IMPROVING MATHEMATICS LEARNING OUTCOMES THROUGH ROLE PLAYING MODELS FOR CLASS II STUDENTS SDN SUMOBITO 1 JOMBANG

Vera Vidyasari¹, Agung Setyawan²

^{1,2} Elementary School Teacher Education, Faculty of education, Universitas Trunojoyo Madura, East Java, Indonesia

> correspondence e-mail: <u>190611100136@student.trunojoyo.ac.id</u>, <u>agung.setyawan@trunojoyo.ac.id</u>

ABSTRACT	ARTICLE INFO
Mathematics is a field of study whose study is	Erticle History:
global so it is always available and needed in other	Received 22 Apr 2022
fields of study as well as in the application of	Revised 14 Jun 2022
everyday life. Therefore, it is important for students	Accepted 24 Jun 2022
to understand mathematics. The background of	Available online 28 Jun
the problem in this research is the low mathematics	2022
learning outcomes of class II students at SDN	Keyword :
Sumobito 1 Jombang. The purpose of this	Keywords 1, Learning
research is to improve students' mathematics	Outcomes
learning outcomes through the application of role	Keywords 2, Role
playing models. The required data were taken by	Playing Models
using the methods of tests, interviews,	Keywords 3,
observation, and documentation. The collected	Mathematics
data was then analyzed using quantitative	
descriptive analysis techniques. The result of the	
research is that there is an increase in the number	
of students who complete before arriving after the	
action. Before the action, the percentage of	
students who completed the first cycle was 12.5%	
and after being given the action in the second cycle	
it became 93.75%. The average learning	
outcomes also increased from 46.25 initially, after	
the action in the second cycle to 84.37, this shows	
the role playing learning model can improve	
mathematics learning outcomes for second grade	
students at SDN Sumobito.	

A. Introduction

Learning is the process of student interaction with teachers and learning resources in the learning environment so as to help students learn better (Djamaluddin, 2019). Self-study means the progress of changing one's behavior (Rohmah, 2017). Learning can also be interpreted as changes that occur in the ability of attitudes or changes in student behavior due to experience or training (Emda, 2017). From these two definitions, it can be concluded that learning is a process of training and providing experience that aims to change a person's attitude and behavior in a certain direction. Therefore, good learning should be held interactively, inspiring, fun, and motivating students to participate actively so that the learning process can run optimally.

Often we see students who are lazy, sleepy, and bored to follow lessons, especially when learning mathematics. One of the contributing factors is because students always think mathematics is a very difficult subject, so they are not enthusiastic or even afraid to take mathematics lessons (Kholil & Sulfiani, 2020). The reason students are afraid and lazy to learn mathematics is the lack of knowledge about the benefits of the mathematical material they learn in everyday life. Whereas mathematics is a global study of science that is always there and needed in the study of other sciences (Kamarullah, 2017). In addition, a good understanding of mathematics can improve one's ability to understand lessons faster and can train thinking to be more rational, critical, logical, analytical, and systematic (Waskitoningtyas, 2016).

Efforts to be made to improve mathematics learning outcomes are to make mathematics learning more meaningful and fun (Gazali, 2016). One of them is to apply a fun learning model and make students active in class. Fun and active learning models for example with game-based learning models or role playing can make students more enthusiastic about learning (Trinova, 2012).

Based on a preliminary study conducted by researchers on second grade students of SDN Sumobito I, teachers have not been able to provide meaningful and fun mathematics learning so that students feel comfortable and fun when learning mathematics. Learning is monotonous and students tend to only listen to the teacher's explanation and respond without asking questions. Mathematics learning that only runs in one direction and monotonous and unpleasant learning activities cause student learning outcomes in the class to be low (Abdillah, 2015). Therefore, researchers conducted classroom action research by applying a role playing learning model to improve mathematics learning outcomes for class II students at SDN Sumobito 1. The role playing learning model itself is a learning model in which students are assigned to play a character in the material whose implementation process is designed in such a way. likeness by the teacher (Tarigan, 5 C.E.). This role playing model has advantages such as making students better understand and remember the material used as drama material, increasing student activity and creativity in class, increasing students' sense of collaboration and communication skills, and training students' responsible attitudes (Yanto, 2015). This learning model is expected to provide a meaningful and fun mathematics learning experience for students.

B. Method

The type of research used in this Classroom Action Research (CAR) uses a collaborative research type. Collaborative CAR is a form of collaboration with school principals, class teachers, and peers who have roles and responsibilities to achieve goals and examine actual problems faced by teachers and students during classroom learning activities (Zulfiani et al., 2016). This type of research was chosen according to the problems that occur in the practice of learning in the classroom, namely the lack of student learning outcomes. The research design used in this study uses the Suharsimi Arikunto cycle model which consists of planning, implementing, observing, and reflecting (Arikunto, 2016). Data collection techniques used in the study consisted of observation, interviews, and documentation, with data analysis using quantitative data analysis techniques, namely data in the form of numbers or numbers. Quantitative data is obtained through student learning outcomes which will be analyzed descriptively to determine the improvement of student learning outcomes in the material of currency value equality using the role playing learning model. The increase in student learning outcomes can be seen from the comparison results when cycle 1 and cycle 2. The tools for data analysis are in the form of pretest and posttest, with a maximum score for each test which is 100 points.

C. Result and Discussion

Cycle I

This research was conducted in the even semester of the 2022 academic year. The location or place of the research was conducted at SDN Sumobito 1, Jombang. Second grade students at SDN Sumobito 1 with a total of 16 students consisting of 8 male students and 8 female students who are taking mathematics courses with the basic competence of "explaining the value and equality of currency fractions".

Based on the results of the first cycle of research, the actions taken consisted of action planning, action implementation, observation, and reflection which were carried out on Saturday, May 21, 2022 in class II SDN Sumobito 1 Jombang. At the beginning of the activity, the teacher gave a pretest. Based on the results of the Pretest cycle I, only 2 students were declared "Completed" or 12.5%, while 14 students were stated to be "Not Complete" with a percentage of 87.5%. The completeness standard uses the minimum school completeness criteria, which is 70. The average learning outcome in the class is 46.25. Based on the mastery learning theory from (Trianto, 2012), which says that a class is said to be classically complete if the number of students has completed at least 85%, then this class when viewed from the results of the pretest shows incomplete criteria. This shows that there are still many students who have difficulty in learning. The following table shows the pre-test (pre-test) to see the learning needs of the currency value equivalence material for the second grade students of SDN Sumobito 1 Jombang.

After the pretest, the teacher forms groups of students, each consisting of 8 people, to act out the scenarios that have been prepared. After completing the role play, students were given a written test that had been prepared by the researcher. The preliminary and closing activities are not much different from the lesson plan. At the end of the first cycle of learning, students are given a post test which aims to see the results of the given action.

Based on the post test of the first cycle, it can be seen that 7 students have a percentage of 43.75% of students who are "completed", while 9 students have a percentage of 56.25% of students who are "not completed". In this first cycle, the students' average score was 60.62. Learning outcomes from this posttest, it is seen that there is an increase in the number of students who complete learning and the average student learning outcomes. This shows an increase in student learning outcomes after taking action. However, the results of this increase still cannot be categorized as classically complete. Therefore, the action will be repeated in cycle II. This is in accordance with what was conveyed (Mulyatiningsih, 2015), which said that repetition of actions in classroom action research can be done if the results in the previous cycle have not reached the desired target and the researcher wants to find out more about the impact of the actions taken. fix things that are lacking based on observations from the observer.

In this study, there were two observers who were colleagues of the researcher, while the researcher himself acted as a model teacher. Based on the results of observations, the results obtained that the teaching quality of educators is in the good category. However, there are several points of input from the observer that can be considered for repeating actions in cycle II, namely making fewer student group members, adding currency nominal media, and conveying learning objectives at the beginning of learning.

Cycle II

At the stage of implementing the action activities, Cycle II took place the same as Cycle I. The difference was the division of groups by the teacher. In the first cycle, they were divided into 2 groups of 8 students each, while in the second cycle, the teacher divided the students by pairing with a classmate. The teacher continues to carry out the pretest and posttest before and after the action

In the results of the Pre-Test cycle II that was carried out, it was found that only 10 students were blind with a percentage of 62.50%, while 6 people were declared to be still incomplete with a percentage of 37.5%. From these data, because the number of students who finished studying was still below 85%, the class could not be said to have completed learning. There is also the average pretest result in the second cycle, which is 69.38%. This average result indicates that there is an increase between the pretest cycle I, posttest cycle I, and pretest cycle II but cannot be said to be complete classical.

At the end of the second cycle of learning, as in the first cycle, students are given a post test which aims to see the results of the given action. Based on the second cycle post test conducted, 15 students completed with a percentage of 93.75%, while as many as 1 other student did not complete with a percentage of 6.25%. This shows that the class has completed classically because the number of students who have completed has exceeded 85%. Other data, namely the average data on learning outcomes shows a score of 84.37. This shows a significant increase in average learning outcomes from the pretest cycle I, which is

46.25 to the posttest cycle II of 60.62 then to the pretest cycle II of 69.38, until finally in the posttest cycle II it reaches 84.37. There are also observations in cycle II that show very good criteria.

D. Conclusion

Learning with the Role Playing learning model assisted by learning media can improve mathematics learning outcomes for class II students at SD Negeri Sumobito 1. This is evidenced by the increasing number of students who completed from the beginning before the action was taken by 12.5% in the pretest cycle I with the classical incomplete category. to 93.75% in the posttest cycle II with the classical complete category. In addition, it can also be seen from the increase in the average student learning outcomes before taking the action from 46.25 in the first cycle pretest to 84.37 in the second cycle posttest.

References

Abdillah, A. A. (2015). Upaya Meningkatkan Hasil Belajar Matematika Siswa dengan Metode Fun Teaching di SDN Rawabadak Utara 10 Petang Jakarta. Politeknik Negeri Jakarta.

Arikunto, S. (2016). Prosedur Penelitian: Suatu Pendekatan Praktik. Rineka Cipta.

- Djamaluddin, A. (2019). Belajar dan Pembelajaran: 4 Pilar Peningkatan Kompetensi Pedagogis. CV. Kaaffah Learning Center.
- Emda, A. (2017). Kedudukan Motivasi Belajar Siswa dalam Pembelajaran. Lantanida Journal, 5(2), 2017.
- Gazali, R. Y. (2016). Pembelajaran Matematika yang Bermakna. *Math Didactic: Jurnal Pendidikan Matematika*, 2(3), 182–190.
- Kamarullah. (2017). Pendidikan Matematika di Sekolah Kita. Al Khawarizmi: Jurnal Pendidikan Dan Pembelajaran Matematika, 1(1), 21–32.
- Kholil, M., & Sulfiani, S. (2020). Faktor-Faktor Kesulitan Belajar Matematika Siswa Madrasah Ibtidaiyah Da'watul Falah Kecamatan Tegaldlimo Kabupaten Banyuwangi. *Educare: Journal of Primary Education*, 1(2), 151–168.
- Mulyatiningsih, E. (2015). Metode Penelitian Tindakan Kelas. In *Modul Pelatiihan Pendidikan Profesi Guru: Fakultas Teknik, Universitas Negeri Yogyakarta.* Universitas Negeri Yogyakarta.
- Rohmah, A. N. (2017). Belajar dan Pembelajaran. CENDEKIA: Media Komunikasi Penelitian Dan Pengembangan Pendidikan Islam, 9(2), 193–210.
- Tarigan, A. (5 C.E.). Penerapan Model Pembelajaran Role Playing untuk Meningkatkan Hasil Belajar IPS Siswa Kelas III SD Negeri 013 Lubuk Kembang Sari Kecamatan Ukui. *Jurnal Primary Program Studi Pendidikan Guru Sekolah Dasar Fakultas Keguruan Dan Ilmu Pendidikan Universitas Riau*, *3*(102–112).

Trianto. (2012). Model Pembelajaran Terpadu. PT Bumi Aksara.

- Trinova, Z. (2012). Hakikat Belajar dan Bermain Menyenangkan bagi Peserta Didik. *Al-Ta'lim Journal*, *1*(3), 2019–2215.
- Waskitoningtyas, R. S. (2016). Analisis Kesulitan Belajar Matematika Siswa Kelas V Sekolah Dasar Kota Balikpapan pada Materi Satuan Waktu Tahun Ajaran 2015/2016. *JIPM: Jurnal Ilmiah Pendidikan Matematika*, *5*(1), 24–32.
- Yanto, A. (2015). Metode Bermain Peran (Role Playing) untuk Meningkatkan Hasil Belajar Siswa pada Mata Pelajaran IPS. *Jurnal Cakrawala Pendas*, 1(1), 53– 57.
- Zulfiani, Herlanti, Y., & Sofyan, A. (2016). Kajian Penerapan Pendampingan Penelitian Tindakan Kelas Kolaboratif Antara Perguruan Tinggi dan Sekolah. *Cakrawala Pendidikan: Jurnal Ilmiah Pendidikan*, *35*(2), 273–283.



© 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/).