

CHAPTER I

INTRODUCTION

A. Background Of The Study

Educational problem is an interest topic to be spoken and to find the solutions. One of the problems is students' achievement, because it is one of indicator of learning process is success or not. It also can be as indicator to appraise the quality of education system implemented in a unit of education.

A learning process can be said success if the behaviors of the student are change positively, based on the objectives of learning which have been planned. So that, teacher as an important element must be active and responsive to the entire phenomenon in learning process. The teacher must be improving their skills and knowledge, doing reflection to the learning managerial, in order to the students not bore and always motivated in learning process.

Mathematics is one of science which has important role for other science and uses to drum up the power of person idea. Everyone studies mathematics starting they are children until adult, because mathematics is very important in daily activity. To dominate and create technology which needs mathematics, it is not enough if we only have cognitive knowledge, but good character to the students is very important. One of the main characters in study mathematics is hard work.

Hard work in study mathematics is important thing. By having hard work character, the students will solve the mathematics problems given by the teacher easily and it will effect to the student's achievement. As we know, students achievement is one of indicator to evaluate the learning process (success or not). By looking at students' achievement, stakeholders know the quality of education system that applied in a school. To study mathematics, not enough by only just memorizing the several formulas or solve the problems which are given by the teacher, but we also need to understand the concept and apply it in daily activities. So that the students can solve the problem in daily activities related to mathematics by using their knowledge.

Based on the observation in mathematics learning process in grade VII A of Al-Islam Junior High School of Surakarta at Thursday, 10 January 2012, the student's hard work in study mathematics are still low. It is shown by: a) demonstrating seriousness in solve the problem (58,33%), b) completing the task on time (25%), c) Never giving up to solve the problems (20,83%), d) solving the problem carefully and accurately (20,83%). On the other hand, student's achievements are also low. Based on the result of algebra test, just 5 students (20,83%) of 25 students pass the minimal score of completeness criteria that is 70. The reason of that fact comes from several factors. They are teacher, students, learning tools, and environment.

The first factor is caused by the teacher. Teacher is like a bridge between the students and knowledge. So the teacher must guide the students to get expected knowledge. If the teacher has no sympathy to the student's

interest, potency, and student's hard work to study mathematics, the interest of the study mathematics will become less. So that, the teacher must use appropriate strategy in order to the students study mathematics effectively and efficiently. The next factor is the students itself. The students are expected to be active and creative in learning process, they can solve the problems which are given by the teacher, and implement their knowledge in their daily lives. Student's being active is one of student's reflexive in seriousness to study mathematics. Student's being active is also very important to know how far their understanding about the material. So that learning mathematics becomes meaningful to the students.

The next factor is learning equipment. The lack of utilization of instructional media that can be used to facilitate the understanding of material and its relevance with daily life, make mathematics become abstract. Learning environment also cause variations in hard work and student's achievement in learning mathematics. If the environments of learning are uncomfortable like light setting, ventillation, position of students, etc. it will give bad influence to the student's activities and less concentration in the learning process.

Among the factors mentioned above, the teacher is the main factor that can affect to the level of hard work and student achievements. Teachers should be able to making class feel comfortable, utilizing instructional media maximally, using interest and variation learning strategies to stimulate the hard work of students in learning mathematics. Teachers also must be able to

relate mathematics problems to real life, so that students are aware to the usefulness of mathematics in daily lives.

Based on the problems above , researcher try to do an effort to improve the hard work and student's achievement, that is conducted by using Contextual Teaching and Learning (CTL) strategy. CTL is a learning concept to helps teacher to make relation between the materials to real-world situations, so that the students are able to make connections between the knowledge which are learned to its application in daily lives. In CTL, the learning process will take place naturally in the form of student work and experience, not just a transfer of knowledge from teacher to students. The special thing of CTL is real word learning. Prioritize real experience, high-level thinking, student-centered active, critical and creative, meaningful knowledge, and the activity is not teaching but learning. The activities of CTL are to educate the students as a human being, solve the problems, and the students achievements are not just from the result of the written test.

By implementing CTL strategy, the students understand about the objectives of learning mathematics, its benefits and how to achieve it. So that the hard work and students achievements in learning mathematics can be increased in accordance to the expected goals.

B. Problem Formulation

Based on the problems above, the writer formulates the research problems as the following:

1. Does the students' hard works of grade VII A SMP Al-Islam 1 Surakarta in learning mathematics increase by using CTL strategy?
2. Does the students' achievements of grade VII A SMP Al-Islam 1 Surakarta increase by using CTL strategy?

C. Objectives of The Study

Based on the problem statement, this study is conducted to:

1. General objective

To improve the hard work and student's achievement in learning mathematics.

2. Specific Objectives

The specific objectives of this research are:

- a. To improve the hard work of students in learning mathematics to grade VII A of SMP Al-Islam 1 Surakarta in even semester for academic year 2012/2013 by using CTL strategy.
- b. To improve student's achievement in learning mathematics grade VII A SMP Al-Islam 1 Surakarta in even semester for academic year 2012/2013 by using CTL strategy.

D. Benefits of The Study

1. Theoretical Benefits

- a. Discovering new knowledge in mathematics learning especially to Improving the hard work and achievements by using CTL strategy.

- b. Being one of the proofs of the existing theories, that CTL is one of the learning strategy which have influence in increasing the hard work and student achievements.

2. Practical Benefits

a. To the students

- 1) Understanding the usefulness of mathematics and using it in daily life.
- 2) Increasing the student's hard work and achievements in learning mathematics.

b. To the teacher

Adding references of learning strategy. The students are feeling abstract with mathematics material. So that by implementing CTL the teacher can help students to relate the learning material to the daily lives.

c. To the Schools

Giving contribution in improving hard work and student's achievement in learning mathematics and ultimately have an impact on improving the quality of SMP Al-Islam 1 Surakarta.

E. Term Definition

1. Hard Work

Hard work is the behavior that indicates serious efforts to overcome all of obstacles in complete the work with the best. Indicators of

hard work were observed in this study are: a) demonstrating seriousness in solve the problem, b) completing the problems on time, c) never giving up to solve the problems, d) solving the problem carefully and accurately.

2. Student's Achievement

Student's achievement is behavioral changes that occur after the learning process according to the objectives of education (Purwanto, 2009:44). Student's achievement is realization of the goals of education, so that it needs to be measured to know whether the learning objectives achieved. In this study, the indicator of students' achievement is based on the score of the tests held at the end of each basic competencies taught.

3. Contextual Teaching and Learning (CTL) strategy

Contextual Teaching and Learning (CTL) is a learning concept that helps teachers relate the learning materials with real-world situations and encourage students to make the connection between the problems that are given in their learning with the application in their lives. Contextual learning occurs when the students apply and have experience with the material being taught with reference to real-world problems. Contextual learning has seven main components, i.e.: constructivism, questioning, inquiry, learning community, modeling, reflection, and authentic assessment.