

CHAPTER I

INTRODUCTION

1.1. Research Background

Every program learning activity entails a goal that can be broken down into specific goals, or learning objectives, which are concise statements about what students will be able to do when they complete instruction. In the process of achieving learning objectives, each teacher has different ways of teaching, both in planning, controlling student behaviour, learning methods, and group formation (Hidayatussaadah, 2016). The well-defined and articulated learning objectives are important because they provide students with a clear purpose to focus their learning efforts, direct the choice of instructional activities, guides the assessment strategies (Anderson and Krathwohl, 2001).

In the learning process, there are also students who experience problems or difficulties during the learning process and achieving the learning process (Widiasworo, 2017; Subini, 2014). The learning difficulty is an indicator of learning quality and needs to be analysed and diagnosed so the learning process can be continued or improved (Sagala, 2010). The importance of learning difficulty analysis can reveal factors contribute to the problem. Some of them are known as external and internal factors. Student's health condition, disability, intelligence, motivation, interest, mental health and special types of learning are some to mention for the internal factors. Whereas, factors such as learning methods, media, strategy and material are those factors contribute to students' learning difficulty (Slameto, 2010).

Learning difficulty in biology have been widely studied by researchers worldwide (Cimer, 2012; Tekkaya, 2001). They concluded that biology is difficult for some of students due to some of the concepts are difficult to comprehend and using English and Latin terminology in most of the context. Other factors such as motivation and health, learning facility and aids, the nature of the subject, and family and community support are some factors that contribute to the learning

difficulties in biology (Ritonga, 2016; Siregar, *et al.*, 2017; Rahmadani *et al.*, 2017).

Tekkaya (2001) also found that the Structure and Function of Plant Tissue topic is perceived by students as difficult topic, along with Water Transport in Plants, Protein Synthesis, Respiration and Photosynthesis, Gaseous Exchange, Physiological Processes, Hormonal Regulation, Oxygen Transport, and Genetics.

Utami (2016) in her research also found that the topic of Structure and Function of Plant Tissue has similar situation. The nature of the content, with lots of sub topics in it have led student to similar findings worldwide. The characteristics and function of each permanent tissue in plants, comparison of the cell structure of various plant tissues in the figure, the kinds of tissue of the vegetative and generative organs, and the anatomical differences between monocot and dicot plants are some to mention. The learning media and laboratory equipment were not available has contributed to the student's difficulty in learning process. For this case, students were found to have low mark and have not reach the maximum achievement criteria or KKM.

Similar situation was also observed by the researcher during the Field Experience Program (PPL) at SMA Negeri 1 Perbaungan. Students at this school have similar difficulty to study the Structure and Function of Plant Tissue, especially in the sub topic of the characteristics and function of each permanent tissue in plants and the anatomical differences between monocot and dicot plants. This was also supported by an interview with the biology teachers at SMA Negeri 1 Perbaungan and also it can be seen from the student's achievement in the test. The result shows that 70% of students could not reach the minimum criteria to pass the exam (75).

The findings during the PPL program are sufficient to predict that students in this school may experience similar difficulty to study the topic of structure and Function of Plant Tissue. In addition, the researcher is subjected to find slightly different facts related to the common problem to study biology. Factors which are responsible to the student's achievement may vary from one school to another. Also, this research will reveal in more detail about specific learning indicator

which has the most influential impact to the student's learning achievement and indicate which factors contribute to the failure of student in the examination. And, there has not been any empirical study about students' learning difficulties of students in this school regarding the topic of Structure and Function of Plant Tissue. The title of this research is proposed to be "**An Analysis of Student's Learning Difficulty in Lesson Material Structure and Function of Plant Tissue of Grade XI IPA SMA Negeri 1 Perbaungan Academic Year 2018/2019**".

1.2. Problem Identifications

From the back ground of the research above, there are several problems that can be identified:

1. There are 70% students of this school experienced low score in the topic of Structure and Function of Plant Tissue.
2. The learning media in the process of learning in the topic is indicated as insufficient.
3. The concept of topic Structure and Function of Plant Tissue is considered as difficult to comprehend and memorise.

1.3. Problem Scopes

This research is limited to:

1. Analysis of students' learning difficulty based on the cognitive aspects of the Structure and Function of Plant Tissue topic at Grade XI IPA SMA Negeri 1 Perbaungan Academic Year 2018/2019.
2. Analysis of students' learning difficulty based on learning indicator aspect of the Structure and Function of Plant Tissue at Grade XI IPA SMA Negeri 1 Perbaungan Academic Year 2018/2019.
3. Factors contribute to students' learning difficulty of the Structure and Function of Plant Tissue topic at Grade XI IPA SMA Negeri 1 Perbaungan Academic Year 2018/2019.

1.4. Research Questions

This research questions are formulated as follow:

1. How is the students' learning difficulty based on the cognitive aspects of the Structure and Function of Plant Tissue topic at Grade XI IPA SMA Negeri 1 Perbaungan Academic Year 2018/2019?
2. Which learning indicators of the Structure and Function of Plant Tissue topic is considered difficult for students of Grade XI IPA SMA Negeri 1 Perbaungan Academic Year 2018/2019?
3. What are the factors contribute to students' learning difficulty of the Structure and Function of Plant Tissue topic at Grade XI IPA SMA Negeri 1 Perbaungan Academic Year 2018/2019?

1.5. Research Objectives

This research is aimed to:

1. Determine the students' learning difficulties based on cognitive aspect of the Structure and Function of Plant Tissue topic at Grade XI IPA SMA Negeri 1 Perbaungan Academic Year 2018/2019.
2. Determine students' learning difficulties based on learning indicator aspect of the Structure and Function of Plant Tissue topic at Grade XI IPA SMA Negeri 1 Perbaungan Academic Year 2018/2019.
3. Determine factors contribute to student's learning difficulty in Structure and Function of Plant Tissue topic at Grade XI IPA SMA Negeri 1 Perbaungan Academic Year 2018/2019.

1.6. Research Benefit

This research will significantly contribute for:

1. For an educational institution, as information about learning difficulty of the topic Structure and Function of Plant Tissue and use it to improve learning process.

2. For biology teacher, as information to deal with similar situation in teaching biology. It is also useful as data to develop better approach and strategy to teach biology.
3. For researchers, as information and data about student's learning difficulty in learning biology. It can also be used as primary data for developing more sophisticated research about teaching biology and student's learning difficulty in studying biology.

1.7. Operational Definition

An Analysis of Student Learning Difficulty in Structure and Function of Plant Tissue of Grade XI IPA at SMA Negeri 1 Perbaungan Academic Year 2018/2019 is a research explore and determine the students' learning difficulties based on cognitive aspects, learning indicators, and factors contributing to student's learning difficulty in studying biology.