere; h) students' ability to take individual tests is classified as good by doing the questions on time; i) the average student activity in cycle I is classified as good

4) Reflection The data obtained through observations were collected and then analyzed. Based on the results of observations made during the action implementation process, in general, it has shown an improvement. The researcher conducted a reflection as follows: a) In cycle I, the teacher's performance at meeting I got 3 and meeting II got 3.2. Student performance at meeting I got 2.5 and meeting II got 2.9. These results show that student and teacher activities still need to be improved.

b) All students participated in math learning. The average evaluation results of students' mathematics in cycle I were 68.2. c) Based on the results of the mathematics evaluation in cycle I, there were 9 students or 36% and students who obtained scores < 65 (KKM) were 16 students or 64%. So, the average math evaluation results in cycle I were 68.2 and students obtained scores \geq 65 (KKM), namely 16 students or 64%. d) The teacher provides information precisely and gradually, directs and guides students' activities in finding answers so that learning is more effective and does not waste time. From the results of cycle I research, the researchers carefully reviewed that judging from the average results of students' mathematics evaluations with the use of concrete objects teaching media was quite successful. This shows that there is an increase in understanding of the concept of fractions in class III UPT SDN 59 Kab. Pinrang. However, judging from the KKM there are still 9 students who have not completed. This is due to several factors, therefore math learning needs to be continued for cycle II guided by the results of the first cycle reflection.

b. Cycle II Cycle II actions were carried out for two meetings. Each meeting consisted of two lesson hours (2 x 35 minutes) which were held on January 22 and 25, 2024. The stages carried out are as follows: 1) Planning Stage Based on the results of the reflection on the implementation of the first cycle of action, it is known that students showed an increase in understanding of the concept of fractions in class III UPT SDN 59 Kab. Pinrang, but not yet optimal. This is indicated by the fact that there are still 9 students who are not yet complete in learning mathematics. action planning activities II was held in classroom III

UPT SDN 59 Kab. Pinrang on January 20, 2024. Researchers designed that the implementation of cycle II actions was carried out in 2 meetings with a time allocation of 2 x 35 minutes per meeting, namely on Monday, January 22, 2024 and Thursday, January 25, 2024. The things that teachers need to improve in learning mathematics with the use of concrete teaching media as an effort to overcome various existing shortcomings are as follows: a) Provide some information precisely and gradually, direct, and guide students' activities in finding answers so that learning is more effective and does not waste time. b) Provide motivation to students, for example by giving awards. c) Teachers improve classroom management by making learning that attracts students.

Given the results of the analysis of performance in cycle I, most students have paid attention to the teacher's explanation during the math learning process. However, math learning in cycle I was declared unsuccessful. The researcher conducted

The steps of planning math learning with the use of concrete objects teaching media are as follows: a) Studying the syllabus of grade III SD and preparing learning resources consisting of several mathematics books for grade III semester 2. b) Researchers designed AJAR MODULE with several indicators, namely; 1) proving the value of simple fractions using concrete objects teaching media; 2) reading fraction number symbols; 3) writing simple fraction number symbols; 4) identifying fractions worth. c) Researchers made LKS for groups and independently which were done at the end of each meeting. d) Provide teaching media for symmetrical concrete objects. In cycle II the teacher used bread and tempeh in the shape of a square and circle. e) Make observation sheets for teachers and students. 2) Implementation of Action In this stage the researcher implements learning by using teaching media concrete objects according to the MODULE AJAR that has been prepared. Learning in cycle II was carried out 2 times a meeting. a) Meeting I Meeting I was held on January 22, 2024 on recognizing the concept of fractions, presenting fractions in the form of pictures, reading fraction symbols and writing fraction symbols. Learning activities begin with prayer. After that the teacher took attendance. Before starting learning, the teacher motivates students by inviting students to sing a song. The teacher determines contextual problems related to fractions. The teacher gives

questions and answers about students' understanding in everyday life such as cutting or dividing cakes to prepare students for learning by using concrete objects teaching media. Students are enthusiastic to answer the teacher's questions. The teacher directs students to look for objects in everyday life both at home and at school that can be cut or divided into several parts. The teacher conveys the learning objectives which are in accordance with the indicators in cycle II meeting I. Students pay attention to the teacher's explanation of the activities to be carried out.

In the core activity, the teacher organizes the class into groups. The teacher distributes concrete objects such as bread/cake and tempeh to each group. The objects are cut according to the teacher's instructions. For example, cutting into 2 parts or 4 equal parts. The teacher asks representatives from several groups to present fractions $\frac{1}{2}$ and $\frac{1}{4}$ in the form of pictures according to their findings and by writing the fraction symbols and students from other groups respond to their friends' work. Each student presents fractions $\frac{2}{4}$ and $\frac{3}{4}$ in the form of a picture and writes down the fraction symbols. The teacher introduces fractions with denominators 6, 8, 12 with fraction pictures. The teacher gives group assignments and monitors students' performance. The teacher randomly selects the group assigned to present the results of the discussion in front of the class. The teacher gives other groups the opportunity to respond. The teacher gives the best strategy in solving the problem.

As a closing activity, the teacher guides students to conclude about what they have done and learned. The teacher provides opportunities for students to ask questions if there are things that are not clear and distributes evaluation questions about fractions for students to do. As a follow-up, the teacher assigns homework. The teacher delivers moral messages containing advice related to fractions. The teacher closes the mathematics lesson. b) Meeting II Meeting II was held on January 25, 2024 simple fractions that are worth. Learning activities begin with prayer. After that the teacher took attendance. Before starting learning, the teacher motivates students by inviting students to sing a song. The teacher determined contextual problems related to fractions. The teacher gives questions and answers about students' understanding in everyday life such as cutting or dividing cakes to prepare students for learning by using concrete objects teaching media.

Students are enthusiastic to answer the teacher's questions. The teacher directs students to look for objects in everyday life both at home and at school that can be cut or divided into several parts. The teacher conveys the learning objectives, which are in accordance with the indicators in cycle II meeting II.

Students pay attention to the teacher's explanation of the activities to be carried out. In the core activity, the teacher organizes the class into groups. The teacher distributes concrete objects such as bread/cake and tempeh to each group. Each group demonstrates fractions worth by cutting the objects that have been distributed according to their creativity. The teacher asks representatives from several groups to demonstrate in front of the class, students from other groups respond.

The teacher gives other groups the opportunity to find different equivalent fractions, either using concrete objects, pictures or common denominators. The teacher asks representatives from some groups to demonstrate in front of the class, students from other groups respond. The teacher provides worksheets for group discussion. Each group presents their work in front of the class, other groups respond.

The teacher directs students to come up with the best strategy to solve the problem. The teacher asks representatives from several groups to present their work in front of the class, students from other groups pay attention and respond to their friends' work. After that, the teacher directs students to get the best strategy in solving the problem. As a closing activity, the teacher guides students to conclude about what they have done and learned.

The teacher provides opportunities for students to ask questions if there are things that are not clear and distributes evaluation questions about fractions worth for students to do. The teacher delivers moral messages containing advice related to fractions. The teacher closes the math lesson.

Data on the value of the ability to understand the concept of fractions after the use of concrete objects teaching media in cycle II above has improved a lot, most students get scores above the KKM, for more details the condition of the ability to understand the concept of fractions of grade III students can be seen in table 6:

Table 6 Frequency Distribution of Mathematics Value Data after the Use of Concrete Object Teaching Media Cycle II

No	Value Interval	f	%	Description
1	55-61	2	8	Below KKM
2	62-68	0	0	Below KKM
3	69-75	5	20	Below KKM
4	76-82	5	20	Above KKM
5	83-89	4	16	Above KKM
6	90-96	9	36	Above KKM
Classical Completeness = 23 : 25 = 92%				

From the table of mathematics evaluation results of simple fraction material after the use of concrete teaching media in cycle II which has been explained above, it can be presented in the form of a diagram in Figure 3:



Figure 3 Results of Mathematics Evaluation After the Use of Concrete Object Teaching Media in Cycle II

3) Observation The researcher monitors the implementation of the action in accordance with the research objectives, namely increasing understanding of the concept of fractions with the use of concrete objects teaching media. In this stage the researcher collaborated with other teachers in monitoring the implementation of the learning process using an observation sheet. Observations were carried out to obtain data on the activities of researchers in the suitability of the Teaching Module prepared with the implementation of learning carried out. In addition, observations were also made to find out how much student activity in participating in learning to be able to improve the understanding of grade III UPT SDN 59 Kab. Pinrang students about the concept of fractions. Observations were not only carried out on the activities of researchers as teachers, but also aimed at students in every learning process. The results of the observation of

the researcher's activities in cycle II are as follows) the situation of students with the learning environment is classified as very good because students follow the lesson calmly so as to create a conducive learning atmosphere; h) the ability of students to do individual tests is classified as very good by doing the questions seriously and on time; the average student activity in cycle II obtained 3.8 which is classified as very good.

) Reflection The data obtained through observations were collected and then analyzed. Based on the results of observations made during the process of implementing the action, in general, it has shown an improvement. The shortcomings in cycle I can be overcome. This can be seen as follows In cycle II, teacher performance at meeting I got 3.7 and meeting II got 3.9. Student performance at meeting I got 3.6 and meeting II got 3.9. These results show that student and teacher activities have increased. b) All students participate in math learning. The average evaluation result of students' mathematics in cycle II was 81.8. c) Based on the results of the mathematics evaluation in cycle II, students who scored < 65 (KKM) were 2 students or 8% and students who scored ≥ 65 (KKM) were 23 students or 92%. So, the average mathematics evaluation results in cycle II were 81.8 and students obtained a score ≥ 65 (KKM), namely 23 students or 92%. d) Teachers provide information precisely and gradually, direct and guide students' activities in finding answers so that learning is more effective and does not waste time. e) Provide motivation to students, for example by giving awards both verbally and nonverbally. f) Teachers have improved classroom management by making learning that attracts students. From the results of cycle II research, the researchers carefully reviewed that seen from the average results of students' mathematics evaluations with the use of concrete objects teaching media had been successful. This shows that there is an increase in the understanding of the concept of fractions in class III UPT SDN 59 Kab. Pinrang. Judging from the KKM there are still 2 students who have not completed.

Based on the results of the second cycle reflection and looking at the evaluation results obtained at each meeting, the learning of mathematics simple fraction material in cycle II has been successful because it has reached the achievement target so there is no need to continue in the next cycle. This shows that learning with the use of concrete objects teaching media can

improve the understanding of fraction concepts in third grade students of UPT SDN 59 Kab. Pinrang Based on data processing can be described as follows: 1. Data on the Results of Mathematics Evaluation of Third Grade Students Before the Use of Concrete Object Teaching Media From the list of grades, it can be seen that the results of the math evaluation before the action, namely students scored 32-43 there were 2 students, scored 44-55 there were 9 students, scored 56-67 there were 11 students, scored 68-79 there were 2 students, and scored 80-91 there was 1 student. Thus, the average score obtained by students is 57.4. There were 19 students who scored less than 65 (KKM) and 6 students who scored ≥ 65 (KKM). This can be interpreted that the classical completeness of 24% is still below the predetermined learning completeness which is 70% of students get a score ≥ 65 (KKM). 2. Data on Mathematics Evaluation Results of Grade III Students After the Use of Concrete Object Teaching Media in Cycle I From the list of grades contained in the attachment, it can be seen that the results of the mathematics evaluation of simple fraction material in cycle I which consists of 2 meetings are as follows: a. Meeting I, students scored 40-47 there were 3 students, scored 48-55 there were 5 students, scored 56-63 there was 1 student, scored 64-71 there were 2 students scored 72-79 there were 4 students and scored 80-87 there were 10 students. Thus, students who scored < 65 (KKM) were 9 students or 36% and students who scored ≥ 65 (KKM) were 16 students or 64%. So, the average mathematics evaluation results in cycle I were 68.2 and students scored ≥ 65 (KKM), namely 16 students or 64%. b. Meeting II, students scored 40-47 there were 3 students, scored 48-55 there were 5 students, scored 56-63 there was 1 student, scored 64-71 there were 2 students scored 72-79 there were 4 students and scored 80-87 there were 10 students. Thus, students who scored < 65 (KKM) were 9 students or 36% and students who scored ≥ 65 (KKM) were 16 students or 64%. So, the average math evaluation results in cycle I were 68.2 and students obtained a score ≥ 65 (KKM), namely 16 students or 64%. 3. Data on the Results of Mathematics Evaluation of Third Grade Students After the Use of Concrete Object Teaching Media in Cycle II From the list of grades contained in the appendix, it can be seen that the results of the mathematics evaluation of simple fractions in cycle I which consisted of 2 meetings were as follows: a. Meeting I, students scored 55-61 there were 2 students, scored 69-75 there were

5 students, scored 76-82 there were 5 students, scored 83-89 there were 4 students and scored 90-96 there were 9 students. The results of the math evaluation in cycle II, students who scored < 65 (KKM) were 2 students or 8% and students who scored ≥ 65 (KKM) were 23 students or 92%. So, the average mathematics evaluation results in cycle II were 81.8 and students obtained scores ≥ 65 (KKM) were 23 students or 92%. b. Meeting II, students scored 55-61 there were 2 students, scored 69-75 there were 5 students, scored 76-82 there were 5 students, scored 83-89 there were 4 students and scored 90-96 there were 9 students. The results of the math evaluation in cycle II, students who scored < 65 (KKM) were 2 students or 8% and students who scored ≥ 65 (KKM) were 23 students or 92%. So, the average math evaluation results in cycle II were 81.8 and students obtained scores ≥ 65 (KKM) were 23 students or 92%. By looking at the research results above, it can be explained the calculation of average scores and student learning completeness which can show students' understanding of the concept of fractions after getting math learning with the use of concrete objects teaching media. The increase can be seen from before action and after action, namely cycle I and cycle II, each cycle consisting of 2 meetings. This can be seen in table 4.7, as follows:

Table 4.7 Average Value of Mathematics Evaluation Results and Percentage of Classical Completion Before Action, Cycle I and Cycle II

Average Value			Percentage		
Before Action	Cycle I	Cycle II	Before Action	Cycle I	Cycle II
57,4	68,2	81,8	24	64	92

The increase in the classical average value of mathematics evaluation results with the use of concrete teaching media can be described in the form of a diagram as follows:

Based on the results of observations that have been made of the teacher's performance in learning by utilizing concrete objects teaching aids, the results obtained in cycle I, namely the average teacher performance value reaches 3.1 which is included in the good category, in cycle II, the average teacher performance value reaches 3.9 which is included in the very good category. From these results, it can be seen that the teacher's performance in learning with the use of concrete teaching media has improved from each cycle. While the results of observations made of student

activities in learning by utilizing concrete objects teaching aids obtained in cycle I, namely the average value of student activities reached 2.7 Before Action Cycle I Cycle II which is included in the good category, in cycle II, the average value of student activities reached 3.8 which is included in the very good category. From these results it can be seen that the results of student activities in learning with the use of concrete teaching media have increased significantly from each cycle. The obstacles encountered in each cycle are different, among others: in cycle I the obstacles encountered were that the teacher had not conveyed the length of the lesson so that during the discussion students paid less attention to the time so that the learning was not maximized due to lack of time. The teacher was lacking in providing motivation to students so that students were still not brave enough to express their opinions.

Teachers have not been able to condition students in conducive learning. Smart students tend to dominate and some students depend on smarter students. While there are also students who are busy playing and not participating in discussions. Efforts to overcome obstacles in cycle I were carried out in cycle II in an effort to improve by conveying in advance the length of learning as well as time limits in discussions so that learning can be carried out according to plan, providing motivation in the form of verbal and nonverbal awards to students to be more courageous in expressing opinions and interacting in groups. Learning in cycle II was successful so there were no significant obstacles. Thus it can be seen that one of the efforts to improve the understanding of fraction concepts in mathematics subjects of grade III students of SD Negeri 59 Pinrang is by implementing learning that utilizes concrete props. This is because the use of concrete props is closely related to everyday life. Learning with concrete props relates learning to students' real lives so that experiences that have been experienced are combined with mathematical material. So learning with the use of concrete props can improve understanding of the concept of fractions in grade III students of UPT SDN 59 Kab. Pinrang

Conclusion

Based on the results of classroom action research carried out in the two cycles mentioned above, it turns out that the hypothesis formulated has been proven correct. With the use of concrete objects teaching media can improve the

understanding of fraction concepts in grade III UPT SDN 59 Kab. Pinrang. This is evident in the initial condition before the action was taken, the average score of students was 57.4 with a percentage of classical completeness of 24%, cycle I class average score was 68.2 with a percentage of classical completeness of 64% and cycle II class average score increased to 81.8 with a percentage of classical completeness of 92%. The implementation of learning activities with the use of concrete objects teaching media makes the class more interesting and fun. In addition, the use of concrete objects teaching media was able to increase creativity and group cooperation. Students' understanding of the concept of fractions, attitudes and skills also increased. Thus the application of learning with the use of concrete objects teaching media can be implemented to improve the quality of mathematics learning in class III so as to improve understanding of the concept of fractions.

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