# CHAPTER I INTRODUCTION

### 1.1 Background

Education is the foundation for poverty reduction knowledge, solve problems and resolve all the problems of ignorance of the nation that has been happening. It is clear, significant and central role of education as he gave the opening and expansion of knowledge. Education aims to build a nation-clad structure with values of ingenuity, sensitivity and concern for the life of the nation. The quality of education is based on the quality of human resources. The success of development in the field of education will greatly influence development in other areas such as social and business fields.

According to results of the learning process the existing questionnaire (75%) apply direct instructional model is characterized by using a lecture in presenting the material. The students just listening to the material presented by the teacher. Students (38.23%) want to learn by practical work and demonstrations, arguing it would be to understand the material because there is real evidence that done and make conclusions from lab work is done so it is easy to understand and remember.

Based on the questionnaire distributed by the author in SMA Negeri 1 Sidikalang, physics known as one of the subjects less desirable students. Of the 34 students, argue that physics is an unpleasant subjects (68%) for the reason that physics is difficult because there are too many use the formula so that students first learn to feel saturated scared before. The notion that physics is more difficult a negative trait that causes the urge to study harder will be low due to lack of interest of students towards physics, so it looks less active students in the learning process. One of the factors that cause unpleasant students of physics is the study model used by teachers less varied. It can be seen from the results of the questionnaire, the students responded very motivated (53%), due to the holding of

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learning and play can enhance the spirit of students to learn physics. According to Sanjaya, 2013: 14-15 "A teacher needs to have the ability to design and implement learning strategies considered to match the interests and talents and in accordance with the level of development of students including utilizing a variety of media sources and learning to ensure the effectiveness of learning".

The existence of problems in learning affect student learning outcomes in physics. Based on the results of interviews with teachers of physics, learning outcomes of students in the subjects of physics at SMAN 1 Sidikalang still low and unsatisfactory. The average value of students is 70.38 which of course does not reach a value that is determined by the school KKM is 75 for class X.

The efforts to overcome the problems in learning are given by several alternatives such as learning and teaching model's approaches to learning and model of teaching. The learning approach is the way in which the teachers in the implementation of learning so that the concepts presented can be adapted by the students. The learning model is a conceptual framework that describes a systematic procedure, a learning experience, guidance in planning and implementing learning.

The efforts to do is to develop an approach that is centered on student learning and learning model developed is a model of cooperative learning. In the model of cooperative learning students are given the opportunity to communicate and interact socially with friends to achieve the goal of learning, while teachers act as a motivator and facilitator of student activity. There are several types of cooperative learning model. However, cooperative learning model used is a cooperative learning model with Teams Games Tournaments (TGT) type. TGT cooperative learning model is an approach that led to small groups for teaching and learning to work together as a team to solve the problem, complete a task or to achieve a common goal. Cooperative learning lessons can be characterized by the following features:

- Students work in teams to master learning goals.
- Teams are made up of high-, average-, and low achieving students.
- Whenever possible, teams include a racial, cultural, and gender mix.
- Reward systems are oriented to the group as well as the individual.

A second important effect of cooperative learning is wider tolerance and acceptance of people who are diffrent by virtue of their race, culture, social class, or ability. A third and important goal for cooperative learning is to teach students skills of coperation and collaboration. These are critical skills in a society in which much adult work is carried out in large, interdependent organizations and communities are be coming more culturally diverse and global in their orientations (Arends, 2007 : 345). Therefore, this research must be done so that any changing in learning process next learning and as balance as teacher to using the spme model.

### **1.2 Problem Identification**

Based on the background of the problems that have been described, we can identify issues that are relevant to the research include:

- 1. Learning is still conventional
- 2. Low interest student learning in physics.
- 3. The results of student learning is still relatively low
- 4. School facilities are not available to make students practices and less difficulty doing it school lab facilities;

#### **1.3.** Scope of Problem

Considering the wide the problem it is necessary to restrictions in the study are:

- 1. The learning model used is Cooperative Learning Model TGT (Team Games Tournament) in the experimental group and the conventional learning model in the control class.
- 2. The results of students in the Topic Heat and Temperature of the second semester class X SMA Negeri 1 Sidikalang the A.Y. 2015/2016.

## **1.4.** Problem Formulation

Based on the boundary problem has been stated, the formulation of the problem in the study were:

- 1. How does the learning outcomes of students to taught by cooperative learning model TGT on the Topic Heat and Temperature of the second semester in class X SMA Negeri 1 Sidikalang?
- 2. How is the learning activities of students during the learning take place?
- 3. How does the influence of cooperative learning model TGT with conventional learning models for student learning outcomes in Heat and Temperature the Topic grade X semester II in SMA N 1 Sidikalang?

# **1.5 Research Objectives**

As for the purpose of the study is as follows:

- 1. To determine the learning outcomes of students to taught using cooperative learning model TGT on the Topic Heat and Temperature the of the second semester in class X SMA Negeri 1 Sidikalang.
- 2. To determine the effect of TGT learning model with conventional learning models for student learning outcomes in the Topic Heat and Temperature the in the second half of the class X SMA Negeri 1 Sidikalang.

#### **1.6 Research Benefits**

The expected benefits of this research are;

- 1. As a comparison and reference for further research will examine and discuss the same research.
- 2. As consideration for subject teachers to consider the use of cooperative learning model TGT in the learning process.
- 3. For the researchers, could further deepen the knowledge of cooperative learning model TGT to be applied in the future.

# **1.7 Operational Definition**

- 1. TGT type of cooperative learning model is a model student centered learning in its approach where there are small groups for teaching and learning to work together as a team to solve the problem, complete a task or to achieve a common goal. TGT cooperative learning model is a cooperative learning model that was developed to engage students in activities of all students without any difference in status, involves the role of students as peer tutors and contains elements of the game.
- 2. The learning outcomes are the abilities of the students after the students receive a learning experience.

