

CHAPTER I

INTRODUCTION

1.1 Background

Education is learning about knowledge, skills, and habits of a group of people passed down from one generation to the next through teaching, training, or research. Education is often the case under the guidance of others, but also allows a self-taught. Education is not only an obligation, beyond that education is a necessity where humans will be developed with the education. The purpose of education itself vary, depending on each individual personally saw education itself, education can improve the economic status, help to get the comfortable job, some are looking at education means transportation to bring it to the level it all.

School is one of the educational system that serves to help improve the quality of human resources. From the nation's education children receive in school, will be able to change the mindset and creativity to create a welfare state with a good and growing economy. School is part of the design that made by the Government in the field of education with the operational foundation is the curriculum. This curriculum goals of education is the nation expected to be made by systematically to achieve the nation of Indonesia.

Graduate competencies described in three dimensions: (a) *attitudes*, (b) *skills* and (c) *knowledge*, accordance with the Peraturan Menteri Pendidikan dan Kebudayaan No.53 Tahun 2013 on Competency Standards for Primary and Secondary Education. Attitude is part of the affective domain, a domain of psychomotor skills, and domain knowledge. So the order of taxonomy education curriculum in 2013, is the main attitudes, followed by skills, knowledge domain as last. The attitude should be promoted first, continue to skills, and the last is the knowledge. In the process of achieving the learning objectives of the curriculum should be done. Whether it is in the process of learning and learning achievements.

Physics is one of the compulsory subjects in high school (SMA) that must be completed. Many students who complain are not too fond of physics because they consider physics lesson is difficult. Once the researchers conducted observations back at SMA Negeri 1 Medan, researchers can conclude that there are problems that occur during the process of learning physics, both from teachers, students and schools. A total of 11% very fond of physics, 54% liked the physics lesson and 35% have normal response in physics. Many of them consider the lessons of physics are just a compulsory lessons. They learned just to complete their learning process. Observations from SMA Negeri 1 Medan also showed that as many as 53% of students happy working on a way of discussion, 17.33% happy if working independently in the process of matter, 17.33% felt indifferent and sometimes lazy to do and 12.34% happy if the students about the given an easy matter. From the data is known that the daily examination results at SMA Negeri 1 Medan 57% have not crossed the line of standard minimum competency (KKM) for sciences subject.

In a typical college classroom, this presents as a teacher lecturing at the front of the room while students feverishly take notes. However, it is probably more likely that most instructors do not solely teach in this passive fashion but also have engaging or interactive classroom moments or situations. Perhaps this is because many recent studies (e.g. Bonwell & Eison, 1991; Michel, et al., 2009) suggest that the passive method may not be the most effective way for students to learn. Rather, current research advocates for teaching techniques that encourage students to actively engage in the material because classroom engagement has been found to promote deeper levels of thinking and better facilitate encoding, storage, and retrieval than traditional lecture (Mc Glynn, 2005; Peck, Ali, Matchock, & Levine, 2006). Consequently, it is likely that most instructors attempt to incorporate techniques that involve the students and get students thinking about and applying the material (see Michel, et al., 2009 for a review). These techniques can range from demonstrations, to discussions, to in-class activities. Simply put, traditional ideas of lecture have developed a bad reputation, and some may be ready to banish them from their teaching repertoire.

Factors that led to the above due to lack of students' understanding of physics concepts. Lack of students' understanding of the concepts of physics can be addressed by changing the learning models. Guided Discovery Learning model of learning can improve learning outcomes for students in this learning model can better understand what is being learned. In applying the learning model Guided Discovery Learning teachers act as mentors to provide the opportunity for students to learn actively, as the opinion of the teacher should be able to guide and direct the learning activities of students in accordance with the purpose (Sardiman, 2005). Such conditions would like to change the teaching and learning activities are *teacher-oriented* to *student-oriented*.

1.2 Problem's Identification

1. Student have usual response to Physics lessons.
2. The results of student's Physics is unsatisfactory.
3. Lack of comprehension student about Physics concept.

1.3. Limitation Problem

Given the extent of the problem in learning is a necessary limitation in this study as follows:

1. The research do in SMAN 1 Medan, 2014-2015 academic year.
2. The research do in class XI Sciences 1 and XI Sciences 2
3. The gathering of data will be only from the school's targets.
4. The models applied in this research is Guided Discovery Learning models

1.4. Problem's Formulation

Based on the problems described above, hence the formulation problems in this research are:

1. How the student learning achievement after applied Guided Discovery Learning models?
2. How the student learning achievement after applied Direct Instructional Learning model?

3. Is there any difference of student learning achievement using Discovery Learning with using Direct Instruction model?

1.5. Research Objectives

The goals of this research are:

1. To know the student learning achievement after applied Guided Discovery Learning Model.
2. To know the student learning achievement applied the Direct Instruction Model
3. To know the differences in student learning achievement by using Guided Discovery Learning models with direct instruction models.

1.6. Research Benefits

- 1) For school: The results of this research are expected to increase of the quality of school as student's learning achievement and teacher's increase of professionalism.
- 2) For teacher: The results of this research are expected to be input in expanding knowledge and insights about Discovery Learning models in teaching science, that Become one of alternative models of teaching as the effort to improve student's learning achievement.
- 3) For student: The results of this research are expected to increase of students learning achievement in learning physics.
- 4) For researcher: The results of this research are expected to be the description of learning models of implementation in teaching physics and increase of the quality of researcher writing.