

CHAPTER I

INTRODUCTION

1.1. Background

New technologies, especially multimedia has an increasingly important role in the learning process. Many people believe that multimedia will bring us to a situation where learning with learning effort will be replaced by learning with fun. So the learning process a fun, creative, not boring would be the right choice for teachers.

Learning system that has made the conventional learning system (teaching faculty), thick with atmosphere instructional and felt less in accordance with the dynamics of the development of science and technology so rapidly. More than that required for the educational obligations also include moral values, noble character, creativity, independence and leadership, which is very difficult in the conventional learning system. Conventional learning systems are less flexible in accommodating the development of materials for teacher competence should be intensified to adjust course material with the latest technological developments.

In fact that Indonesia entered the information era is an era marked by the increasing number of media information, widening the spread of information and instantaneous, as well as information in a variety of forms that vary presented in quick time. Presentation of the message in the information age will always use the media, both electronic and non-electronic. Associated with the presence of the media, explaining that the media neatly organized systematically affect educational institutions such as the institution of the family, religion, school, and scout. From the description of the proficiency level indicates that the presence of the media has affected all aspects of life, including our education system, albeit in varying degrees.

Thus the learning outcomes are determined by various factors that influence it. One of the factors that are outside the individual is the availability of media that make it easy for individuals to study learning materials, resulting in

better learning. In addition, learning style is a characteristic cognitive, affective and behavioral psychomotoric, which acts as an indicator of relative stability for the learners who are related to each other and react to the learning environment.

It is possible due to the low value of student competencies by learning delivery strategy is less appropriate. In this case, the teacher may have little or no use of learning resources optimally. Among teachers in delivering instruction often ignore the use of media, but the media is working to increase student learning motivation and in turn will improve the quality of education students.

The role of media in teaching and learning by Gerlac and Ely (1971:285) stated that there are three special treatment held teaching media, namely: (1) The media has the ability to capture, store and display the return of an object or event, (2) The media has the ability to bring back objects or events in various ways adapted to the needs, and (3) The media has the ability to display something object or event that has meaning.

Similarly, Ibrahim (1982:12) suggests the function or role of media in teaching and learning include: (1) to avoid the occurrence of verbal, (2) Generating interest or motivation, (3) Attractive the attention, (4) Overcoming the limitations of space, time and size, (5) Enable students to learn and (6) Making provision stimulus for learning.

Along with the times then the development of science and technology plays a very large. Physics as one of the branches Natural Sciences (IPA) is the fundamental science that form the backbone for the development of science and technology. Physics is also the science that studies the parts of nature and interactions in it, and can be explained with simple concepts.

Physics is part science subjects are basically interesting to study because the study of the phenomena that occur in the universe. Where necessary for the study of effective and efficient learning to understand it. But in fact many students who do not like physics with regard to study physics was saturating and boring.

Based on the experience of researchers at the Integrated Field Experience Program (PPLT) in SMA N 1 Perbaungan, physics teachers generally prefer the reduction formulas and calculations or discuss the questions, so that students think that physics is difficult, tedious and less enjoyable.

This happens due to the lack of varied learning model of the material to be delivered, teachers are less involved and require students to engage in problem-solving lessons, so students are less creative thinking using logic, it is also less eager to follow the teaching and learning activities, resulting in the subject matter presented the teacher can not be accepted by most students.

Based on the above it is necessary model to encourage students to passionate in following the teaching and learning activities, with the inquiry training learning model. Inquiry learning model emphasizes student activity maximally to seek and find, that inquiry learning model puts students as study subjects. Inquiry students in the learning process not only act as receivers lessons through teacher's explanation verbally, but students find their own role to the core of the subject matter.

From interviews with a physics teacher at SMAN 1 Perbaungan, said that there are many students who are less interested in studying physics because students are less active in learning activities, in addition to the models used by teachers are less varied and still use the traditional learning model. It also makes learning not fun and does not create a vacuum in the students' learning process and only receive lessons without any real understanding of physics.

In order to realize the physics learning interesting and fun, the students develop thinking skills especially critical thinking skills, active and creative indispensable. Students who master the concepts are not only able to memorize a number of concepts that have been learned, but students should be able to apply it to other aspects to develop the concept of thinking. One model that is able to invigorate teaching students to think actively, creative and able to think critically

in the process of learning is inquiry training learning model. Inquiry training learning model not only developing intellectual abilities but all this potential, including the emotional development and skills development. In the inquiry learning model, students are exposed to a problem who accidentally created by the teacher or the results of "engineering", so students must put all thoughts and skills to get the findings in the problem through the research process.

Learning inquiry will train students to express opinions and discover their own knowledge useful for solving problems. The use of models in an efficient and effective inquiry will reduce the dominance of the teacher during the learning process, and the boredom of students receive lessons will be reduced. Inquiry learning has an important role in improving the quality of education in schools, including physical education, for inquiry learning not only developing intellectual abilities but all potential students include emotional development and skills development. Thus, efforts to be made to actively involve students in learning so as to improve the skills, understanding, interest and learning outcomes of students in physics, one using inquiry training learning model.

The research has been carried out by Ridwan Abdullah Sani and M. Zainul Abidin (2010), entitled Influence Inquiry Training Learning Model for Mastering of Physic Concept In Class X SMA N 1 Tanjung Beringin. From the research that is done then there is the influence of Inquiry Training learning model for Mastering Physic Concept In Class X SMA N 1 Tanjung Beringin where the obtained value 6,69 posttest experimental class and control class posttest results 4,64.

The research has been carried out by Nurhaida Lubis (2010), entitled influence inquiry learning model for student learning outcomes in the material substance and its form of class VII semester 1 MTS N 3 Terrain academic year 2009/2010. From the research that is done then there is the influence of inquiry learning model for student learning outcomes in the material substance and its form of class VII semester 1 MTS N 3 Terrain academic year 2009/2010 where

the obtained value 68.70 posttest experimental class and control class posttest results 59.20 . The constraints faced by previous researchers, among others: (1) students are not familiar with the inquiry training learning model before so it took an adjustment period with the students during the learning process takes place. (2) in the group discussions there were some students who are silent or actively participate less and less in group discussions. (3) the limitations of the tools and materials in the lab because of the number of groups is too much.

How to overcome the above weaknesses researchers will now apply the inquiry training learning model and trying to overcome the constraints faced by previous researchers by providing guidance and clarification in advance stages of inquiry training learning model at the start of the meeting at the time of teaching and learning activities will be started if the students still do not get it Researchers explain the stages of inquiry training learning model at the next meeting. Second, researchers gave LKS (student worksheet) put more emphasis on students' understanding of concepts when teaching and learning take place as well as providing some animation related to the material that will be taught to identify the level of student understanding. Second, the presence of a clear LKS, will allow students to understand what will be done in a group discussion so that students will actively participate in groups and researchers will give more attention and guidance to students who are noisy and disturb the current discussion.

Research conducted by researchers at the above applied in Junior High School (SMP). To that end, researchers are trying to carry out research in high school (SMA). In this case, researchers want to conduct further study by outlining the steps inquiry training learning model in the lesson plan so that the implementation of research activities carried out in accordance with the more targeted measures inquiry training learning model to guide and motivate the students to perform learning activities in order to increase student participation. Unlike previous research, this study researchers will provide the student worksheets to facilitate teachers in conveying information to students and media attention to the use of learning interesting and simple as flash. Researchers also

will also consider the effectiveness of the time so that students are expected to play an active role in the learning well.

Based on the description above, researchers interested in conducting research entitled **The Influence of Multimedia Based Inquiry Training Learning Model on Student's Achievement on Momentum and Impulse in Class XI, SMA N 1 Perbaungan, Year 2013/2014.**

1.2. Identification of Problems

Based on the background above, the problem of identification of this research are as follows:

1. Study physics was saturating and boring
2. Low of student achievement for physics
3. lack of students to think actively, creative and critical thinking in the learning process
4. learning model still not variated that used by teacher
5. The dominance of the teacher in the learning process, so students do not have a chance to express their opinion.

1.3. Scope of Research

In order to keep this research become more focused and directed, the researcher limit the problems as the following

1. Learning model used is a Inquiry Training Learning of on the experimental class and Conventional Learning on the control class.
2. The material taught is Momentum and impulse
3. Conducted to determine the Influence of Multimedia Based Inquiry Learning Model on student learning outcomes.
4. Learning outcomes that will be examined only on cognitive aspects

1.4. Problem Statement

The problem statement of this research are:

1. Is the students achievement in the momentum and impulse subject using Multimedia Based Inquiry Training Learning Model has influence than Conventional Learning?
2. How does student learning activities during the Inquiry Training Learning Model in the subject matter in momentum and impulse of SMA N 1 Perbaungan, year 2013/2014?

1.5. Research Objective

The research objective is as follows:

1. To know the Influence Multimedia Based Inquiry Learning Model on students achievement in the subject matter Momentum and Impulse in class XI SMA N 1 Perbaungan, year 2013/2014.
2. To know the student learning Activity using Inquiry Training Learning Model on student achievement in the subject matter Momentum and Impulse in Class XI SMA N 1 Perbaungan, year 2013/2014
3. To know the student learning achievement by using Mutimedia Based Inquiry Training Learning Model and conventional learning on Momentum and Impulse in class XI SMA N 1 Perbaungan, year 2013/2014

1.6 Research Significance

1. For students

1. Improving student learning outcomes in the subjects physics, especially the material momentum and impulse
2. Motivating students to engage in learning through inquiry training learning model

2. For teachers

1. Opening think conception of teachers in developing teaching and learning model one uses inquiry training learning model
2. Feedback for teachers to measure the success of the implementation of the teaching and learning activities in the classroom

3. For schools

1. Improving the quality of the school through learning outcomes student learning and teacher performance
2. As feedback to improve the effectiveness and efficiency of the learning activities