

# Improvement of Mathematics Learning Outcomes of Students Class VIII A Madrasah Tsanawiyah Subulussalam Sumberjo through Learning Teams Games Tournament

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**Abstract:-** This study aims : (1) To determine the level of Mathematical understanding of students by using the strategy of learning Teams Games Tournament (TGT), (2) To improve the Mathematics learning outcomes of students of Madrasah Tsanawiyah Subulussalam Sumberjo taught with the strategy of learning Teams Games Tournament (TGT), (3) To determine the percentage increase in students ' Mathematics learning outcomes after using the strategy of learning Teams Games Tournament (TGT). This research is a Classroom Action Research. The subject of this research is class VIII-2 Madrasah Tsanawiyah Subulussalam Sumberjo as many as 29 students . And the object of research is Through Learning Teams Games Tournament (TGT) in improving Students ' Mathematics Learning Outcomes VIII Madrasah Tsanawiyah Subulussalam Sumberjo. Based on the results of the initial test the average Value of learning outcomes of students before applied strategy games tournament is by 34,10% with the criteria very low and in the classical 13,79%. The average value of students ' Mathematics learning outcomes after applied the strategy of teams games tournament in the first cycle of 65,83% with the criteria of being and in the classical 72,41% means the value obtained by the students have not yet reached the *kertuntasan* classical which amounted to > 85%. The average value of students ' Mathematics learning outcomes after applied the strategy of teams games tournament in the second cycle of 74,48% with very high criteria and in classical 86,21%. Mean value learning outcomes the student has achieved mastery in the classical style. This means happened the increase in students ' Mathematics learning outcomes of prior action to the first cycle of 58,62%, and from cycle I to cycle II amounted to 13,79%. From this research resulted in the conclusion that by using the strategy of learning Teams Games Tournament (TGT). can improve the study result and activity of students of class VIII-2 Madrasah Tsanawiyah Subulussalam Sumberjo the school Year 2018/2019.

**Keywords:-** Learning Teams Games Tournament and Student Learning Outcomes.

## I. INTRODUCTION

The development and progress of technology today is inseparable from the development and progress of science. In line with the development of science, then mathematics as a science of knowledge that many of role in other sciences is in need because of the usefulness of mathematics instead of just giving the ability in the calculation-the calculation of the quantitative alone, but also in structuring the ways of thinking, especially in the formation of the ability to analyze, make synthesis, evaluation to problem-solving skills.

There are several reasons about the need to learn and master the mathematics, as proposed by Cornelius ( Abdurrahman 1990 : 253) who suggests that:

“Five reasons for the need for studying mathematics, because mathematics is, (1) a means of thinking clearly and logically, (2) a means to solve problems in everyday life, (3) a means of knowing patterns of relationship and generalization of experience, (4) means to develop creativity, (5) a means to increase awareness of the development of culture”.

Mathematics is needed in all areas of life, because mathematics can form a thinkers a critical, systematic, logical, creative and have the willingness to cooperate effectively and mathematics is very necessary in facing all the changes of the times are constantly changing and growing very rapidly, especially in the world of technology, according to the Ministry of National Education (2007 : 345) on the curriculum 2006 Competency Standards Mathematics issued by the Ministry of National Education mentioned that: mathematics it is also intended to develop the ability to use mathematics in problem solving and communicate ideas using symbols, tables, diagrams, and other media. Thus, students need to have the ability to obtain, select and manage information to survive in the ever-changing circumstances, uncertain and competitive. This ability requires critical thinking, systematic, logical, creative and have the willingness to cooperate effectively. The way of thinking like this can be developed through learning mathematics because mathematics has a structure and the linkages are strong and

clear between the concept that allows skilled students thought rational.

But in fact, learning outcomes in mathematics there is still less than satisfactory. based on the results of the observations of researchers in the Madrasah TsanawiyahSubulussalam, researchers looked at the average value of mathematics students is still less than satisfactory, and still much lower compared with the value of other subjects. Although the improvement efforts of all aspects concerning the improvement of students ' mathematics learning outcomes has been done. However, there are still obstacles, shortcomings or failures. Researchers also look at the quality of mathematics education has not been as expected. In terms of the learning process, researchers see teaching done by the teacher are still using conventional learning or the traditional way where the teacher is more dominant and more active in every delivery of the subject matter presented to students. While the students only hear what is described teacher, noting what was written the teacher's on the board write, the occasional teacher asked to the student or students ask, then teacher provides practice questions or homework or do it on the board clock, then at the end of the semester all students follow the replay of the general. It is a portrait that students are passive (to be received) about what is learned. The researchers also noticed that the teacher only uses strategies that's it, do not apply the other strategies or strategies varied and less precisely teachers choose the strategies used in delivering the subject matter so that students feel bored and indifferent on the subjects of mathematics and the desire to better learn math lessons wasted away, causing the results of students ' mathematics learning is low. But not infrequently the students who claimed to like mathematics. There are two reasons why cooperative learning is recommended for use, namely : first, some of the results of the study prove that the use of cooperative learning can improve learning achievement of students at once can improve the ability of social relationships, cultivate an attitude of accepting the flaws of yourself and others and can improve self-esteem. The second reason, can realize the needs of the students in learning to think, solve problems, and integrate knowledge and skills. From the results of the research Harahap, A (2016) has been using cooperative learning type Make A match and obtain a good result, so the researchers are also interested in using cooperative learning with different models namely model Teams Games Tournament (TGT). TGT requires students to cooperate in small groups consisting of 4-5 people to cooperate with each other and discuss understand the material given by the teachers. Then held the game academic in order to enable students in the learning process and increase learning motivation. In this case the teacher can guide solve the difficulties experienced by students at the time of the discussion. Based on the background above, the researcher is interested and wishes to do research with the title: "Improving Mathematics Learning Outcomes of Students class VIII a Madrasah TsanawiyahSubulussalamSumberjoThrough Learning Teams Games Tournament (TGT) academic Year 2018/2019.

## II. METHODS

### ➤ *Learning Teams Games Tournament*

In the world of education, especially in the implementation of learning known term strategies and methods and techniques. The third term is different, but contains the general objectives are the same. In this case, Sanjaya (2007:125) explains that:

Strategy is a planning that contains a series of activities designed to achieve specific educational goals. The method is a way that can be used to implement the strategy, whereas "technique is the way in which a person in order to implement a method.

The main purpose of the presentation of the strategies, methods and techniques this learning is to facilitate learning so as not to bring concerns to the student in learning. In the process of teaching and learning, teachers need to have techniques so that students can learn effectively and efficiently in accordance with the expected goals. As is understood and known that there are many strategies, methods and techniques proposed by the educational experts to be able to use educators in the learning activities in the classroom. Therefore, teachers should choose techniques that are appropriate in conveying the material to students. Therefore it should be understood that learning is something students do, not made to students. This was disclosed by the Isjoni (2009:11) that: "learning is basically an effort of educators to help students perform learning activities that materialize the efficiency and effectiveness of the learning activities that students can do.

Joseph and Syaiful (1995 :182) explains the "techniques of teaching there are 24 kinds in the foreign language, either Arabic or English. One of them is the Type of Teams Games Tournament (TGT) in an effort to increase the ability of students studying Mathematics.

In the learning of TGT as a strategy of applied learning to enable the students in learning is a method of group work. Methods of group work are often discussed at this time is the method of cooperative learning. Cooperative learning method has a type among the other types of games tournament. Cooperative learning type teams games tournament (TGT) is a type of cooperative learning that requires students to work together in one group consisting of 4-5 people to help each other, give each other referrals and guidance in understanding the material presented by the teachers for lunch in the tournament. But keep in mind not all group work is considered cooperative, Lie (2003:31)mentions to achieve it must be met the five elements of cooperative learning model, namely: (1) the interdependence is positive, (2) responsibility of individuals, (3) face-to-face, (4) communication between members, and (5) evaluation of the group process.

In accordance with the type of the problem, then the research is more appropriate to use classroom action research (PTK). Classroom action research (PTK) in English is Classroom Action research (CAR) is a research activity conducted in class

According to Arikunto (2008 : 3) classroom action research (PTK) is :

- Research refers to an activity observing an object by using the how to and rules of a particular methodology to obtain data or information that is beneficial in improving the quality of a thing which interest and important for researcher.
- Action refers to a motion activity which is deliberately done with a specific purpose. In the study shaped a series of cycle activities for students.
- The class in this case is not tied to the definition of a class room, but in the sense that more specific. As has

been long in the field of education and teaching, which is meant by the term class is a group of students who are in the same time, receive the same lessons from the same teacher anyway.

- The same thing was also said by Kemmis and Taggart (Aqib 2006:22), namely :

“ In one cycle or round consists of four components which include (a) planning (planning), (b) the action / action (acting), (c) observation (observing), (4) reflection (reflecting). After a cycle is implemented, especially after the reflection, then followed with the re-planning is implemented in the form of a cycle of its own. And so on, or with some cycle times.

In more detail, the procedure of implementation of the classroom action research can be shown in the following image :

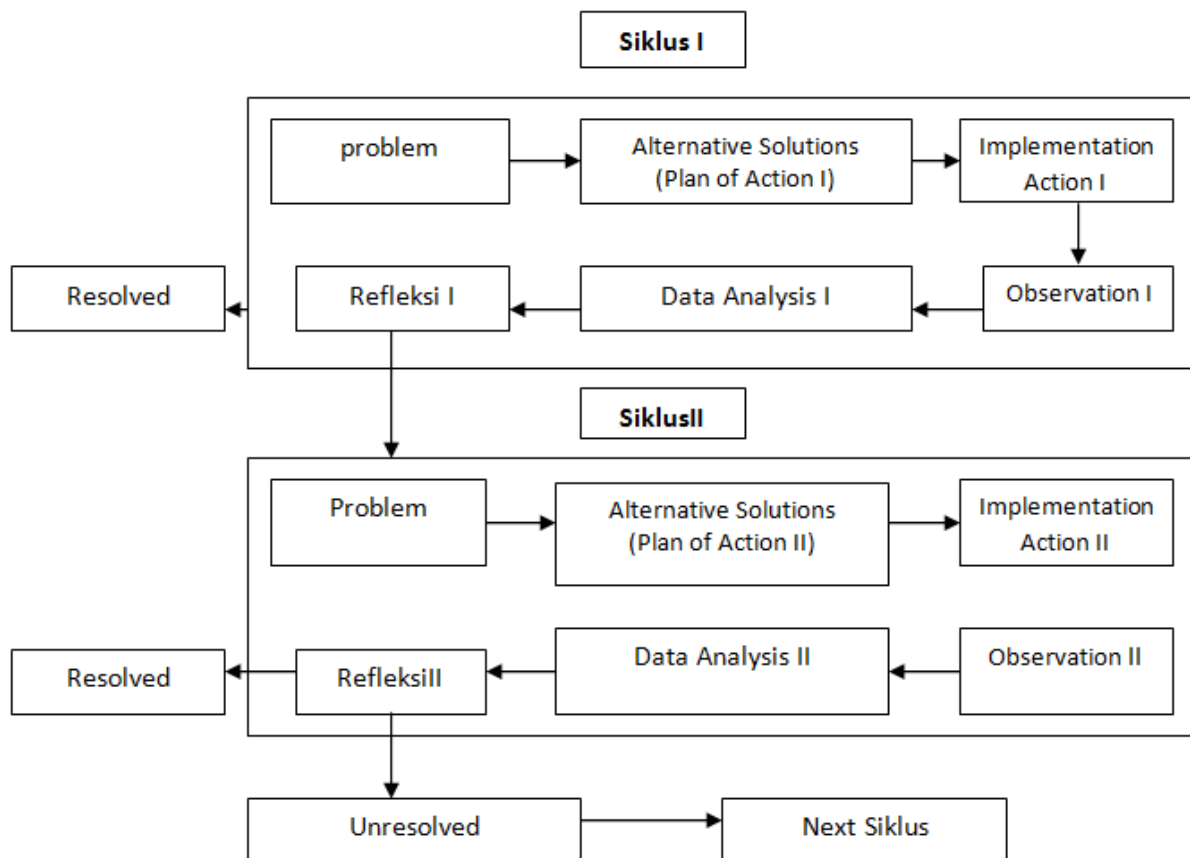


Fig 1

### III. RESULTS AND DISCUSSION

➤ *Indicators of success*

The performance indicators used to measure success in research action of this class is as follows.

- A student is called to pass the study when it has reached a score of 65% and In this research, the target to be achieved is the percentage of classical completeness reached > 85%

- If the activity of students in learning can achieve the target of at least >75% as measured by the see observation sheet of students.

➤ *Learning Outcomes*

At this stage the researcher gives pretest to students to determine the initial ability of the students before the learning is done. From the results of the pretest the obtained results of learning of students far below the value of mastery by the value of the average 34,10. Student learning outcomes are low with regard to the problem of the quality

of the design of the teaching of Mathematics presented teacher in the learning activities. Learning atmosphere in class and the presentation of material in mathematics that is less interesting can cause students to feel bored before they learn it. Therefore, the designed learning that seeks to enable students in learning, linking the material taught with real situations and encourage students to make connections between the knowledge possessed by its application in everyday life as well as create learning environments that are natural. This presented researchers with applying the strategy of learning teams games tournament learning in mathematics. Based on the test given before the act obtained the following results :

No.	Nilai	Kategori	Frekuensi
1	90 – 100	SangatTinggi	0
2	80 – 89	Tinggi	0
3	65 – 79	Cukup	3
4	55 – 64	Rendah	0
5	0 – 54	SangatRendah	26

Table 1:- Description of the Value of the Initial Test Results

No.	Nilai	Kategori	Frekuensi
1	90 – 100	SangatTinggi	0
2	80 – 89	Tinggi	0
3	65 – 79	Cukup	21
4	55 – 64	Rendah	1
5	0 – 54	SangatRendah	7

Table 2:- Description of the Value of the Postes I

No.	Nilai	Kategori	Frekuensi
1	90 – 100	SangatTinggi	3
2	80 – 89	Tinggi	4
3	65 – 79	Cukup	18
4	55 – 64	Rendah	3
5	0 – 54	SangatRendah	1

Table 3:- Description of the Value of the Postes II

#### • Reflection I

From the results of the test in cycle I conducted in class VIII-2 Madrasah TsanawiyahSubulussalam, obtained 21 students (72,41%) who achieved mastery learning 65% and 8 students (27,59 %) have not yet reached the level of mastery learning. In addition, from results of observation it turns out that the efforts of the teachers with the implementation of the strategy of learning teams games tournament has not been able to make the students more understand the material Surface Area . Some students still have not been able to apply the strategy steps of learning teams games tournament (TGT) in learning, Students are also not accustomed to mempersentasikan the result of discussion on the future of the class. Because found many shortcomings during the cycle I then need to held improvement actions. Therefore, research was continued to the cycle II.

#### • Reflection II

Based on the results of observation and results of tests performed students, it can be concluded as follows :Researchers have been able to maintain and increase success in the learning cycle and fix the failures encountered in the learning cycle II. The results of learning obtained by students in the second cycle also increased significantly. It can be seen from the increasing value of the average class, namely from 65,83 on cycle I become 74,48 in cycle II. Thus obtained peningkatan average amounted to 8,66 with the classical completeness 86,21%. The value of the mastery it has achieved a mastery learning classical set so that the cycle of learning in this study is stopped. Based on the results obtained shows that the learning teams games tournament (TGT) can improve student learning outcomes in class VIII 2 Madrasah TsanawiyahSubulussalamSumberjo.

## IV. CONCLUSION

Based on the results and discussion of the research, conclusions can be drawn as follows :

- The average value of student learning outcomes before applying the learning teams games tournament (TGT) is by 34,10 % with the criteria very low and in the classical 13,79 %. Means the average value of Mathematics students should be more ditingkatkanp in the next cycle by applying the learning model teams games tournament (TGT).
- The average value of students ' Mathematics learning outcomes after applied learning teams games tournament (TGT) in the first cycle of 65,83 % with the criteria of being and in the classical 72,41%. mean value obtained by students have not yet reached the *kertuntasan* classical which amounted to > 85%.
- The average value of students ' Mathematics learning outcomes after applied learning teams games tournament (TGT) on the second cycle of 74,48 % with a high criteria and in classical 86,21 % . mean value learning outcomes the student has achieved mastery in the classical 86,21% > 85%.
- The increase in the average value of students ' Mathematics learning outcomes of prior action to the first cycle of 31.73% and from cycle I to cycle II amounted to 8,65 %.
- The increase in the average value of students ' Mathematics learning outcomes in the classical style from before the action to cycle I of 58,62 %, and from cycle I to cycle II amounted to 13,80 %
- In cycle I, the average result of observation of student learning activities amounted to 2.62 (65,50%) with good category, and in cycle II the average results of observation of student learning activities to 3.29 (82,25%.) with very good category.
- In cycle I, the average result of observation of the activity of the master's of 2.79 with either category, and in cycle II the average results of the observation activity the teacher by 3.75 with a very good category.

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