

CHAPTER I

INTRODUCTION

1.1. Research Background

Learning is an internal process that occurs in each individual to achieve a certain goal in life. People will be changed as they learn more and be knowledgeable, more skills to implement and finally, through times they have more understanding about life. People learn things anywhere and anytime but basically formal education is conducted at schools or other education institutions.

At school, the curriculum set is aimed to produce goals which expect that every student will experience an authentic learning environment where they rigorously apply knowledge and skills from multiple disciplines to solve real world problems and answer meaningful questions. In the process to achieve the goals students will experience difficulties and barriers from their both inner and outer environments (Rumini, 2013; Supriyono, 2013). Internal factors such as motivation, health, ability, and interest are some to mention. Teaching methodology, teachers, and lesson materials are some of external factors affecting student's achievement at school.

Student's interest of the topic, motivation and talents are things to be considered important when teaching and implementing the curriculum. While externally, lesson material is one of the important factors in teaching Biology, it is very interesting to explore the student's difficulty to study Biology in each topic. Each topic in Biology has its level of difficulty for student to comprehend as each topic may need specific strategy or approach in delivering it in class. Teacher is responsible for translation and implementation of educational policies, curriculum and instructional materials package. It is therefore certain that no curriculum can achieve the desired results unless teachers are appropriately trained. What teacher knows and can do is the most important influence on what student learned. The teacher may determine the kind of experience students are exposed to in the classroom.

Lesson material such as Biology is a subject that is difficult to learn for some of students. Research on student's difficulties in understanding the subject matter of biology has been widely studied throughout the world (Cimer, 2011; Tekkaya, 2001). The difficulty affects student achievement and makes students are less motivated to learn the subject. One of the most difficult things for students is to make connections between different topics in biology (Law and Lee, 2004). In addition, many concepts or topics in biology can be perceived as difficult to learn by secondary school students, biological level of its organization and the abstract level of the concepts. Lazarowitz and Penso (1992) also stated that overloaded biology curricula, the abstract and interdisciplinary nature of biological concepts, and difficulties with the textbooks are the other factors preventing students from learning.

Research on learning difficulties in various biological materials has been conducted for several years. Learning difficulties in the topic of structure and function of animal tissues (Anggani, 2016), found that the most dominant factors affect student learning difficulties are student's interest and motivation and the nature of the materials. Relevance to the previous research, Siregar, Restuati and Gultom (2016) found similar findings about the most influencing factor affect student's achievement in the topic of digestive, respiration, and excretory system. They stated that the students' interest and motivation, school facilities, study aids and curriculum are the most influencing factors that cause the learning difficulty. Rahmadani, Harahap and Gultom (2017) also found that talent, interest and motivation were playing an important role to enhance student's achievement in biotechnology materials. The completeness of laboratory tools, textbooks and teaching methods some of external factors influence student's performance in class. Study that conducted by Irmayanti, Hasruddin and Kartika (2017) shows that student have learning difficulty in lesson material of hormone that caused by some factors such as learning material, school, teacher and family.

As it was for students in Turkey, Cimer (2011) found that the structure and function of plant tissue is one of the most difficult materials together with cell material, endocrine system, and respiratory system. Research conducted by

Kusumawati (2016) shows that students at Grade XI SMA Negeri 3 Klaten have learning difficulties in the material structure and function of plant tissue both in the realm of understanding plant tissue structure, function of plant tissue and the relationship between structure and function of plant tissue. Relevance to the finding, observations conducted by the author also revealed that teachers at SMA Negeri 11 Medan recognised that only 32% of the students of class XI IPA managed to reach the minimum completeness criteria (KKM) of the school which is 75. Commonly issues such as the biological level of organization and the abstract level of the concepts are part of the subject which was considered difficult. Several reasons are also common such as 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.

Therefore, the aim of the current study are to analyse the students learning difficulty based on the cognitive and indicator aspect and explore the main factors causing the student's difficulty in the lesson material of structure and function of plant, that in this research is limited to the external factors. This will provide a knowledge base for teachers in understanding the difficult part of the lesson material and the factors affecting the student's test performance. Then it will help both teachers and students to reach their goals in teaching and learning process.

The proposed title of this research is “ **An Analysis of Student's Learning Difficulty in Lesson Material Structure and Function of Plant Tissue at Grade XI SMA Negeri 11 Medan Learning Year 2018/2019**”.

1.2. Problem Identifications

Based on the background description of the problem above, there are several problems that can be identified:

1. Low student learning outcome in lesson material Structure and Function of Plant Tissue is more than 68% students get score lower than the minimum score (KKM) that is 75. This indicate the learning difficulty in this topic.
2. Learning media that can help the students comprehend during learning Structure and Function of Plant Tissue is insufficient.

3. Teacher's teaching methods is considered as ineffective as teachers still use the teacher-centred method.
4. Learning difficulties that found are too many concepts required high comprehend and remember, the facility that can help learning process is not enough or insufficient, intangible factor and seldom conduct observation or practicum activity.
5. There is no empirical study about student's learning difficulty on the topic of Structure and Function of Plant Tissue at grade XI IPA SMA Negeri 11 Medan Academic Year 2018/ 2019.

1.3. Problem Scopes

This research is limited to:

1. Analysis of students' learning difficulty based on the cognitive aspect in lesson material Structure and Function of Plant Tissue at Grade XI IPA SMA Negeri 11 Medan Academic Year 2018/2019.
2. Analysis of students' learning difficulty based on learning indicator aspect in lesson material Structure and Function of Plant Tissue at Grade XI IPA SMA Negeri 11 Medan Academic Year 2018/2019.
3. Factors affected students' learning difficulty during learning Structure and Function of Plant Tissue at Grade XI IPA SMA Negeri 11 Medan Academic Year 2018/2019 limited for the external factors such as learning research, teacher, learning activity, nature of material and time allocation.

1.4. Research Questions

This research questions are formulated as follow:

1. How are the student's learning difficulties level based on cognitive aspect in lesson material Structure and Function of Plant Tissue at Grade XI IPA SMA Negeri 11 Medan Academic Year 2018/2019?
2. How are the student's learning difficulties level based on learning indicator aspect in lesson material Structure and Function of Plant Tissue at Grade XI IPA SMA Negeri 11 Medan Academic Year 2018/2019?

3. What are the external factors that affected student's learning difficulty in lesson material Structure and Function of Plant Tissue at Grade XI IPA SMA Negeri 11 Medan Academic Year 2018/2019?

1.5. Research Objectives

There are two (2) research objectives to describe what we expect to achieve by a research, they are:

1. Knowing student's learning difficulties level based on cognitive aspect in lesson material Structure and Function of Plant Tissue at Grade XI IPA SMA Negeri 11 Medan Academic Year 2018/2019.
2. Knowing student's learning difficulties level based on learning indicator aspect in lesson material Structure and Function of Plant Tissue at Grade XI IPA SMA Negeri 11 Medan Academic Year 2018/2019.
3. Knowing the external factors that affected student's learning difficulty in lesson material Structure and Function of Plant Tissue at Grade XI IPA SMA Negeri 11 Medan Academic Year 2018/2019.

1.6. Research Benefit

This research will significantly contribute for:

1. For the school, it can be used as a suggestion or recommendation to develop appropriate learning facility in order to improve the quality learning process and after knowing learning difficulty of their student so party who have authority in the educational institution can take an action to reduce learning difficulty factors that come from an institution.
2. For biology teachers, it can be used to know student learning difficulty in Structure and Function of Plant Tissue and can take action to reduce it. So, the students get help to improve their learning outcomes and achievement especially in Biology.
3. For students, it can be used to know their difficulty during learning Structure and Function of Plant Tissue, so they can try to resolve their own difficulty and give support to improve their learning outcomes and achievement.

4. For the next researcher, it can be used as the source to do other research that has linked to this research and improving research on analyzing learning difficulty in Structure and Function of Plant Tissue.

1.7. Operational Definition

To equate the concept, the following given operational definition related to this research is:

An Analysis of Student's Learning Difficulty in Lesson Material Structure and Function of Plant Tissue at Grade XI IPA at SMA Negeri 11 Medan Academic Year 2018/2019 is a research that done for knowing the student's learning difficulty level based on cognitive aspects, indicator aspects and the external factors that affected student's learning difficulty in Structure and Function of Plant Tissue which limited just for factors such as learning research, teacher, learning activity, nature of material and time allocation. Student with learning difficulties are those who have score on a learning test result under the KKM (<75).