

CHAPTER I

INTRODUCTION

1.1. Background

The world developing so fast, something that previously could not be done, suddenly struck by another person who could do it. So that someone is not left behind, and not left behind by the fast changing era, then humans must have the science to suit the times. Nations who want to progress, build community and trying to improve the situation one of them through the education sector. It can be concluded that education is important and is one key to the success of a nation.

Physics is part of natural science, a science that studies natural phenomena that occur in their daily lives. In general physics lessons suppose a difficult subject, so this has resulted in student learning outcomes to be low. Based on observation data done by researcher to grade XII IA-1 and XII IA-2 in SMA N 2 Kisaran in form questioner the researcher got that 58.57 % students dislike physics lesson and 41.43% student like physics lesson from 70 student in two class. From compare the data look that many student dislike physics lesson. The case supporting by many reason of students. Which of one they said that the physics lesson is difficult to figure out. So that the case make them don't interact to physics lesson and make their learning outcome is low.

Based on interview researcher with physics' teacher that teach in SMA N 2 Kisaran , said that learning outcome of student in physics still low in grade XII year 2011/2012 reach average 60, this case look from daily test and result of test semester of student. One of factor that cause low in learning outcome of student in physics can see from lesson plan of teacher. In lesson plan the teacher just using conventional method, learning just center on teacher, teacher just explain the lesson front of class the student have physics so that physics lesson become difficult and bore. Look from the student, student just now the theory from the book, it like memorize content of the book. They can't construct their thinking about a theory and also inquiry solution from a physics problem by their thinking. Teacher also seldom using model in teaching and learning process, by using model student can construct their thinking about the theory. In teaching and learning teacher also never do reflection subject matter after learning and teaching process.

The low results obtained by students in learning physics because physics is presented in a form that is less attractive and seem difficult, so that students feel bored to

learn. Often the lessons presented in math's equation, so the concept of physics cannot be applied in their daily lives.

Learning that orientation to mastery of subject matter that suppose fail produce student be active, reactive and innovative. Student be success remember in short time but fail in help student to solve their problem in life. Whereas, changing learning model that more useful so can help student in face issue. In daily life, vibration and wave can find around us and suitable to contextual teaching and learning.

From the problem the researcher has reason to take CTL in subject matter vibration and wave because this model has components that can construct think of student of what that they study and make student active, reactive, and innovative in learning and teaching. CTL is learning concept has thought that "child will study well if environment created natural", it mean will more useful if child work and experience themselves what their learning, not only know it. Learning not only activity transfer knowledge from teacher to, but how student mean what their learn.

CTL had observed by: Sihotang (2010) *Pengaruh Model Pembelajaran Kontekstual Terhadap Hasil Belajar Siswa pada Materi Pokok Hukum Newton di Kelas X Semester 1 SMA N 1 Parlilitan T.P.2009/2010*, before applying CTL average value pretest is 40,12 and then applying CTL gotten average value is 81,6 so increasing between pretest and posttest is 41,48. whereas Rambe (2011) *Pengaruh Pendekatan Kontekstual (Contextual Teaching and Learning) Terhadap Hasil Belajar Fisika Siswa di Kelas VII SMP N 18 Medan T.P.2010/2011*. Before applying CTL average value pretest is 40,69, then applying CTL gotten 73,38 so increasing between pretest and posttest is 32,69. Both observer did experiment and found that outcome learning of student increase after applied Contextual Teaching and Learning. But both of them did not use Flash Animation Media for this model, so that the observer interesting to use flash animation media in this model.

Base on explaining above, observer interesting observe success learning of student that related to a model Contextual Teaching and Learning. So observer want take title about **The Effect of Contextual Teaching and Learning (CTL) by Using Flash Animation Media in Subject Matter Vibration and Wave on Grade XII SMA Negeri 2 Kisaran**

1.2. Problems Identification

Based on the above background, some problems can be identified as follows:

1. Students' physics learning outcomes is low
2. Teacher less using variation learning approach in teaching
3. Teachers less involve students in learning activities and teaching

1.3. Problem Limitation

Based on the background and the identification problem, limitation problem focused on :

1. The student is limited to students Grade XII of SMA N 2 RSBI Kisaran Semester 1 Year 2012/ 2013
2. The student's learning outcomes are limited on subject matter Vibration and Wave.
3. The used approach in this research is limited on Contextual Teaching and Learning (CTL) and the used media is limited on learning animation Flash

1.4. Problem Formulation

Based on problem identification above be problem formulations are:

1. How learning outcome of physics by use Contextual Teaching and Learning by using flash animation media in subject matter vibration and wave on grade XII SMA N 2 Kisaran?
2. How learning outcome of physics by using conventional model in subject matter vibration and wave on grade XII SMA N 2 Kisaran?
3. What is there a significant effect Contextual Teaching and Learning by using flash animation media in subject matter vibration and wave on grade XII SMA N 2 Kisaran?

1.5. Research Objectives

As for objectives from this research are :

1. To know learning outcome of physics using Contextual Teaching and Learning by using flash animation media in subject matter vibration and wave on grade XII SMA N 2 Kisaran.

2. To know learning outcome of physics using Conventional model in subject matter vibration and wave on grade XII SMA N 2 Kisaran
3. To know what is there a significant effect of Contextual Teaching and learning by using flash animation media in subject matter vibration and wave on grade XII SMA N 2 Kisaran.

1.6. Benefits Experiment

The benefits of this research are:

1. As an information material of learning outcome of student to the subject matter of vibration and wave by using the learning of Contextual Teaching and Learning using flash animation media in SMA Negeri 2 RSBI Kisaran.
2. As one alternative learning that can use by teachers to improve the quality of learning
3. As input for researchers as prospective teachers of physics to be able to apply the learning approach of CTL using flash animation media in physics learning activities