#### **CHAPTER I**

#### INTRODUCTION

### 1.1 Background

Modern societies often require people to possess remarkable knowledge and strong thinking, referred to as critical thinking skills as well. Cognitive competence is one of important aspects for students' development which related to the learning process, and determine their success in school. Cognitive is useful for students to think and develop their ideas. It also makes students to understand the material which is given by the teacher.

Based on (Lutz 2002), there are six stages of cognitive competence includes knowledge, comprehension, application, analysis, synthesis and evaluation. Knowledge is the basic level to recall information without comprehending. Comprehension is understanding the material from reading, listening, or seeing which related to students' knowledge. Application is the next stages after the students comprehend the knowledge from many sources and activities, they should apply in some tasks to comprehend in actual situations. Analysis is the ability to choose a material or concepts into component parts, so the structure can more understand by students. Synthesis is the ability to combine the separate parts into a complete whole and meaningful. Evaluation is the highest stages than the others, stages of cognitive competence. At this stage the student should be able to give a decision on the value of something in terms of objectives, ideas, labor, materials and specific criteria. From the sixth stages, there are three stages that require higher order critical thinking such as analysis, synthesis and

evaluation. Because at last stages of cognitive, students not only understood about some knowledge, but also required to use critical thinking to see, find and solve the problem.

According to Halpern (1998) there are 6 steps on critical thinking. The first step is recognizing the problem. It means that someone must identify the problem that will be solved. The second step is collecting the information to resolve the issue from different sources and activities. The third step is evaluating the information, facts or statements that have been found. The fourth step is analyzing information or data that is not stated explicitly. The fifth step is finding a solution to solve the problem. The lastly stage is drawing conclusions based on the issues which have been discussed.

Based on Fruner and Robinson (2004) argued that several reasons for the need for critical thinking skill for the students, such as to develop the attitudes and perceptions that support the creation of classroom condition are positive, integrate knowledge and broaden the knowledge. Bryce and McCurry (2009) argue that they are able to filter all the information from all sources. Not easy to believe any information without first thinking it was being delivered. Assumption as a fact (Van Sluys 2006) from disrupting the commonplace, students practice and learn to analyze about everyday issues from the critical inquiry perspective (Shor 1987). If the students only memorize the information learned while teacher explain the material, of course, in the next meeting their knowledge had gone. Because study is not only memorize, but also practice and use their thought to think optimally during lesson.

Besides, the importance of critical thinking, there are some factors of obstacle students' critical thinking. The habit of students trusts teacher as the source and the center of the information or knowledge. During the teaching learning process, there is no interaction between students and the teacher.

Claudette Thompson (2011) states that the lack of understanding of the teaching of critical thinking led to a tendency not to teach or assess thinking skills to the students. So, the students do not motivated to think critically. In teaching learning process, they are accustomed to follow their friends' answer who had good ability in speaking. Students feel afraid when they want to ask or give opinion. They also have less confidence to share their arguments so they just listen and give the opportunities for certain students who share their argument or ideas (Lutz 2002)...

For solving those obstacles, there is an approach which enhances students' critical thinking. It is a student centered approach. Student centered approach can enhance student activities in learning, especially in critical thinking. Because in students centered learning, students dominate during learning process all of activities depend on the students. Through the implementation of the student centered learning, students are expected to be more active, have critical thinking, analyze and solve the problem by themselves.

Inquiry based learning is one of student centered learning. Inquiry based learning is focused on how learners can solve the case by their own way by using thought (En Linea 2013). Thayer (2000) states that inquiry based learning is not about memorizing facts, but it is about formulating questions and finding an appropriate resolution of the questions and issue. Teacher just gives the topic for material and ask for the students to gather information by their own learning

process. They can select and combination variety of settings, resources and still use their creativity (Baird 1998).

But there is no researcher who investigate the effect of inquiry based learning in EFL students especially in English subject and measure on students' critical thinking. Mostly the researcher investigates the effect of inquiry based learning on students' motivation and students' achievement. They did the research in other English subjects. Darwis (2002) states that the students' achievement can increase during the implementation of this strategy. The students understand deeper when they used experiment in a science project. Not only comprehending the material easier, but also they can be more independent during doing the task and confidently. Dillon (2001) the students more complete and reasonable in their writing procedure text after using inquiry based learning in teaching writing at Bahasa subject. Mohsen Zare (2013) investigated the effect of inquiry based learning in a Mathematic subject showed that this strategy gave positive effect on students' motivation.

In the fact, English teacher of SMA NU 1 Gresik used cooperative learning, but he never applied inquiry based learning as his strategy in teaching learning process. It was known from the researcher's interview to the English teacher. He said that he used cooperative learning as his teaching strategy, but he never used inquiry based learning in the classroom. So inquiry based learning was still new for him and his students. Therefore, this study was aimed to know the effect of inquiry based learning on students' critical thinking of speaking in senior high school.

#### 1.2 Problem Statement

Based on the explanation above about the situation and problem which are found by students in critical thinking skill, the problem of this research: Is there any significant effect of inquiry based learning for influence students' critical at eleventh grade in SMA NU 1 Gresik?

## 1.3 Hypothesis

The hypothesis of this study is the using inquiry based learning for influence students' critical thinking is effective at the eleventh grade students in SMA NU 1 Gresik

## 1.4 Significance of the Research

This study is hoped to give a contribution toward two significances, those are theoretical and practical. It will describe below:

# 1.4.1 Theoretical

This study gives contribution theory, strategy how the students in senior high school use their thought to understand the material with criticism by using inquiry based learning at eleventh grade in SMA NU 1 Gresik.

#### 1.4.2 Practical

The result of this study is expected, it gives some impacts:

### a. Teacher

By knowing the effect of inquiry based learning on students' critical thinking, the teacher considers uses inquiry based learning in teaching English. It is can make interesting learning process and teaching learning process can successfully.

#### b. Students

For students, it is hoped that this study can help them in learning English, especially on students' critical thinking using English in their habit with the other and they are able to solve their own problem or daily issue.

#### c. Researcher

For the researcher, this study can be useful to know the significant effect of inquiry based learning in students' critical thinking and new experience by the researcher itself.

## 1.5 The Scope of the Study

This study is focused on the use of inquiry based learning at eleventh grade of SMA NU 1 Gresik. Scope for critical thinking focus on students in making reasoning and deducing on speaking skill.

## 1.6 Definition of Key Terms

To make clear about this research, the researcher intended to define the key terms as follows:

- Inquiry based learning is a strategy in teaching learning which 5 steps.
   Those are ask, investigate, create, discuss and reflect.
- Critical thinking is an individual to think logically in identifying the issue, giving argumentation, word choices and emphasizing decision-making about what to believe or do confidently.