

## Research Article

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# Improving Mathematics Learning Outcomes Through the Use of Animated Video Media in Learning to Build Flat Grouping for Mentally Impaired Students

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**Abstract:** The use of media can increase students' enthusiasm and interest in learning. This study shows that learning mathematics with the use of model media has a positive impact on improving student learning outcomes. Based on data analysis, the learning outcomes of students in the teaching and learning process using Animation Video Media in each cycle have increased. This has a positive impact on student learning outcomes, which can be shown by increasing the average value of students in each cycle which continues to increase. Thus, it can be concluded that the animated video media is suitable to be applied to learning to recognize the elements of flat shapes for mentally retarded students.

**Keywords:** learning outcomes, learning media, mental retardation

## Introduction

Mathematics is one of the fields of study that is very influential in life. In transactions and socialization of society cannot be separated from matters relating to calculations, quantitative calculations. Therefore, in the educational environment the field of mathematics studies has an important role. Starting from elementary school (elementary school) to university, public schools or special schools, the field of mathematics has been taught. The field of study in mathematics is difficult for most students in formal schools, especially students in schools with special needs, such as mentally retarded students.

Mentally retarded children are children who have significantly below the average intelligence of children in general, accompanied by obstacles in adjusting to the surrounding environment (Nunung Apriyanto, 2012:21). They experience permanent delays in all areas, their memory spans are short, especially those related to academics, are less able to think abstractly and require very detailed explanations.

The use of special methods in mathematics lessons is expected for mentally retarded students to have an understanding in receiving learning. Media has an important role in the learning

process. The use of media can increase students' enthusiasm and interest in learning. In simple terms, learning media are tools used to support the teaching and learning process, from books to the use of electronic devices in the classroom. Learning media serves to explain or visualize a material that is difficult to understand if only using verbal speech.

The things mentioned above are the reasons behind the author to conduct a study entitled "Improving Students' Mathematics Learning Outcomes Through the Use of Animated Video Media in Learning Grouping Build Flat in Class VI SLBN Mataram"

The purpose of this study in general is to describe how to improve students' mathematics learning outcomes through the use of animated video media in the learning of grouping flat shapes in class VI SLBN Mataram.

Theoretically, this research can add insight or understanding of theoretical approaches and learning strategies using animated video media in improving students' mathematics learning outcomes in learning material for grouping flat shapes in Class VI SLBN Mataram.

### Literature Review

According to Slameto (2010: 2) Learning is a business process carried out by a person to obtain a new behavior change as a whole, as a result of his own experience in interaction with his environment. According to Oemar Hamalik (2004: 27) Learning is the modification or strengthening of behavior through experience.

According to Agus Suprijono (2010: 6) Learning outcomes are patterns of actions, values, understandings, attitudes, appreciation and skills in the form of verbal information, namely the ability to express knowledge in the form of language, intellectual skills, cognitive strategies, motor skills and attitudes.

Definition of Mathematics according to Abdurahman (2003: 252) is a symbolic language whose practical function is to express quantitative and spatial relationships so that its theoretical function is to facilitate thinking.

Children with mental retardation are children who have significantly below the average intelligence of children in general, accompanied by obstacles in adjusting to their surrounding environment (Nunung Apriyanto, 2012:21).

### Research Methods

The type of research carried out is classroom action research. Classroom action research (CAR) is a research conducted by the teacher in his own class through self-reflection with the aim of improving learning. The research design used is a spiral model. The design is described in the form of a spiral loop where one round is a cycle/meeting consisting of four stages, namely: planning, action, observation, and reflection.

The research was conducted at SLBN Mataram, which is located in Mataram City, West Nusa Tenggara. This research was carried out in Class VI (Tunagrahita) in the first semester, starting from July to September 2022. The research was carried out following the lesson

schedule prepared at the SLBN Mataram. The research subjects are students of class VI (Tunagrahita) for the academic year 2022-2023. The number of students is 4 students, consisting of 1 male student and 3 female students.

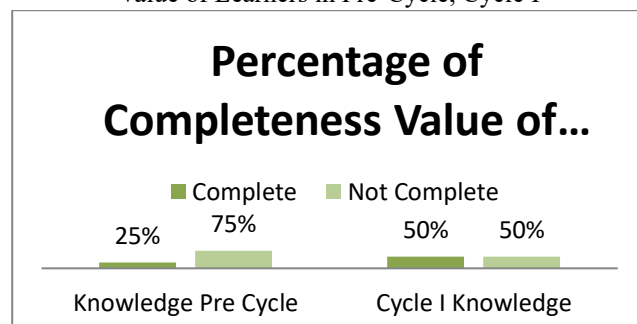
### Research Results And Discussion

The results of this study indicate that learning mathematics with the use of model media has a positive impact on improving student learning outcomes. This can be seen from the increase in the percentage of students' learning completeness, as shown in the table below:

**Table 1** Improving Student Knowledge Learning Outcomes In Pre-Cycle, Cycle I

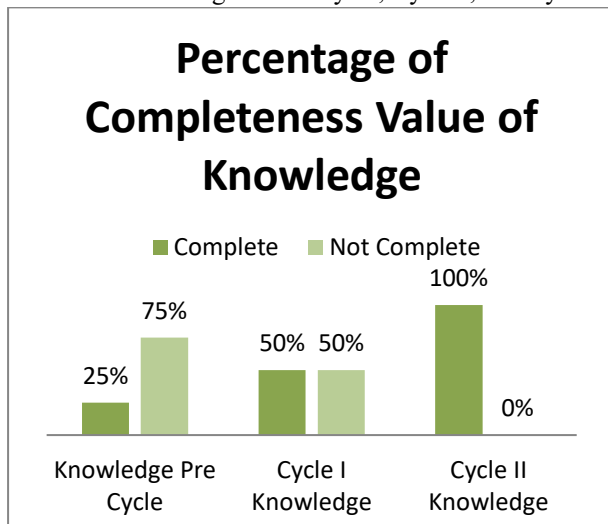
Precycle		Cycle I	
Knowledge		Knowledge	
Average	%	Average	%
67.50	25%	72.50	50%

**Graph 01** Percentage of Increase in Mastery Knowledge Value of Learners in Pre-Cycle, Cycle I



**Table 2** Improving Student Knowledge Learning Outcomes in Pre-cycle, Cycle I and Cycle II

Precycle		Cycle I		Cycle II	
Knowledge		Knowledge		Knowledge	
Average	%	Average	%	Average	%
67.50	25%	72.50	50%	85.00	100%

**Graph 2** Percentage of Increase in Completeness Value of Learners' Knowledge in Pre-Cycle, Cycle I, and Cycle II

Based on data analysis, the learning outcomes of students in the teaching and learning process using Animation Video Media in each cycle have increased. This has a positive impact on student learning outcomes, which can be shown by increasing the average value of students in each cycle which continues to increase.

Thus, it can be concluded that the animated video media is suitable to be applied in learning to recognize the elements of flat shapes in class VI (tunagrahita) SLBN 1 Mataram.

## Closing

### Conclusion

- 1) The use of animated video media is a learning strategy designed to help achieve goals such as improving intellectual skills, as well as stimulating students' curiosity in an interesting and fun way to become independent learners.
- 2) Through the use of animated video media, an increase in student learning outcomes in each cycle, this can be seen from the mastery of learning knowledge increased from pre-cycle 67.50 = 25%, first cycle 72.50 = 50%, and second cycle 85.00 = 100% .
- 3) Through the use of animated video media, there was an increase in teacher teaching activities from 61% in the pre-cycle to 69% in the first cycle and increased to 86% in the

second cycle. student learning activities = 50%, cycle I student learning activities = 54%, and cycle II = 85%

### Suggestion

- 1) To teachers of Mathematics, especially at SLBN Mataram, that this animated video media application can be used as a guide in learning to improve student learning outcomes
- 2) For researchers the application of the use of animated video media can be developed to achieve goals and objectives in the field of academic achievement, especially in the field of mathematics.
- 3) To the education office, to provide more teacher competency training related to innovative learning media.

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