

CHAPTER I INTRODUCTION

1.1 Background

Education is a major key to create competent human resources for the betterment of the country. Education is a very crucial thing to ensure a nation's development and life continuity. Also, education is a nation's advancement benchmark, and becoming the mirror of society's personality. The education itself should have a certain quality. The quality of the education is related to the students' success in learning which can be seen from the learning achievement obtained.

Learning is an implementation of the educational efforts. Learning in both explicit and implicit way shows a change in someone's behaviour and personality based on a certain experience or practice. Everybody has their own experience on something, thus they learn something from it and the changes to that person called the learning process.

Learning is not just transferring knowledge from teachers to students. It is an understanding process where relatively permanent changes are caused by information and experience. These changes do not solely refers to outcomes of the learners' behaviour 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 the educators make the effort to find out what students' conceptions of learning are and what constitutes understanding.

Djamarah, (2011) propose a formulation that learning as a sequence of body and soul, psychophysical towards individual development thoroughly, in the relation of elements of creativity, feels, initiative, cognitive, affective, and psychomotor. As the result of the learning process itself can be seen from the change of the behavior as the result of experience. Teaching and learning as process has three elements that can be distinguished, they are: the objectives of

teaching (instructional), experiences (process) of teaching-learning, and the result of learning.

This thing is a difficult problem for teachers. The difficulty is because student is not just as an individual with the uniqueness they have, but also as a social being with different backgrounds. These individual differences have to be considered in applying learning strategies, in order to make the students develop fully and master the learning materials thoroughly. Everybody has their own problem in learning things. Especially in every school in many kinds and levels, there must be students that have difficulties in learning. Learning activities for each individual is not always occurs smoothly. Sometimes it might be difficult for the students to understand the learning material. In the matter of the eager to learn, sometimes the students have high spirit, but in the same time they are lacking in the ability to concentrate. This is the reality happened within student in their daily life related to their learning activity.

There are some difficult subject matters faced by the students and they are not capable of accepting some topics in Biology subject matter. Based on research done by Tekkaya (2001) which identified some difficult concepts in Biology, it is shown that nervous system is one of difficult concept in Biology. Nervous system taught as a subtopic in Human Regulatory System topic in senior high school class XI. If the diagnosis' done earlier, the difficulties in learning this topic can be resolved. These things are done in order to make the students understand better about learning the concept of nervous system.

Another background of this research is the low points of learning outcomes reached by the student in nervous system learning material in class XI IPA SMAN 1 Lubuk Pakam. The result shows that 30% of learning outcomes point in nervous system is under the KKM (Kriteria Ketuntasan Minimal / Minimum Completeness Criteria) that has been sets. Related to this condition, students are assumed having difficulties in learning the nervous system. This information obtained from the observation that has been done in SMAN 1 Lubuk Pakam and the statement biology teacher class of SMAN1 1 Lubuk Pakam, Mrs. Jaminatun Simbolon.

Therefore efforts should be made to increase students' achievements and a way to do it is by knowing the problems faced by the students that affect their learning outcomes in Biology subject matter, especially in nervous system.

Based on the background submitted above, researcher interested to do a research on students in class XI IPA SMAN 1 Lubuk Pakam with the title: **“Analysis of Students’ Learning Difficulties in Studying Nervous System in class XI SMAN 1 Lubuk Pakam”**

1.2. Problem Identification

The problem can be identified based on the background above are as follows:

1. In average of 30% of students that learned nervous system do not achieve the KKM (Kriteria Ketuntasan Minimal / Minimum Completeness Criteria).
2. Students are difficult to understand subtopics in nervous system..
3. Lack of students knowledge to understand the language and terminology used in textbook and in the classroom, makes it difficult to grasp the meaning of the concept.

1.3. Problem Limitation

The problem in this research is being confined in:

1. Learning difficulties in studying nervous system in cognitive ability aspects ($C_1 - C_6$) in class XI IPA SMAN 1 Lubuk Pakam Academic Year 2016-2017.
2. Learning difficulties in studying nervous system in indicators of learning aspects in class XI IPA SMAN 1 Lubuk Pakam Academic Year 2016-2017.
3. Factors causing the learning difficulties studying nervous system in class XI IPA SMAN 1 Lubuk Pakam Academic Year 2016-2017.

1.4. Problem Formulation

In accordance with the stated issues, the problem can be formulated as follows:

1. How are the learning difficulties in studying nervous system in cognitive ability aspects in class XI IPA SMAN 1 Lubuk Pakam Academic Year 2016-2017?
2. How are the learning difficulties in studying nervous system in indicators of learning aspects in class XI IPA SMAN 1 Lubuk Pakam Academic Year 2016-2017?
3. What are the factors causing the learning difficulties studying nervous system in class XI IPA SMAN 1 Lubuk Pakam Academic Year 2016-2017?

1.5. Research Objectives

The objectives of this research are:

1. Knowing the learning difficulties in studying nervous system in cognitive ability aspects in class XI IPA SMAN 1 Lubuk Pakam Academic Year 2016-2017.
2. Knowing the learning difficulties in studying nervous system in indicators of learning aspects in class XI IPA SMAN 1 Lubuk Pakam Academic Year 2016-2017.
3. Knowing the factors causing the learning difficulties studying nervous system in class XI IPA SMAN 1 Lubuk Pakam Academic Year 2016-2017.

1.6. Research Significance

The benefits that can be taken from this research are:

1. For researcher, add and develop the depth of knowledge related to analysing students' learning difficulties and the efforts on solving the students' difficulties.

2. For the teachers, to give enlightenment to teachers on where the students' difficulties in topic nervous system lie so the teacher can get the best solution to make the students' understand the Nervous System.
3. For the development of science, to be the additional book towards educational discourse in Indonesia.
4. For the students, as an input material in learning especially in learning the topic nervous system so that later the students can improve the learning achievements.
5. For other researchers, as a reference to do a research related to the analysis of students' learning activity in nervous system topic.
6. For the campus, as a source for the lecturers in devoting themselves in the SMAN 1 Lubuk Pakam