CHAPTER I
INTRODUCTION

1.1. Background

Education is the process of educating or teaching. The aim of education should be to teach us rather how to think, than what to think rather to improve our minds, so as to enable us to think for ourselves, than to load the memory with the thoughts of other men. The study done is a good and right will speed up development of potential students, in contrast a study carried out by amateurish and unsuitable will make difficult improving the relate to the potential. The fields given since level of elementary school up to high that is the natural sciences.

The natural sciences with regard to how to find out about nature systematically, so that science is not just a collection of knowledge mastery in the form of facts, concepts or principles but alsois a process of discovery.Science education is expected to bea vehicle for students to learn about themselves and the environment, as well asprospects for further development in applying it in lifedaily. The learning process emphasizes providing experience direct to develop competencies in order to explore and understand about scientific nature. Science education is directed to inquire and doso it can help learners to gain understanding more about the nature around.

The nature of science includes four main elements that is attitude, process, products, and application. The attitude iscuriosity about objects, natural phenomena and living beings. The process was the solution to problem procedures through the scientific method, scientific method,includes preparation of hypotheses, designing experiments or trials, evaluation, measurement, and conclusion. The application of scientific methods andmethods and conceptsof science in everyday life.

Learning physics can actually understand if students are given direct experience. The provision of direct experience is intended to futher develop

students competence. Therefore, learning must to be presented as attractive as possible so that students are interested to be involved directly in the learning process. The goal of learning physics is mastery of the concept. Students involvement in the learning process gives good impact to be able to understand the concepts. Thus, it is necessary to develop to level of mastery of concepts students in learning process.

Learning process the arranged on a number of component or element related and interaction with another. The interaction between teacher and students in learning process teaching have a role important for aim relalize. However there are fact happened in teacher using conventional method is the learning method direction on, where only teacher give all information and students all information absorb giving in teacher. This method also repress in individualistic learning, are individual learning without interaction with another, until the happen asymmetry between students, the students have ability low and more left behind with learning. The besides students difficulty finding in the learning matter only can be saving without working for finished. This thing because learning outcomes students law, That for teacher must able class manage with well and the alternative finding in process learning teach, use tired learning purpose by means selection and applying learning model in matter delivery.

The based observation result and interview with teacher physics Class XI SMA N 2 Balige the resulting daily test refer that the students ability in finishing physics learning low, students can not potential optimum which property students for making learning with well and students mixed scare for thinking finded physics concept. Low learning outcomes in school that effect by factor, as the ability low learning students, metacognitive low ability of student's and less attention students in study. However in this thing the most dominant causing The achievement low students in physics learning class XI SMA N 2 Balige, where learning model using by teacher is conventional method (speech, exercise, and give task) monotonous inclined, boring, and limited in learning delivery in the same direction is method (speech, exercise, and give task) until the students

difficult for understanding learning matter. The problem superintend in above, after prospering in physics learning making a innovation. The reparing needed in learning process in order to process learning teach carried with well and increase resulted. Teaching repairing is teaching changed conventional with applying inquiry model. The overbalance from learning model inquiry is the potential increasing students intellectual, can compose and developing self concept in students, helping in use memory and transfer on situation new study process and the students avoiding from study manner with memorize. The used inquiry model is the manner for help students understanding physics concept until have thinking ability. Based on the description above, researchers interested in conducting research in the physics department with the title "**The Effect of Inquiry Model on Metacognitive Ability of Students' on Topic Static Fluid for Class XI SMA N 2 Balige Academic Year 2015/2016.**"

1.2.Problem Identifications

From the explanation above, can be identified the scope of the problem, namely :

1. The students are involved rarely to think find the concept of physics in everyday life.
2. The using of a less varied learning model, as well as the still low level of undestanding of the concepts and metacognitive ability of students.
3. Low of student's achievement in physics.

1.3.Problem Limination

The researchers will problem limination examined. The problemlimination in the study were:

1. Research conducted in two class namely class of control and class of experiment that implement inquiry learning.
2. The matter of physics which reviewed at thisresearch is static fluid which includes concepts is hydrostatic pressure, archimedes law and surface tension.

1.4. Problem Formulation

The based on the above problems, the formulation of the problem in this research is:

1. How the student's metacognitive with inquiry model?
2. How the student's metacognive with conventional learning?
3. What there effect inquiry model onmetacognitive ability of students?

1.5.Research Objectives

1. To know there is an influence of inquiry model on metacognitive abilityof students on topic fluid static in Class XI Semester II SMA N 2 Balige Academic Year 2015/2016.
2. To determine the differences between metacognitive ability of students on the subject matter fluid static using inqury model and conventional learning in Class XI Semester II SMA N 2 Balige Academic Year 2015/2016.
3. To know increase students metacognitive in Class XI Semester II SMA N 2 Balige with using inquiry model.

1.6.Research Benefit

The expected benefits of this research are as follows:

1. Can add insight, knowledge and ability to author the model of learning can be applied in schools, especially the inquiry learning model.
2. As an input and reference to the particular school teachers of physics in using the inquiry learning model as one that is effective and efficient way in improving metacognitive ability of students.
3. For consideration or input for the other researchers and others doing similar research.