

## CHAPTER I INTRODUCTION

### 1.1. Background

Education systems aim to enable students not just to acquire knowledge but also to become capable, confident and enthusiastic learners. At school, students who have positive approaches to learning, in terms of both attitudes and behaviours, tend to enjoy good learning outcomes. Beyond school, children and adults who have developed the ability and motivation to learn on their own initiative are well-placed to become lifelong learners. Thus, an overall assessment of the outcomes of schooling needs to consider not only students' knowledge and understanding but also their approaches to learning (Artelt, 2003).

One of the problems that faced in education is lack of learning process. In learning process, students are less encouraged to develop critical thinking. This learning process in class is directed to student's ability to memorize information, the brain is forced to remember and store many information without required to understand information that they remembered to relate in daily life. As consequently, when students have graduated from school, they are smart theoretically but less of application (Sanjaya, 2006).

Based on the interview result with Mrs. Daryanti, the Biology teacher of class XI IPA SMA Negeri 11 Medan, known that value of Kriteria Ketuntasan Minimal (KKM) Biology subject in School is 72, while the learning outcomes of students was average of 65 – 70. It was caused the teaching way of teacher still monotonous although sometimes used learning media such as power point that presented in front of the class, teachers still dominate teaching learning process so that students tend to be passive when teaching learning process in the class. In this situation, teachers serve as the main source of information so that the learning activities happen in one direction and make students become bored in learning.

The interview result with Biology teacher in SMA Negeri 11 Medan stated the cooperative learning model Think Pair Share and Numbered Head Together

type never used in Biology subject yet. Thus, researcher introduced the cooperative learning model to solve the problems.

Cooperative Learning refers to variety of teaching methods in which students work in small group to help one another learn academic content. In cooperative classrooms, students are expected to help each other to discuss and argue with each other, to assess each other's current knowledge and fill in gaps in each other's understanding, so that the interest and active students in the learning process can be improved individually and groups (Siburian, 2013).

The reason of researcher choose Think-Pair-Share type is this cooperative learning model designed to influence the interaction patterns of students. Think-Pair-Share is a classroom-based active learning strategy, in which students work on a problem posed by the instructor, first individually, then in pairs, and finally as a class-wide discussion. TPS has been recommended for its benefits of allowing students to express their reasoning, reflect on their thinking, and obtain immediate feedback on their understanding (Kothiyal, 2013)

Numbered Head Together learning model is one of cooperative learning models that developed based on constructivism principle. 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 prevent the domination of particular student in a group.

Reproductive System Topic was the learning topic that teach in second semester. This topic was also accordance with research time that carried out. Researcher used learning model Think-Pair-Share and Numbered Head Together type on Reproductive System, with the hope through this cooperative learning students can work together to resolve the matter.

Based on the background above, so the title research title is **“The Difference of Student Learning Outcome and Activity between Think Pair Share and Numbered Head Together Model on Human Reproductive System in Class XI SMA Negeri 11 Medan Academic Year 2013/2014”**.

## **1.2. Identification of Problem**

Based on the background above, the problem identification in this study :

1. The variation in learning still low in applying learning models
2. Lack of interaction between students with teacher or one student with others.
3. The students cooperation in teaching learning process still low.
4. Learning outcomes still low level

## **1.3. Scope of Problem**

The problem scope in this research :

1. This research is limited in using cooperative learning Think-Pair-Share with Numbered Head Together.
2. The research is applied in Topic Reproductive System in Class XI SMA Negeri 11 Medan Academic Year 2013/2014.
3. The Learning Outcomes that observed is limited in cognitive and affective aspects.

## **1.4. Research Question**

The research question in this research :

1. Is there any difference between student learning outcome that taught by using Think Pair Share and Numbered Head Together Type on Topic Human Reproductive System in class XI SMA Negeri 11 Medan Academic Year 2013/2014?
2. Is there any difference between student learning activity that taught by using Think Pair Share and Numbered Head Together Type on Topic Human Reproductive System in class XI SMA Negeri 11 Medan Academic Year 2013/2014?

## **1.5. Objectives of Study**

The study objectives are to know :

1. The difference of student learning outcome that taught by using Think Pair Share and Numbered Head Together Type on Topic Human Reproductive System in class XI SMA Negeri 11 Medan Academic Year 2013/2014.

2. The difference of student learning activity that taught by using Think Pair Share and Numbered Head Together Type on Topic Human Reproductive System in class XI SMA Negeri 11 Medan Academic Year 2013/2014.

#### 1.6. Significance of Study

The significance that hoped in this study :

1. Consideration for biology teacher to determine learning models that will used in delivering learning topic accordance with subject matter.
2. As input for researcher to self-prepare become teacher who able to improve learning quality.
3. Provide knowledge and experience for student about discussion way with using learning model Think Pair Share (TPS) and Numbered Head Together (NHT) type so that can used by student to explore and develop knowledge and learning skill for other topic through information sharing with peers or another.
4. As practice source for next research in education field.