

# The Influence of Demonstration Methods with Media on Mathematics Learning Outcomes SDN 091546 Unong Manik, Simalungun Regency

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**Abstract.** Mathematics is the science that underlies the development of modern technology. Mathematics has a role in various other disciplines, and advances human thinking. One of the learning methods that apply real learning aids is the demonstrass method. Demonstration method is a learning method that shows the object, the process of something being studied, accompanied by a brief explanation from the teacher and the participation of students in learning. The researcher formulates the problem as follows. Is there an effect of the use of demonstration methods with the media on mathematics learning outcomes in fifth grade students at SD Negeri 091546 Unong Manik? The research design used in this study was a one group pre-post test design. What is studied is the process of implementing learning, the increase that occurs from pretest to posttest, the effect of the demonstration method with the media on student learning outcomes using the demonstration method which is then compared with the two-way ANOVA test. Mathematics lessons before learning using the Demonstration method with the media reached 48, 68 were included in the almost sufficient category. Based on the t-test, the t-count results showed 1.553 with a p value of 0.129 0.05 meaning that there was an effect of the Demonstration method with the media on student learning outcomes in learning Mathematics for class V SD Negeri 091546 Unong Manik Semester 1 (even) Academic Year 2017/2018 After conducting research and data processing it can be concluded that the application of the demonstration method in learning mathematics affects student learning outcomes. Suggestions from researchers, demonstration methods can be used by teachers in learning activities to create an active learning atmosphere and to improve student learning outcomes.

**Keywords:** Demonstration, Learning, Outcomes

## I. INTRODUCTION

The more developed human life, the more developed the problems faced by education, so that it increasingly demands human progress in thoughts about education. Now it is increasingly realized that education plays an important role in the life and progress of mankind. Education is a dynamic force in the life of every individual, which influences the development of his physical, spiritual power (reason, taste and will), social and morality ( Dwi Siswoyo, et al 2007: 17)

Sunaryo Kartadinata and Nyoman Dantes (Arif Rohman, 2009) define education as an effort to help children develop themselves optimally in social life. This is in accordance with RI Law No. 20 of 2003 concerning National Education System article 1 paragraph 1 which states that "Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control , personality, intelligence, noble character, and the skills needed by himself, the community, the nation and the State"

The opinion above reveals that education is a conscious effort in the learning process so that students can actively develop their potential. development of students' knowledge, attitudes, and skills as learning objectives.

The learning process carried out by the teacher will determine the success or failure of the learning objectives. Teachers must be able to explain abstract concepts with concrete objects or objects so that students can easily understand them. In line with this, according to Piaget's theory, elementary school students (7-12 years).

### Problem Formulation Based on limits

Problem of research problem formulation How does the demonstration method with the media influence the results of learning mathematics in class V at SDN 091546 Unong Manik in the 2020/2021 Academic Year?

## II. METHODS

### Location and Time of Research

#### Research sites

The research location is SD 091337 located at Rindung RT/RW 00, RINDUNG Din, Silou Huluan Village, Raya District, Simalungun Regency, North Sumatra Province Postal Code 21162 Pictures of the location of SDN 091546 Unong Manik are attached in Appendix 3

#### Research time

This research was conducted from May to August 2021.

## III. RESULTS AND DISCUSSION

Based on the analysis of the pretest scores of the fifth grade students at SDN 091546 Unong Manik, it was shown that the two classes, namely the demonstration class in class V SDN 091546 Unong Manik, had a homogeneous value variance in the Sig. 0.120, This proves that the two classes are not significantly different. After knowing that the demonstration class was not significantly different, the researcher determined the demonstration class by learning to use the demonstration method

The time used in the learning process on each

The results of this study are in line with the results of research from Edward Sinaga (2016) with the title "Efforts to Improve Learning Outcomes and Matemanka Learning Creativity in Determining the Position of an Object on the Cartesian Diagram Through the Use of the Demonstration Method in Class VI Students of SD Negers 091311 Pematang Raya" Based on Edward's research results

it can be concluded that the demonstration method in learning mathematics can improve student learning outcomes. After the learning activities were carried out, the result was that 96.3 % of the total students had been declared complete in participating in the basic competence mathematics learning to determine the position of points in the coordinate system.

Based on the t-test the t-count results show 1.553 with a p-value of 0.129 0.05, meaning that there is an influence of the demonstration method with the media on student learning outcomes in Mathematics class V SD Negeri 091546 Unong Manik Semester 1 (even) 2017 Academic Year/ 2018 After carrying out research and data processing, it can be concluded that the application of the demonstration method in learning mathematics has an effect on student learning outcomes. Suggestions from researchers, demonstration methods can be used by teachers in learning activities to create an active learning atmosphere and to improve student learning outcomes. However, so that demonstration learning can run well, correctly and achieve maximum results, the teacher needs to check the readiness of students and also the demonstration tools that will be used.

## IV. CONCLUSIONS

The average value of students at SDN 091546 Unong Manik as an experimental class in Mathematics before conducting learning using the Demonstration method with media reached 48, 68 was included in the almost enough category. The average value of the average student learning outcomes at SDN 091546 Unong Manik as an experimental class after carrying out learning with the Demonstration method with media in the Mathematics subject it reached 77.86 included in the more than sufficient category. Based on the 1-test 1-count test results show 1.553 with a p value of 0.1290.05 meaning that there is an influence of the Demonstration method with the media on student learning outcomes in Mathematics class V SDN 091546 Unong Manik Semester 1 (even) Academic Year 2017/ 2018

Mathematics is the science that underlies the development of modern technology. Mathematics has a role in various other disciplines, and advances human thinking. One of the learning methods that apply real learning aids is the demonstrass method. Demonstration method is a learning method that shows the object, the process of something being studied, accompanied by a brief explanation from the teacher and the participation of students in learning. The researcher formulates the problem as follows. Is there an effect of the use of demonstration methods with the media on mathematics learning outcomes in fifth grade students at SD Negeri 091546 Unong Manik? The research design used in this study was a one group pre-post test design. What is studied is the process of implementing learning, the increase that occurs from pretest to posttest, the effect of the demonstration method with the media on student learning outcomes using the demonstration method which is then compared with the two-way ANOVA test.

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