

CHAPTER I

INTRODUCTION

1.1. BACKGROUND

Education has an important role in the daily life human and the progress of a country. Through education, creating the next generation on the nation to realize the ideals of the nation. Given the critical importance of education in life, it is not an overstatement that current education gets more attention from the government. Moreover along with the development of science and technology, it is a nation require people strong and able to face the challenges of globalization of education.

In education, biology is one part of the educational building of Indonesia, who alTherefore must be considered in the improvement of quality. Biology is one of the subjects in which there are complex because of the variety of materials that are described with the concepts of inter-related and integrated Therefore that we can not understand any of the concepts of learning without understanding the concept as well. One of the goals of learning in high school biology students are able to understand the concepts biology and their interrelationships. Many students think that biology is a subject that is memorizing. This opinion is in line with the expression Susilowati (2008).

"When talking about biology, certainly in the mind of the students are full of memorizing learning. Exposure biology text books are Therefore vast and detailed impression that all material must be memorized. This is what ultimately makes students confused absorb the essence of the lesson "

There are two general causes that make biology difficult to learn biology. (1) In its nature is difficult to learn and (2) the learning process that do not make the students interest. That factors causing low motivation of students to learn biology. It can be seen from the attitude of students during the lessons. Most of the students that do not concentrate on their studies would started talking to their

friend. Therefore, teachers should equipped themselves with skills that are expected to assist in carrying out their duties. Since the teacher is one of the factors that influence the learning process, the teacher should understand and develop their methods in teaching to improve student' interest.

Based on the observation done by the researcher in SMAN 18 Medan on September 2013, students thought that biology is difficult because of frequently using difficult terms. In addition, the teaching methods given by the teachers tend to be no variety. Therefore that it made them bored. The impact is that their value is low (about 68) which was the minimum criteria of completeness (MCC) biology at the school is 75.

Researcher took the topic of animal and plant cells because the animal and plant cells is a matter of submatery that use many terms that are rarely heard and difficult to understand. Therefore, many students assumed that the material is difficult to be studied because it contains of and coverages quite a lot of learning materials.

One activities that can not be separated from teaching and learning biology is making note. Without recording and repeating it, most students could only remember a part of material that they read or what they heard (De Porter and Hernacki, 2005). The student's ability is organizing the information in the form of interesting note would increase as well as their ability in creating. Therefore, it is not necessary for the students to write down all the sentences into the records, but it can be in the combination of key points, symbol, and concept about the learning

One solution to solve the problem learning above, according to Manik (1991): "Concept maps are educational media to demonstrate the concept of science is systematically formed from the core of the problem to the support section having a relationship with one another to form a knowledge and ease of understanding of a lesson topic " By using this concept map, lesson delivered to a wider and facilitate students' understanding of the lesson concepts are related to

each others. To determine the students' understanding of concepts learned, we want to do the testing by providing student learning achievement.

Therefore, from the objective of study, we will combine the concept map with Students Team Achievements Division (STAD) cooperative learning methods which is help students thinking process critically to accept the subject matter and improve the students learning achievement. Student Team Achievement Division (STAD) is a cooperative-learning strategy in which small groups of learners with different levels of ability work together to accomplish a shared learning goal (Majoka,2010). Cooperative learning is an approach to instruction in which students work in small groups to help another learn (Johnson D & Johnson R,1987). *Cooperative learning* refers to instructional methods in which teachers organize students into small groups, which then work together to help one another learn academic content. Cooperative learning methods are extensively researched and under certain well-specified conditions they are known to substantially improve student achievement in most subjects and grade levels, yet the structured forms of cooperative learning that have proven to be effective are not used as often as more informal forms(Robert,1995)

The integration of cooperative learning within active learning activities leads to the development of critical and independent thinking skills, deeper understanding of concepts, and longer-lasting learning (Donmoyer, 1996 and Secules *et all*, 1997).

1.2. Problem Identification

Based on the background of the issues raised above, Some problems can be identified, namely:

1. Low student learning achievement
2. Model of teacher learning are less varied. Therefore, the students feel bored of the learning process

3. The teaching technique is less effective. Therefore, that students saturated with noted activities.

1.3. Research Scope

As for the scope of the problem in the studies are the subject matter of animal and plant cells by using concept maps in STAD cooperative learning in class XI semester I SMA N 18 Medan Academic Year 2013/2014

1.4. Research Question

The question of the problem namely:

1. Are the students who have been taught by using concept map in STAD Cooperative learning more active than students without concept map in STAD cooperative learning in animal and plant cells topic?
2. Is there any effect of concept map in STAD cooperative learning on student learning achievement at the material animal and plant cells in class XI semester I in SMA NEGERI 18 MEDAN Academic Year 2013/2014?

1.5. Research Objective

Based on the research question above the objective this study is to know:

1. The students' learning activities who have been taught by concept map in STAD Cooperative learning more active than without concept map in STAD cooperative learning in animal and plant cells in class XI semester 1 SMA NEGERI 18 Medan T. A 2013/2014
2. There are any effect of concept map in STAD cooperative learning on student learning achievement in the teaching-learning process using concept maps in STAD cooperative learning on the material of animal and plants cells in class XI semester I SMA NEGERI 18 Medan T.A 2013/2014

1.6. Research Significance

After doing this research are expected to be useful:

1. Provide alternative options and use of media in teaching and learning to teachers
2. Assist and advise the teachers to improve student learning achievement and student activities with the selection and use of appropriate media in learning and teaching
3. For information on improving student learning achievement teaching by using concept maps and worksheets for students in the subject matter of animal and plant cells