Efforts To Improve The Mathematics Learning Outcomes Of Class VII Students At The Wusto Level By Applying The Snowball Thrawing Learning Model At The Imam An-Nasai Islamic Boarding School, Gowa Regency

Nur Aisyah[1*], *Azwan* Anwar[2], *Nurwakia*[3] ,*Nursyamsi*[4] *Suriani.*M[5] ,*Miftahul* Jannah[6], *Hukma*[7],*Nur* Rezky Ramadhan[8] , *Haeruddin*[9]

[1]Mathematics Education Study Program, Pejuang University of the Republic of Indonesia, Makassar, South Sulawesi, Indonesia
[2] Mathematics Education Study Program, Institut Cokroaminoto Pinrang, Pinrang, South Sulawesi, Indonesia
[3] Department of Islamic Education, IAIN BONE, Bone, South Sulawesi, Indonesia
[4] Mathematics Education Study Program STAI Al bayan Hidayatullah Makassar, Makassar South Sulawesi, Indonesia
[5] Department of Actuarial Science, Muhammadiyah University Bulukumba, Bulukumba, south Sulawesi, Indonesia
[6] Mathematics Education Study Program, Universitas Al Asyariah Mandar, Polewali Mandar, West Sulawesi, Indonesia
[7] Department of Actuarial Science, Universitas Muhammadiyah Bulukumba, Bulukumba, South Sulawesi, Indonesia
[8] Mathematics Education Study Program Bosowa University Makassar, Makassar, South Sulawesi, Indonesia
[9] Water Resource Management Study Program Institut Teknologi Pertanian (ITP) Takalar, Takalar, South Sulawesi, Indonesia

Abstract. *This research is a classroom action research (CAR) conducted at PPTQ Imam An Nasai Gowa Regency which aims to improve mathematics learning outcomes using the snowball thrawing method. The subjects of this study were students of class VII with a total of 27 students. Data collection was carried out using a learning achievement test sheet. The collected data were analyzed using quantitative and qualitative analysis. The results showed that the average score of student learning outcomes in the first cycle reached an average of 77.96 and in the second cycle reached an average of 89.85. The standard deviation in cycle I was 10.353 and in cycle II it was 5.29. Based on the completeness category of learning outcomes used, the score obtained for students' mathematics learning outcomes which were categorized as complete in cycle I was 74.7% and in cycle II it increased to 92.59%. From these results it can be*

* Corresponding author: nur.aisyah@upri.ac.id

concluded that there is an increase in learning outcomes in mathematics using the snowball method thrawing

1. INTRODUCTION

1.1 Problem Formulation

To achieve high quality learning, each subject, especially Mathematics, must be organized with the right method or model so that the teaching and learning process can take place as expected. Looking at the condition of schools, especially cottage-style schools, where the proportion for the general learning process is less than optimal in terms of time because it is more dominant in Islamic nuanced subjects. With the background as a new female student receiving education in a dormitory, a serious learning style adjustment process was obtained. This adaptation process resulted in some grades for the students' mathematics subjects being less than optimal. Therefore, there is a need for improvement. By using the snowball thrawing learning method optimally, it is able to answer the dilemma of the mathematics grades of class VII students at Wusto level at the Tahfizul Qur'an Imam An-Nasai Islamic boarding school, Gowa Regency because with this method, the teacher is able to find out the extent of the students' knowledge and abilities in the material. Packed with challenging and exhilarating implementation. Based on the background described above, the author formulates the problem in this research as whether using the snowball thrawing method can improve the learning outcomes of class VII wusto level students?

1.2 Research purposes

The purpose of this study was to improve the learning outcomes of class VII students at the Wusto level at the Imam An-Nasai Tahfizul Qur'an Islamic Boarding School, Gowa Regency.

1.3 Benefits of research

The expected benefits of this research are: 1) For students: Train student readiness and impart knowledge to each other. 2) For teachers: Assisting teachers in choosing and determining alternative learning methods that should be used in the learning process so that the targets for achieving student learning outcomes are truly appropriate and effective. 3) For schools: As an input in the context of improving the quality of education at the Imam An-Nasai Tahfizul Qur'an Islamic Boarding School, Gowa Regency.

2. LITERATURE REVIEW

2.1. Theoretical Study

2.1.1. The results of learning mathematics

a. Learning theory

Sardiman (Zainal Aqib, 2015:210) states that "Learning is a change in behavior or appearance, with a series of activities, for example reading, observing, listening, imitating, and so on.

b. The essence of learning mathematics
In the constructivist view, learning mathematics requires reasoning. With this reasoning or logic, students can form their mathematical knowledge well. In the constructivist school, argumentative reasons are needed to form a person's mindset in learning mathematics.

c. Mathematics learning outcomes
The word result in Indonesian (Zainal Aqib, 2015:211) contains the meaning of acquisition from an effort that has been carried out previously. Learning outcomes are a problem in the history of human life, because throughout their lives humans have always pursued achievements according to their respective fields and abilities.

d. Evaluation of Learning Outcomes
Bloom (Daryanto, 2010:1) "Evaluation, as we see it, is the systematic collection of evidence to determine whether in fact certain changes are taking place in the learners as well as to determine the amount or degree of change in individual students. "Meaning: Evaluation, as we see, is a systematic collection of facts to determine whether in reality there has been a change in the student and to determine the extent of the change in the student's personality.

1. Method
Method comes from the word methodos which consists of the word metha, which means passing, going through or through, and the word hodos, which means way or way. Method means way or the path to be traversed or taken. Meanwhile, according to the term method, it is a method or path that must be taken to achieve a goal. According to Muhibbin Syah (Zainal Aqib, 2015:213), method is defined as a way of carrying out an activity or a way of doing work using systematic facts and concepts.

2. Learning
Learning is a translation of "learning" which comes from the word learn or "to learn". Learning describes a dynamic process because in essence learning behavior is realized in a dynamic process and not something that is silent and passive. Zubaidah Amir,Risnawati (2016:5)

3. Snowball thrawing learning method
Snowball thrawing is a lesson that was first adopted from a physical game where a lump of snow was thrown with the intention of hitting another person. This method is used to determine the extent of students' knowledge and abilities in understanding, train students to be more responsive to receiving messages from other people and convey these messages to their group friends. (Miftahul Huda, 2015:226)

In mathematics learning, the syntax of the snowball thrawing learning method (Miftahul Huda, 2015:226) in more detail is: (1) The teacher conveys the material to be presented; (2) The teacher forms groups and calls each group leader to provide an explanation of the material; (3) each group leader returns to their respective groups and then explains the material presented by the teacher to their group friends; (4) each student is given one sheet of work paper to write down one question regarding the material that has been explained by the group leader; (5) students shape the paper like a ball and throw it from one student to another for 15 minutes; (6) after the student gets one ball, he is given the opportunity to answer the questions written on the paper in turn; (8) the teacher evaluates and closes the lesson

4. Framework of Thinking
The Snowball thrawing method is a learning method used to provide students with the concept of understanding difficult material, knowing the extent of students' knowledge and abilities in that material. It is hoped that apart from achieving learning objectives, student learning outcomes can be improved.

e. Action Hypothesis
"By applying the snowball thrawing method, the mathematics learning outcomes of class VII students at Wusto level at the Tahfizul Qur'an Imam An-Nasai Islamic boarding school, Gowa Regency can be improved."

3. METHOD

3.1 Type of Research

This type of research is class action research (class room action research). This research was carried out in the form of a cycle which includes implementation stages, namely: planning, action, observing and reflecting.

3.2. Research Setting

This research was carried out at the Tahfizul Qur'an Imam An-Nasai Islamic boarding school, Gowa Regency, which took place in the even semester of the 2022/2023 academic year. The subjects of this study were students of class VII at the wusto level, totaling 27 students.

3.3. Research Procedures

In carrying out the research, the researcher took several steps to prepare and carry it out. The steps are planning, implementing, observing, and reflecting which are divided into two cycles.

3.3.1. Planning stage (planning)

Before starting the activities in cycle I, the first things to do were: [1] Examine the wusto level VII mathematics curriculum; [2] Create a learning implementation plan for three meetings [4] Design and create a question grid as an evaluation tool at the end of the cycle.

3.3.2 Implementation stage (action)

Teacher Activities [1] The teacher conveys the material to be presented; [2] The teacher forms groups and calls each group leader to give an explanation of the material;

Student activities are) each group leader returns to their respective groups and then explains the material presented by the teacher to their group friends;

[4] each student is given one sheet of work paper to write down one question regarding the material that has been explained by the group leader; [5] students shape the paper like a

ball and throw it from one student to another for 15 minutes; [6] after the student gets one ball, he is given the opportunity to answer the questions written on the paper in turn;

3.3.3 Observing stage (Observation)

Observations were made by identifying the state of the students during the teaching and learning process

3.3.4. Reflection Stage (reflection)

The results obtained in the observation stage are collected and analyzed at this stage. Likewise, the evaluation results show things that still need to be improved and developed while maintaining the results obtained at each meeting. The results of the analysis of each cycle are used as a reference for planning whether the research continues to the next cycle.

3.4 Research Instruments

The instrument used to collect data or a means of obtaining data and information to complete this discussion is: mathematics learning outcomes test. The mathematics learning outcomes test is in the form of a description test submitted in writing with the aim of providing answers that can be used as a basis for placing numerical scores.

3.5 Data Collection Techniques

The type of data that will be obtained is quantitative data and in the form of learning outcomes. The data collection technique used is data about students' mathematics learning completeness obtained from the results of mathematics learning tests carried out at the end of each cycle.

3.6 Technical Data Analysis

Data collected from learning outcomes were analyzed quantitatively and qualitatively. Quantitative data Student learning outcomes are calculated using descriptive analysis, namely: mean, standard deviation, variance, maximum value and minimum student value obtained in each cycle. For qualitative analysis using categorization techniques. The categorization guidelines that will be carried out in this study are the Minimum Completeness Criteria (KKM) in class VII wusto level

For the 75 math subjects that students must achieve. This category consists of 5 learning outcome assessments, namely: very low, low, medium, high, very high (Arikunto, 2013:281) in table 1

Table 1. Categories of learning outcomes assessment

Value	Category
80 – 100	Very high
66 – 79	Tall
56 – 65	Currently

Value	Category
40 – 55	Low
0 – 39	Very low

The criteria for success in this research are student learning outcomes, namely if the average learning outcome reaches a KKM score of 75.

4. RESULTS AND DISCUSSION

Description of the mathematics learning outcomes of class VII students at the wusto level cycle I

Table 2. Statistical Scores of Learning Outcomes for class VII students at the wusto level after applying mathematics learning with the snowball thrawing method

Statistics	Value Statistics
subject	27
Means	77,96
Maximum	96
Minimum	62
Score range	34
Standard deviation	10,353
variance	107.191

If the students' mathematics learning outcomes scores are grouped into assessment categories, the frequency distribution obtained is shown in table 1.3

Table 3. Frequency Distribution and Score Percentage of Mathematics Learning Results for Class VII Wusto Level Female Students in Cycle I

Score Results	Category	Frequency	Percentage
80 – 100	Very high	13	48,14
66 – 79	Tall	13	48,14
56 – 65	Currently	1	3,7
40 – 55	Low	0	0
0 – 39	Very low	0	0

Table 4. Description of individual completeness of learning outcomes for class VII students at the wusto level in cycle I

Score Results	Category	Frequency	Percentage
0-74	Not finished	14	51,85
75-100	complete	13	48,14
Jumlah		27	100

Based on the results of the analysis of the frequency distribution of the completeness of students' mathematics learning outcomes in cycle I in table 1.4, it is categorized as complete if the score is 75-100. Meanwhile, incomplete is if the student achieves a learning outcome score between 0-74. In table 1.4 there are 14 students or 51.85% who are in the incomplete category and there are 13 students or 48.14% who are in the complete category.

Description of mathematics learning outcomes for class VII female students at wusto level, cycle II

Data based on the results of the final cycle II test for class VII students at the wusto level after applying mathematics learning with the snowball thrawing method are in table 5

Table 5. Statistics on Learning Result Scores for female students of class VII wusto level in cycle II.

Subject	Value Statistics
Means	27
Maximum	89,85
Minimum	100
Score range	79
Standard deviation	21
variance	5,829
subject	33,97

If the scores of the students' mathematics learning outcomes are grouped into five categories of levels of mastery of learning outcomes, the distribution of student scores is obtained as shown in table 6.

Table 6. Frequency Distribution and Percentage of Mathematics Learning Outcome Scores for female students of class VII wusto level in cycle II

Score Results	Category	Frequency	Percentage
80 – 100	Very high	25	92,59
66 – 79	Tall	2	7,4
56 – 65	Currently	0	0
40 – 55	Low	0	0
0 – 39	Very low	0	0

Furthermore, the 27 female students who took the test in cycle II can be seen in table 1.7

Table 7. Frequency Distribution and Percentage of Complete Learning Outcomes for female students of class VII wusto level in cycle II

Score Results	Category	Frequency	Percentage
0-74 75-100	Not finished complete	0 27	0 100
Amount		27	100

The improvement in mathematics learning outcomes for class VII students at the wusto level is also presented in Figure 1

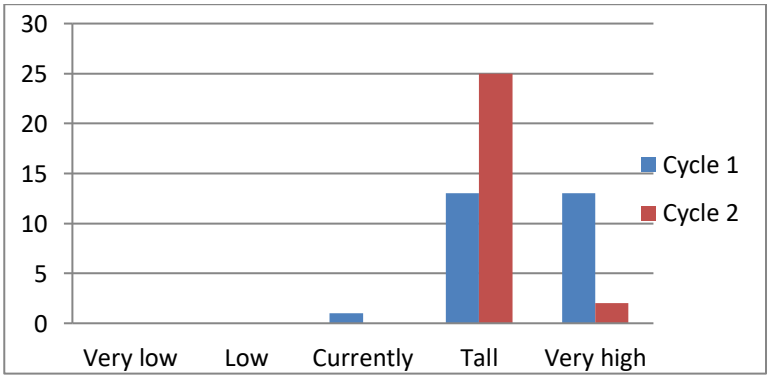

Fig.1. The Improvement in Mathematics Learning Outcomes for Class VII

Based on Figure 3 above, it can be seen that there has been an increase in mathematics learning outcomes for class VII Wusto level female students through the use of the snowball thrawing method from cycle I to cycle II. This means that implementing mathematics learning using the snowball thrawing method can improve students'

mathematics learning outcomes. Furthermore, in table 8, shows an increase in student learning outcomes cycle I and cycle II:

Table 8. Description of the Improvement in Mathematics Learning Outcomes for Class VII students at the wusto level in Cycle I and Cycle II

No	Cycle	Score			
		Subject	Highs	Lowes	$\bar{X}$
1.	I	27	96	62	77.96
2.	II	27	100	79	89,85

Based on table 8 it can be seen that the average student mathematics learning outcomes carried out in two cycles has increased.

5. CONCLUSION

The average value of students' mathematics learning outcomes in cycle I was 77.96 and if grouped into categorization it was in the high category, while in cycle II the average value of students' mathematics learning outcomes was 89.85 and if grouped into categorization it was in the very category. tall. Apart from that, if you look at the percentage of individual completion in cycle I, it only reached 48.14%, while in cycle II there was an increase, namely 100% completed. So there is an increase in the learning outcomes of class VII students at Wusto level at the Tahfizul Qur'an Imam An-Nasai Islamic boarding school, Gowa Regency.

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