CHAPTER I

INTRODUCTION

1.1. Background of the Study

Learning is not just the transferring of knowledge from the teacher to the learner. It is an understanding process where relatively permanent changes are caused by information and experience. These changes do not solely refer to outcomes of the learner's behavior that are manifestly observable, but also to attitudes, feelings and intellectual processes that may not be so obvious (Atkinson *et al.* in Chu, 2008). Learning for understanding can be achieved if educators make the effort to find out what students' conceptions of learning are and what constitutes understanding.

According to Djamarah (2011), learning is a series of soul activities to obtain a change in behavior as a result of the experience of individuals in interaction with their environment involving cognitive, affective and psychomotor. Changes that occur are as a result of learning activities that have been carried out by individuals. That change is a result that has been achieved from the learning process. So, to get the learning outcomes in the form of "change" has to go through a specific process that is influenced by factors from within the individual and beyond the individual.

These days a lot of thought said that the progress of modern society due to the learning outcomes and better quality of education as a pillar in creating the next generation of quality. Without good quality of education will never create good quality human resources, especially the students in achieving success in learning. That's because the quality of human resources, which is still very low, the quality of education has not been achieved for example a low learning achievement, especially for science subjects. Conceptual problems which might possibly cause alternative conceptions were determined biology topics of science and technology and some recommendations were made concerning about way of correcting (Dikmenli, 2009). Therefore, in an effort to improve the quality of education is optimal, then the aspects that are related to the learning process needs to be evaluated, updated, and improved.

Realizing the process of teaching and learning are the most important elements required include how teachers can stimulate and engage students in learning, which in turn can encourage students in achieving optimal learning outcomes with student learning can stimulate the brain for thinking and creativity in driving behavior change and the student growth (Dalyono, 2005). Unfortunately, the reality is happening in the field is inversely proportional to Dalyono statement. Which became the center of attention at the time of the learning process is just a teacher. Students not involved in learning activities, which in turn makes them feel bored in following the teaching and learning activities.

Biology as a subject is receiving a great deal of attention from educators and administrators. Because the world is simmering with biological problems and concerns ranging from the environment to an aging population, biology is important in the General Education curriculum (Ghosh, 2000). Biology is a unique discipline where experiments with living organisms can take place both in the laboratory and in the field (Prokop, 2007). But, biological materials that exist today is loaded with biological terms, mostly taken from the Latin so that the loss of important concepts that are simply not understood by the students. Added with the lack of teaching learning strategies that is used so that students unable to complete the study. The success of students in learning activities is highly desirable, but not infrequently lead to a variety of constraints that occur disadvantaged students achieve results as expected. Affective perceptions are the most important factors for quality of learning due to their effects on choice of activities and assessment and on planning (Koksal, 2008).

After the initial observation by conducting interviews Biology teacher in SMA Negeri 3 Medan, the first semester of academic year 2013/2014, data showed that results of biological studies students on the fungi subject matter is still much below the standard. Below standard means the average score obtained by the students still do not meet the minimum completeness criteria (KKM).

Value that should be achieved by the students so that said complete in Fungi subject matter in SMA 3 Medan is 75. Mastery learning classically obtained by the students of SMA Negeri 3 Medan on fungal material is 40% from 288 students or approximately only 115 students (Uji Kompetensi Data).

Learning difficulties faced by students Class X SMA Negeri 3 Medan, such as: (1) Influenced by circumstances that are not conducive classroom, where the presence of students who do not pay attention, talk during the learning process takes place, (2) Students are less active to seek an explanation additional related to the fungus that does not exist in the student handbook, (3) low ability students who have given the subject matter taught. This situation will certainly lead to students not able to absorb the subject matter so well that resulted in low student learning outcomes.

The study revealed that it is difficult to teach biology using learner centered methods because the range of abilities is too wide among many learners, learners are not able to express themselves in English and they do not do their homework. The other factors influencing the learning of biology were teacher's lack of adequate knowledge of the subject matter and teachers feeling insecure when teaching in English. The result seems to suggest that most learners' inability to express themselves in English as indicated by many respondents can have implications on the learning of biology in Zambian high schools (Manda, 2012).

Beside that, the research done by Cimer (2012) obtained the conclusion that from 207 participants, 177 students have difficulties learning in biology. According to the data analysis, five main reasons emerged: the nature of the topic, teachers' style of teaching biology, students' learning and studying habits, students' negative feelings and attitudes towards the topic, and a lack of resources. According to Gibson and Chase in Prokop (2007) showed students lost interest in science when they moved from middle to high school.

Moreover, there was the research done by Tekkaya (2001) obtained data that approximately 14,4% the students have learning difficulty in topic of classification which containing fungi subject matter. Most of the participants thought that biology is a course that presents very many content, most of which depend on memorization.

By looking at the difficulties faced by the students in the study of biology (especially fungi), it is necessary to research the title "Analysis of Students' Learning Difficulties in Fungi Subject Matter Grade X Science of SMA Negeri 3 Medan Academic Year 2013/2014".

1.2. Problem Identification

Based on the background description above, researcher identified the research problem as follows:

- 1. Limited practical work that was suited to the content of teaching fungi.
- 2. Difficult to remember the Latin name of fungi subject matter.
- 3. Limited learning resouces about fungi for senior high school grade.
- 4. Student low understanding in the fungi concept and knowledge.

1.3. Problem Limitation

In order to obtain an appropriate discussion, this research has some limitations as follows:

- Students learning difficulties category from cognitive aspect focuses on fungi topic only in X Grade Science Students of SMA Negeri 3 Medan Academic Year 2013/2014.
- Students learning difficulties category from each learning indicators on fungi topic in X Grade Science Students of SMA Negeri 3 Medan Academic Year 2013/2014.
- 3. Factros that influence the students' learning difficulties on fungi topic in X Grade Science Students of SMA Negeri 3 Medan Academic Year 2013/2014.

1.4. Research Question

There are some questions of this research as follow:

- 1. In what category of students learning difficulties from cognitive aspect on fungi topic?
- 2. In what category of students learning difficulties from each learning indicators on fungi topic?
- 3. What are the factors that influence the students' learning difficulties on fungi topic?

1.5. Research Objective

This research is conducted to achieve some objectives as follows:

- To know the category of students learning difficulties from cognitive aspect on fungi topic in X Grade Science Students of SMA Negeri 3 Medan Academic Year 2013/2014.
- To know the category of students learning difficulties from each learning indicators on fungi topic in X Grade Science Students of SMA Negeri 3 Medan Academic Year 2013/2014.
- To know the percentage of students understanding level based on fungi topic in X Grade Science Students of SMA Negeri 3 Medan Academic Year 2013/2014.

1.6. Research Significant

Considering about the research result and discussion, this research expected has significant beneficial both theoretical and practical.

In theoretical, this research significant as follows: as additional reference for biology teacher about the students learning difficulties on fungi topic, to motivate the teacher to increase the learning process and understand the students characteristics that meet the learning difficulties on fungi topic, and as another researcher reference to develop other further research.

Meanwhile, in practical. This research significant as follows: as a practical reference for teacher, developer, and educational institutions to

understand student understanding dynamic on fungi topic, as a reference for headmaster to increase more the work of biology teacher in learning process, and as a reference for biology teacher to develop the meaningful learning process on fungi topic so that the students learning difficulties can be handled.

