### **CHAPTER I**

#### INTRODUCTION

## 1.1 Background of the Study

School is one of God's agents in this world to do the redemptive work. Van Brummelen (2009, p. 14) once said, "The overall aim of Christian education is to help and guide students be and become responsible and responsive disciple of Jesus Christ". Becoming disciples of Jesus Christ involves understanding and committing oneself (holistically) to Christ and Christ's vision of God's kingdom (Van Brummelen, 2009, p. 16). School is the best place after family to learn to be the disciple of Jesus Christ by serving others with our gifts and talents. In short, it is about how we walk with God in personal lives and in society lives. Thus, student engagement plays an important role in Christian education.

Students need to engage in their process of to be and become responsible and responsive disciple of Christ. They cannot automatically become responsible and responsive if they do not actively participate in the process of learning. Van Dyk (1997, p. 62) explained in one of his book, "Letter to Lisa", that the more alarming problem with student passivity or disengagement is it reflects quite incompatible with the ultimate goal of Christian teaching: knowledgeable and competent discipleship. In fact, Jesus' teaching in the scripture consists with the invitation for his disciples to act. The disciples actively respond to Jesus' teaching by doing what He said. For instance, when Jesus called the first disciples. Their response was they left their nets immediately and followed him right away (Matt

4: 20). They paid attention to what Jesus was saying and did as he said. They engaged themselves in what Jesus was saying to them. Therefore, they could respond responsibly. The model of Jesus' disciples at that time should be imitated by the students nowadays who lately lack of engagement in the learning. Jesus' disciple would not understand Jesus' teaching if they did not listen attentively, asked questions to Jesus, thought deeply about it, and acted it out.

Aware of this fact, Van Brummelen (2009, p. 112) concluded that there are fourfold rhythm in learning that takes into account learners as unique and responsible image-bearers of God, which are: the stage (*preparing*), disclosure (*presenting*), reformulation (*practicing*), and transcendence (*responding by going beyond*). Students must actively process concepts and ideas in each phase because meaningful learning demands active engagement (Van Brummelen, 2009, p. 115). The example of the active engagement that is talking about are, students must listen, ask question, solve simple problems, and discuss (Van Brummelen, 2009, p. 116). Therefore, the same as students now, they would never really learn if they just passively listen to the teacher explanation. As Kearney said that students learnt best when they are active processors of the material, engage emotionally, and focus their attention (2013, p. 83). Through their active engagement in learning, they learn to be a responsive and responsible disciple of Christ.

The fact is, when the researcher taught mathematics subject to grade 10 students at SMAK XYZ, there were many students who were disengaged in the mathematics learning process. It was clearly seen through observation that the students were not interest in doing mathematics problems, they felt bored almost at all of mathematics sessions, they spent most of their time to chat with their

fellow friends in the classroom, students who answer the teacher's question was always predictable, and they did not like to ask questions to the teacher if they did not get the teacher's explanation. As had been predicted, their mathematics scores were very low. From 24 students, there would be just 2 or 3 students who passed the mathematics standard minimum score which is 75.

Those facts made the researcher concerned more in their classroom. Then, researcher decided to hold a classroom action research in their classroom. Nowadays, teachers are not only acknowledged as the knowledge craftsman but also as a person who attempts to alter the student disposition according to the aim of education (Sanjaya, 2013, pp. 16-17). The aim of education in this research always refers to the aim of Christian education. Therefore, researcher started to find out what is really happening in their classroom by making a pre-cycle questionnaire for the students. Besides, the researcher also had an interview with mentor about that particular classroom. Mentor confirmed that the researcher observation was true and really happened.

The pre-cycle student questioner also produced a fit result with the researcher observation, and researcher interview with the mentor. Based on the students' questioner, 50% of the students said that they do not pay attention to the teacher presentation. Students who confessed that they chat during the learning process were 71%. There were 71% of the students who love to ask for help to their fellow friends. Also, 54% of the students mentioned that they do not ask to the teacher if they have difficulties. There were only 27% of the students who actively answer the teacher's questions during the class. In addition, 58% of the students admitted that they feel bored during mathematics session and they also

wish math class will be ended soon. The amount of the students who said that they often fail in math test were 71% and 58% of the students said that they need friend to learn math better. (See appendix F-1)

Based on the classroom condition, it clearly reflects student disengagement. Therefore, the researcher's focus on this research is an endeavor to increase the student engagement in mathematics subject by implementing Students Team Achievement Division (STAD).It consists of five main components -teacher presentation, group work, quiz, individual improvement score, and team recognition (Slavin, 2008, p. 143). In teacher presentation, teacher would present the material and it's time for students to focus, to listen and to ask questions. In the group work, students are divided into heterogeneous group consist of 4-5 member each (members are selected by the teacher). Since it's heterogeneous, students are encouraged to teach their fellow friends to understand the material. It will lead them to active discussion and enjoyment of mathematics with friends. Then, they will have quiz about what they learn with the teacher and the group. This part reminds the students that their responsibility in learning is both for themselves and their fellow member. After that, their quiz will be scored. Then, the last one is the recognition of the group which is based on each member grade on individual tests.

STAD second last step (individual test) helps the students to be more aware about their responsibility to learn at school. They will be a better listener and more curious about the material when the teacher explains in front of the class. The students in the classroom basically love to learn mathematics in group, have profound solidarity toward each other, and quite shy to ask question to the

teacher. Hence, based on the Students Team Achievement Division characteristics, classroom condition, and students' characters, Students Team Achievement Division is very appropriate to be implemented in the classroom to increase the students' engagement. As what being mentioned before, the student engagement refers to students who listen attentively to the teacher's explanation, ask question, solve simple problems, and discuss. The most important, whenever we can get children to cooperate, help each other, and serve each other, we are meeting some of the demands of the Lord (Van Dyk, 1997, p. 122).

## 1.2 Research Question

The statement of the problem for this research can be formulated into these following research questions:

- 1) Does Students Team Achievement Division method increase the students' engagement in grade X SMAK XYZ Semarang?
- 2) How does the implementation of Students Team Achievement Division method increase grade X students' engagement at SMAK XYZ Semarang?

## 1.3 Purpose of the Study

Based on the research question above, the purpose of the study can be defined as:

- 1) To know an increase in students' engagement in grade X SMAK XYZ Semarang by implementing Students Team Achievement Division method.
- 2) To investigate how the implementation of the Students Team Achievement Division (STAD) increase grade X students' engagement at SMAK YSKI Semarang.

## 1.4 Benefits of the Study

By doing the research it is expected that it will provide beneficial contribution to the mathematics teachers, the other CAR researchers, and researcher.

### 1. For Mathematics Teachers

- a) Mathematics teacher could use the method that the researcher used to increase the students' engagement in studying mathematics subject.
- b) Mathematics teachers will have an alternative teaching method to teach mathematics.

### 2. For Other CAR Researcher

- a) This research could be used by the other researchers as a consideration, comparison, or reference to further research.
- b) The result of this research can also be used as an example to develop the similar method in difference subject area.

### 3) For Researcher

- a) The researcher will get an experience in running a classroom action research and evaluating strengths and weaknesses of applying Students Team Achievement Division in improving students' engagement.
- b) The researcher will be able to improve her teaching skill, especially in teaching Mathematics subject.

#### 1.5 Definition of Terms

The following are the definition of terms used in this study, which are:

## a) Students Teams Achievement Divisions (STAD)

Students Teams Achievement Divisions is a cooperative learning that consists with five main components –teacher presentation, group work, quiz, individual improvement score, and team recognition (Slavin, 2008, p. 143). Teachers usually present the material by direct instruction or direct-discussion. Then, students are divided into four-or-five-member-learning-teams heterogeneously to help one another in the group to master the learning objective. After that, each one of them would take individual quiz. Their quizzes grades will determine the team recognition. (Arends, 2008, p. 352; Slavin, 2008, p. 143; Hamdani, 2011, p. 93).

# b) Student Engagement

Student engagement refers to the degree of attention, curiosity, interest, optimism, and passion that students show when they are learning or being taught (Abbott, 2014). Thus, student engagement is awareness of the students to actively response in the learning behaviorally, emotionally, and cognitively.