

## IMPROVING MATHEMATICS LEARNING OUTCOMES OF CLASS VI STUDENTS THROUGH DISCUSSION METHOD AT BANYUAJUH 2 ELEMENTARY SCHOOL

Zairor Rizky Khanifah<sup>1\*</sup>, Kusnaningsih<sup>2</sup>, Rika Wulandari<sup>3</sup>

<sup>1,2</sup> Elementary School Teacher Education, Faculty of education, Universitas Trunojoyo  
Madura, East Java, Indonesia

<sup>3</sup> Banyuajuh 2 Elementary School

correspondence e-mail: [190611100048@student.trunojoyo.ac.id](mailto:190611100048@student.trunojoyo.ac.id)<sup>1</sup>,  
[Kusnaningsih670@gmail.com](mailto:Kusnaningsih670@gmail.com)<sup>2</sup>, [rika.wulandari@trunojoyo.ac.id](mailto:rika.wulandari@trunojoyo.ac.id)<sup>3</sup>

### ABSTRACT

*One of the things that can affect the success of a lesson is the accuracy of the use of learning methods. The purpose of this study was to determine the increase in mathematics learning outcomes in the circle diagram material for class VI students at Banyuajuh 2 Elementary School through the discussion method. This research is a class action research conducted in 2 cycles. Data was collected through observation techniques, tests and documentation. The data that has been collected was then analyzed using descriptive quantitative qualitative data analysis techniques. The results showed that there was an increase in mathematics learning outcomes in the circle chart material for class VI students at Banyuajuh 2 School in each cycle. In cycle I, the average student learning outcomes in a classical manner is 63.6 with the percentage of students completing is 57%. Learning outcomes rose in cycle II to an average of 82.9 with the percentage of students completing 100%.*

### ARTICLE INFO

#### Article History:

Received	17
November 2022	
Revised	20
November 2022	
Accepted	28
November 2022	
Available online	2
December 2022	

#### Keywords:

Mathematics;  
Learning Outcomes;  
Discussion Method.



© 2022 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution ShareAlike (CC BY SA) license (<https://creativecommons.org/licenses/by-sa/4.0/>).

## **A. Introduction**

Education is a process of learning knowledge, skills and habits of a group of people which are passed down from one generation to the next through teaching, training and research. According to Taufik (2013: 1.3) education is the influence of the environment on individuals to produce permanent changes in habits, thoughts, attitudes and behavior. According to Purwanto (2016: 18) explains that education is a process of activity that is intended for student input to produce the desired result in accordance with the goals set.

The function of education in general includes: the function of individualism, socialization, nationalization, humanism. If the function of education is running well, it is certain that the Indonesian people will be able to deal with advances in science and technology and be able to compete with other countries. However, in reality, education in Indonesia is still problematic and needs improvement. The purpose of education is a set of educational outcomes achieved by students after carrying out educational activities. In general, education aims to educate and develop potential in students.

Based on the results of observations at Banyuajuh 2 Elementary School, it shows that the results of learning mathematics are still low, this is because the learning carried out by the teacher is still conventional, the teacher uses the lecture method, besides that learning is also not conducive. Students in class tend to be passive and some even look unfocused by disturbing their classmates, getting sleepy, and falling asleep in class. Another problem that also exists is the absence of media that supports the success of learning mathematics so that it is proven that student learning outcomes are low. This condition has an impact on learning outcomes in mathematics. It can be seen that of the 19 students in class VI, only a few students reached the KKM.

From the problems found above, there must be actions that can at least make learning mathematics in class more conducive and students become more active. One of the efforts that teachers can make to improve this is by improving the teaching process. The success of a student in being able to master a subject matter, apart from being determined by internal student factors, such as the level of intelligence, craft, and perseverance is also determined by external factors, including the effectiveness of the strategies, methods and learning media used by the teacher when delivering subject matter.

In the explanation that has been presented above, that the task of a teacher is to stimulate students and create a learning climate, so that the learning process can take place. In this case there is a meaning, that the teacher must have the ability to develop and create and manage situations that allow children to be involved in the teaching and learning process. Because teaching is the teacher's attempt to create conditions or regulate the environment in such a way that there is interaction between students and their environment, so that the learning objectives that have been set are achieved.

In this study, researchers will take action by applying the group discussion method. This is because, based on the results of interviews with the teacher, in learning mathematics, the group discussion method has never been used before. Mathematics learning is always carried out individually and only relies on lecture and assignment methods. This discussion method has several advantages, including providing space for students to exchange ideas, stimulating students to be more active during learning, being able to develop a sense of responsibility in students, and practicing speaking skills (Jaimah, 2018). This is supported by other research which also states that the application of the discussion method to learning mathematics can increase the activity and learning outcomes of students in mathematics in elementary school (Mahmud et al., 2013) has been widely proven by previous studies if this method can improve interest and student learning outcomes, including in mathematics. Therefore, researchers conducted a study entitled "Improvement of Mathematics Learning Outcomes through the Discussion Method for Grade VI Students of Banyuajuh 2 Elementary School" with the aim of finding out how far the improvement in mathematics learning outcomes in that class, if the discussion method is applied.

## **B. Method**

The type of research that the writer did was a class action research. Classroom Action Research is a form of research that is reflective and collaborative by using certain actions in order to improve and improve the quality of learning and teacher professionalism in a sustainable manner. In this class action research carried out in 2 cycles, with each cycle consisting of 4 stages, namely planning, implementing, observing, and reflecting. The data in this study were collected through test, observation and documentation techniques. By using the instrument observation sheets of student activities and test results of learning. The data that

---

has been collected is then analyzed using descriptive quantitative qualitative data analysis techniques.

### C. Result and Discussion

#### Result

##### 1. Precycle

Before starting in classroom action research, the researcher chose the school that was the target of the research. After finding the target and also getting approval then ask permission from the school principal to make observations. Prior to that, the researcher also prepared an interview instrument for a framework in the pre-cycle. Then conduct interviews with class teachers, and examine class activities. After that the researcher has a target problem, namely by applying the discussion method to mathematics learning which will be followed up in conducting research.

##### 2. Cycle I

Before carrying out cycle I, the researcher first prepared everything needed when conducting research. Researchers prepare learning tools such as lesson plans, teaching materials, and circle diagram material evaluation questions which then these learning tools will be made for teaching. At the implementation stage, the learning activities in cycle I used the discussion method with the class teacher to open the lesson. Then students are asked to form groups that have been determined by the teacher. After that students are given a stimulus that shows the learning of mathematics. The group consists of 3-4 students. Then invited to discuss to complete the test. After that students were asked to ask questions that they did not understand. Then the teacher gives students time to finish on their own so that students get used to asking questions before the teacher explains. More precisely provide stimulation to students. The following are the results of students' mathematics learning after taking action in cycle I:

**Table 1.** Hasil Belajar pada Siklus I

No	Name	KKM	Score	Description
1	Achmad nauval	70	55	Not Complete
2	Andika Rafli	70	55	Not Complete
3	Bunga Syarfah	70	70	Complete
4	Cinta Cilla	70	55	Not Complete
5	Cristi Agustoni	70	70	Complete
6	M. Nouvalian	70	70	Complete
7	Wahyu Sabilah	70	70	Complete
Average				63,6
Number of Students Complete				4

---

Percentage of completeness:	57%
-----------------------------	-----

---

Based on the learning outcomes data in the table above shows that the average classical student learning outcomes is 63.6%. This average still does not meet the minimum class completeness criteria, namely 70. In addition, there are 57% of students who have completed their studies. That means there are still 43% of students who do not complete. Referring to the mastery theory of (Trianto, 2012), that is, a class is declared classically complete if  $\geq 85\%$  of students are declared complete. Therefore researchers evaluate the learning process. The results of the evaluation showed that there were several deficiencies in the implementation of cycle I, including:

- a. In group discussions, not all children can participate in the discussion, sometimes only people who have these thoughts discuss it and the others just follow along.
- b. The assessment given is not based on individual assessment, but is still based on the results of group work. In fact, if you look at the results of the group work, not everyone in the group is as capable as the results of the group work assignments.
- c. There are some students who still do not understand the flow of the discussion because the time is short so the time for discussion is fast and there are some students who are left behind.

Because the learning outcomes obtained in cycle I have not reached the target of research success, where the average learning outcomes in the class are still below the KKM and cannot be said to be classically complete, the researcher in this case repeats the action in cycle II. In cycle II the researcher will correct the deficiencies that occur in cycle I so that the learning outcomes obtained are better. This is in accordance with what was conveyed (Mulyatiningsih, 2015), namely a researcher in classroom action research can repeat the cycle if there are things that need to be corrected in the previous cycle and if the target of research success has not been achieved.

### 3. Cycle II

At this stage the researcher returns to preparing everything needed when conducting research such as lesson plans, teaching materials, and evaluation questions. group discussion activities, providing more concrete and interesting apperceptions, as well as explaining the initial concepts of the material at the beginning of learning.

---

Learning activities using group discussion method. The class teacher groups students into several groups, each group consisting of 3-4 people. The teacher then gives apperception to students related to the material to be discussed and then continues with the presentation of the initial material. The next step, students are given test questions to work on together with their respective group members. After that, the teacher and students discuss these questions by pointing to students randomly and taking turns to work on the problem on the blackboard, and discuss it with other students whether the answers are correct or not. When all the sample questions have been discussed and the teacher has ensured that students' understanding of the material is good, the teacher then gives the test again to students, but in this test the teacher directs students to complete it themselves. The following is the learning outcome data in cycle II:

**Table 1.** Hasil Belajar pada Siklus I

No	Name	KKM	Score	Description
1	Achmad nauval	70	75	Complete
2	Andika Rafli	70	80	Complete
3	Bunga Syarfah	70	90	Complete
4	Cinta Cilla	70	75	Complete
5	Cristi Agustoni	70	90	Complete
6	M. Nouvalian	70	85	Complete
7	Wahyu Sabilah	70	85	Complete
Average				82,9
Number of Students Complete				7
Percentage of completeness:				100%

Based on the learning outcomes data in the table above, it shows an increase in student learning outcomes in cycle II. The average classical student learning outcomes is 82.9%. This average still does not meet the minimum class completeness criteria, namely 70. In addition, 100% of students complete their studies. Referring to the mastery theory of (Trianto, 2012), namely a class is declared classically complete if  $\geq 85\%$  of students are declared complete, if it is related to the theory above, the class learning outcomes in cycle II, then the class can be said to be classically complete. Therefore, the target of research success has been achieved and it can be proven that the discussion method can improve students' mathematics learning outcomes in class VI Banyuajuh 2 Elementary School material.

#### **D. Conclusion**

Based on the results of the above research, it can be concluded that the discussion method can improve students' mathematics learning outcomes in circle

diagram material for class VI at Banyuajuh 2 School. This is evidenced by the data on learning outcomes for each cycle which continues to increase. In cycle I, the average student learning outcomes in a classical manner is 63.6 with the percentage of students completing is 57%. Learning outcomes rose in cycle II to an average of 82.9 with the percentage of students completing 100%. This shows that the target of success in this study has been achieved.

## References

- Annisah, Siti. (2014). Alat Peraga Pembelajaran Matematika. *Jurnal Tarbawiyah*. 11(1).
- Jaimah. (2018). Penerapan Metode Diskusi untuk Meningkatkan Hasil Belajar Matematika Siswa Kelas I SDN 004 Tembilahan Kota Kecamatan Tembilahan Kabupaten Indragiri Hilir. *Jurnal PAJAR (Pendidikan Dan Pengajaran)*, 2(2), 173–178.
- Mahmud, M., Marzuki, & Utami, S. (2013). Penggunaan Metode Diskusi untuk Meningkatkan Aktivitas Belajar Matematika di Kelas IV SDN 05 Pontianak Timur. *Pendidikan Dan Pembelajaran Khatulistiwa*, 2(6), 1–11.
- Muhammad, Nurdin (2016). Pengaruh Metode Discovery Learning untuk meningkatkan Representasi Matematis dan Percaya diri Siswa. *Jurnal Pendidikan Universitas Garut*. 9(1).
- Mulyatiningsih, E. (2015). Metode Penelitian Tindakan Kelas. In *Modul Pelatihan Pendidikan Profesi Guru: Fakultas Teknik, Universitas Negeri Yogyakarta*. Universitas Negeri Yogyakarta.
- Prasetyo, Tego. Winoto, Yudi Cahyo (2020). Eektivitas model Problem Based Learning dan discovery Learning Terhadap kemampuan berfikir Kritis Siawa Sekolah Dasar. *Jurnal Basicedu*. 4(2).
- Sabirin, Muhammad (2014). Representasi Dalam Pembelajaran Matematika. *JPM IAIN ANTASARI*. 1(2).
- Satria, Tio Gusti (2021). Pengembangan LKS Matematika berbasis Discovery Learning Pada Materi Statistika untu Siswa. *Jurnal Ilmiah Aquinas*. 4(2).
- Trianto. (2012). *Model Pembelajaran Terpadu*. PT Bumi Aksara.
- Yuliana, Nabila (2018). Penggunaan Model Pembelajaran Discovery Learning dalam meningkatkan hasil belajar siswa di Sekolah Dasar. *Jurnal Ilmiah Pendidikan dan Pembelajaran*. 2(1).