CHAPTER I

INTRODUCTION

1.1 Background

Education is very important for human life. Through education, humans will grow and develop as a whole person. Education is expected to play an important role in the progress of a country and nation. If the higher the level of education of the people in a country, the higher the level of prosperity in the country. Besides that education can also be interpreted as a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have spiritual spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves and society. Therefore, various efforts have been made to improve the quality of education. One of them is the development of research in the field of education, especially in the teaching and learning process.

The results of interviews with one of the physics teachers at SMA Negeri 12 Medan state that physics lessons are often considered by students to be difficult and very boring lessons, not surprisingly the value of physics lessons is lower than other lessons. It can be seen from the average scores of daily physics student tests in SMA Negeri 12 Medan that there are still many below the Completion Criteria Minimum (CCM). One of the causes of student learning outcomes is low on Measurement material. Many students do not understand how to use measuring instruments and how to measure correctly.

The low absorption of students can not be separated from the problems encountered in the learning process. One example is when students experience difficulties in learning. Learning difficulties are one of the symptoms that are characterized by various behaviors that are within themselves and outside of students. Characteristics of students when experiencing learning difficulties include: showing low learning outcomes; the results achieved are not balanced

with the efforts that have been made; slow in doing learning tasks, and not doing homework (Lubis, 2017).

Physics is one of the abstract subjects of science. Therefore students must begin to develop imagination in order to understand fundamental concepts in physics to improve maximum learning outcomes. The abstract concept of physics that must be absorbed by students in a relatively limited time makes physics a difficult subject for students so that many students are not maximized in the learning process. This is related to learning activities that are often carried out by teachers in the classroom to only discuss physics questions. While students prefer physics learning with practical methods and demonstrations. The expected learning model is a model that helps students develop the intellectual skills needed to ask questions and find answers (Sitorus and Shinta, 2017).

The process of learning physics is still focused on the teacher as an informator who plays a dominant role in each learning process. In the learning process students need to be encouraged not only to see and hear, but also to do something to truly understand the concept and be able to apply it in everyday life. The teacher is the front row in order to print quality human resources. The teacher must be able to create the best teaching and learning atmosphere in the school. Teachers should have a variety of intellectual skills that are adequate, intellectual skills include mastery of conceptual skills from the material to be delivered and always prepare themselve to answer every question from students.

Learning to teach physics is basically an interaction or reciprocal relationship between teachers and students in the learning process. One of the goals of physics learning is the realization of the efficiency and effectiveness of learning activities carried out by students and educators. One way to function in the process of achieving learning goals in schools is to use a learning model. The learning model is a way of educators in compiling learning frameworks to achieve the learning objectives to be achieved. Accuracy in choosing a learning model, can help students to generate interest and increase learning outcomes (Erina et al., 2015).

Student learning outcomes can be said to be successful if students are able to understand concepts in physics. For this reason, it is necessary to experiment as an introduction to the teaching and learning process and the use of instructional media in the teaching and learning process. Learning media is a tool for teaching and learning. Everything that can be used to stimulate the thought, feeling, attention and abilities (skills) of students so that it can encourage the learning process. The use of learning media in the teaching and learning process can generate new desires and interests, generate motivation and stimulation of learning activities, and even help students improve their understanding concepts.

One of the teacher's most important abilities is the ability to develop learning models in a creative and innovative way. By using an interesting learning model in accordance with the learning material can improve learning outcomes students can also motivate students. Learning experience of students can be realized through the use of varied learning models and student-centered.

Based on the results of the preliminary study using questionnaires and interviews the researchers concluded that the learning process was not student-centered which resulted in students not playing an active role in gaining knowledge. The dominance of teachers in this learning causes students to wait for the offerings from the teacher rather than finding themselves. To address the problem above, there needs to be an effort made by the teacher to use a student-centered model in the learning process that is in accordance with the material presented.

Based on the problems that have been raised, the solution can be sought, namely by trying actions that can develop conceptual knowledge, and scientific attitudes of students. One learning model that can be used is the Inquiry Training learning model. The Inquiry Training learning model is designed to bring students directly into the scientific process through exercises that can condense the scientific process into a short time. The purpose of the Inquiry Training learning model is to help students develop intellectual discipline and skills needed to improve questions and search for answers that are hidden from their curiosity (Joyce et al., 2011).

The improvement that will be made is to create an effective classroom atmosphere by conducting monitoring in each group while the discussion process is underway and providing and ensuring tools and materials for complete experiments as support in teaching and learning activities and optimizing the time allocation step by step so that the learning plan runs efficient. Based on the background described, the author wishes to conduct research with the title **The Effect of Inquiry Training Model Assisted by Learning Video to Learning Outcomes on Measurement Topic Semester I Grade X in SMA Negeri 12 Medan A.Y 2019/2020.**

1.2 Problem Identification

According to the background of the problem that has been raised, the problems that can be identified are as follow:

1. The low interest of students to study physics
2. Students consider physics to be a difficult subject and always leads to calculations and formulas
3. Less varied learning models and learning is only teacher-centered
4. Media is still rarely used in learning
5. Student learning outcomes in class X are still low

1.3 Problem Limitation

The limitation of the problem in this study is:

1. The subject of research is student class X semester I at SMA Negeri 12 Medan A.Y. 2019/2020
2. The learning model used is the inquiry training model
3. The learning matter to be examined is Measurement in class X semester I at SMA Negeri 12 Medan A.Y. 2019/2020

1.4 Problem Formulation

Based on the background, identification, and limitations of the problem, the formulation of the problem in this study is:

1. How are students learning outcomes using the konvensional model in the subject matter Measurement in the grade X Semester I SMA Negeri 12 Medan A.Y 2019/2020
2. How are students learning outcomes using the inquiry training model assisted by learning video in the subject matter of Measurement in grade X Semester I SMA Negeri 12 Medan A.Y 2019/2020
3. Is there effect of the inquiry lerning training model assisted by learning video on students learning outcomes in the subject matter of measurement in grade X Semester I SMA Negeri 12 Medan A.Y 2019/2020

1.5 Research Objectives

The research objectives are as follow :

1. To find out student learning outcomes using conventional learning model on the subject matter of Measurement in grade X semester I SMA Negeri 12 Medan A.Y 2019/2020
2. To find out student learning outcomes using inquiry learning training model assisted by learning video on the subject matter of Measurement in grade X semester I SMA Negeri 12 Medan A.Y 2019/2020
3. To find out effect of the inquiry learning training model assisted by learning videos on student learning outcomes in the subject matter of measurement in grade X Semester I SMA Negeri 12 Medan A.Y 2019/2020

1.6 Research Benefits

The expected benefits from the results of this study are:

1. For researchers, to increase knowledge and insight so that researchers are more skilled in using existing learning method, especially in inquiry training learning methods.
2. For further researchers, as reference material and information material about the use of inquiry training models for the purpose of further research.

1.7 Operational Definition

1. Learning model is a way of educators in compiling learning frameworks to achieve learning objectives to be achieved.
2. The conventional learning model is a way of delivering information verbally to a number of listeners, this activity is centered on lecturing and communication that occurs in one direction
3. Inquiry training model is a learning model that trains student ability to research, explain phenomena and solve scientific problems.
4. Learning outcomes are behavioral changes caused by students achieving mastery over a number of materials given in the teaching and learning process.