

CHAPTER I INTRODUCTION

1.1 Background of the Study

Learning is a two-way communication process, teaching that conducted by the teacher as an educator, while the learning is done by the students. In this case, the role of teacher is not merely providing information, but also directing and facilitating the study process to be more appropriate to the learning process (as facilitator). Learning is a process of the study that builds teachers to enhance students' thinking skills, and increase the ability of students to construct new knowledge as a good effort to improve the mastery of subject matter (Syamsudin, 2007).

Observation revealed that as teachers there is a tendency that they still dominate the learning activities in the class. Teachers still use the conventional way of teaching that is lecturing method where the teacher acts as the only source of information. On the other hand, student's activity are listening and taking notes. This creates a situation where the learning activity is centered on the teacher alone and students act as passive learners.

The condition of learning activities above is not considered as effective as it could have been. Lecturing method tends to create an atmosphere of monotonous and boring circumstance in the classroom. Few observations have revealed that some students cannot focus and pay attention to the teacher. Questions are also rarely asked and discussed. This may relate to the condition that biology contains lots of explanations and memorizations. We can see this problem through their achievement in most exams. Some students have difficulties to reach the minimum requirements to pass in the exams.

Studying biology involves lots of memorization which may quite difficult for some of the students. It contains lots of concepts that lead to many misconceptions as well. Students face problems of understanding concepts and it can be seen through activity of re-iterating some concepts at the end of the learning processes (individual observation, 2012 and Karo, 2012). The students seem to forget all the concepts easily, no sign of retaining the information given.

It is suspected that this problem led to the low achievements in some topics where the understanding of some concepts are important.

I interviewed the biology teacher for grade XI of SMA Negeri 1 Lubukpakam and it was suggested that one of the most difficult topic for students is learning human reproductive system (Karo, 2012). She emphasized that the students had problem of memorizing organs of human reproductive system and its anatomical and physiological structure of each organ. The method of lecturing is used to deliver all the information due to the lack of media and alternatives for some reasons. Teacher becomes the only source of information. The observation showed that the result of student monthly test in the biology subject is below the minimum completeness criteria (KKM) . The value is 70 and of the average of students scored only reached 65.

In this situation teachers are in charge to have initiatives dealing with difficulties faced by both teachers and students. Teachers are expected and encouraged to be more active and creative in developing learning strategy. One the strategy may involve the students in the process instead of waiting the information to be delivered. Vygotsky theory suggested that students need to learn and work in groups so that the students can interact with each other and needed the help from teacher to students in learning activities (Syamsudin, 2007). In this case I chose cooperative learning model as a solution to the problem of the grade XI of SMA Negeri 1 Lubukpakam.

Cooperative learning model is not entirely new for the teachers. Model of cooperative learning is a learning model that prioritizes the groups (Slavin, 2005). Each student in the group had levels of different abilities (high, medium and low) and if it is possible a member of the group come from different races, cultures, different tribes and with regard to gender equality. Cooperative learning model prioritizes cooperation in solving problems to apply the knowledge and skills in order to achieve learning objectives.

Based on the above issues teacher needs to develop the model of learning that can improve student's achievement and activity in the learning process. One of the options is the model of cooperative learning STAD (Student Team

Achievement Division) type. According to Slavin (2005) STAD emphasizes the interaction between student activity to motivate each other and help each other to master the subject matter in order to achieve maximum performance. The advantages of cooperative learning STAD model is a type of cooperation in groups and in determining the success of the group's success not only based on the group scores but also depend on the individual ability of the member, so that the students in a group must ensure that their members master the learning topic.

The other type of the cooperative leaning that will be applied in this reasearch is NHT (Numbered Heads Together). Numbered Heads Together is the model that emphasizes each student accountable for learning the material. Students are placed in groups and each person is given a number (from one to the maximum number in each group). The teacher poses a question and each student has their own responsibility to figure out the answers relate to the predefined number . According to Lie (2004) NHT can provide benefits for students who are underachieving and high achieving students that work together to complete the task. The students in a group depend on each other for information and for doing the task assigned on them This model can promote mutual respect among the members and the prevent the domination of particular student in a group.

Based on the problem above I am interested to make the comparison of STAD with NHT in order to know which model is more appropriate that can be served to solve the problem exist in this school and state my research title as **The Comparison Of Student's Learning Achievement In The Topic Of Human Reproductive System Using The Model Of Cooperative Learning Type STAD (Student Team Achievement Division) And NHT (Numbered Head Together) Grade XI IPA Students In SMA Negeri 1 Lubukpakam Academic Year 2011/2012.**

1.2 Problem Identification

1. Some of students learning achievement in the topic human reproductive system is below the KKM.
2. The Lecturing- method is dominantly used in the learning process.
3. Students rely on the listening, taking notes, and memorizing processes.

4. Activeness and cooperation among the students in the biology learning process are still low.

1.3 Problem Scope

There are many factors that affect the student's achievement at school but this research focuses on "The Comparison of student's learning achievement in the topic of human Reproductive System using the model of cooperative learning type STAD and NHT grade XI IPA Students in SMA Negeri 1 Lubukpakam Academic Year 2011/2012".

1.4. Research Question

In accordance with the issues that have been stated, then the problem can be formulated as follow:

1. How do the students learning achievement in the topic human reproductive system grade XI IPA in SMA Negeri 1 Lubukpakam that taught by using the model of cooperative learning type *STAD*?
2. How do the students learning achievement in the topic human reproductive system grade XI IPA in SMA Negeri 1 Lubukpakam that taught by using the model of cooperative learning type *NHT* ?
3. How do the comparison of student's learning achievement in the topic human reproductive system that taught by using *STAD* and *NHT* of grade XI IPA in SMA Negeri 1 Lubukpakam academic year 2011/2012?.

1.5. The Research Aims

There are several aims of this research, they are:

1. To obtain the information about students' learning achievement in the topic human reproductive system grade XI IPA in SMA Negeri 1 Lubukpakam that taught by using the model of cooperative learning type *STAD*?
2. To obtain the information about student's learning achievement in the topic human reproductive system grade XI IPA in SMA Negeri 1 Lubukpakam that taught by using the model of cooperative learning type *NHT* (*Numbered Head Together*) ?
3. To obtain the information about the comparison of students' learning achievement in the topic human reproductive system that taught by using *STAD* and *NHT* of grade XI IPA in SMA Negeri 1 Lubukpakam academic year 2011/2012?.

1.6. Research Contributions:

The research findings will be useful for:

1. Improving student learning achievements in order to achieve the thoroughness standards of learning especially in the topic of Human Reproductive system.
2. Increasing student interest and motivation in learning biology.
3. Increasing the activity of students in learning in the learning process.
4. Improving students' ability to work together in a group / discussion.
5. Enhancing teacher's awareness to develop alternative strategies to teach biology.

References for other researchers who want to continue and develop this

