

CHAPTER I INTRODUCTION

1.1. Background

In general, the process of education and teaching in schools today is still running in the classical style, which means that a teacher in the classroom faces the number of students between 20-40 students in the same time and delivers the same learning materials as well. Teachers often use the same model to the whole students. In this classical teaching, the teachers assume that all students of the class have not different ability, different readiness and different maturity. Actually, each person has different characteristics - different from one to another one. One such individual differences is the ability, so we often found in each class that the students group that has a high, medium and low capability. Nowadays, teachers use the learning model that have not been able to appreciate and accommodate the individual differences of students. In the implementation of the learning process, the teachers teaching by same service for all the students, whether it is for the high, medium and low ability of student. The students have different learning speeds and they can get the service of learning is depended on each of their abilities. Students who are slower still left behind, while students who are faster get the optimal service learning. This learning process that takes place in the class can not encourage students to progress and develop according to each of their abilities.

When I was in my teaching experience program, the results of my interviews with a Biology teacher at SMA Negeri 1 Berastagi, Ms. Florida Ginting, S.Pd., learning process in class is still very less effective. One contributing factor according to her, is that her students less active in the learning process. It can be seen in the learning process, students pay less attention in teaching process, they just listened to the teaching's lectures, did not ask questions on other class activities. The facts that occurred when the learning process is less enthusiastic following of students in learning activities. When the teacher asked, many students were not able to answer. The students ability to remember newly learned material is very low or they are quickly forget the lesson they just learned.

Thus, probably it is why formative test scores of students for human sensory system is still below the Kriteria Ketuntasan Minimum (KKM). KKM value in RSBI SMA Negeri 1 Berastagi at XI Science Class is 78, while the students score average was only 53.

The results of my interviews with a Biology teacher of SMA Negeri 1 Medan, Ms. Dra. Hamidah when I observed, the direct instruction learning model is still being used in the learning process in the class. For the human sensory system, KKM value in SMA Negeri 1 Medan at XI Science Class is 75, and the teacher said that almost all of the students' formative test results passed the KKM and also almost all of the students were active in the class. I chose this school as my research location, to observe the effect of Numbered Head Together as learning model in the learning process. My expectation, all of the students are active in learning process and NHT improves the students learning outcome in Human Sensory System Topic.

There are a number of potential approach to improve this learning process and outcome, namely the teacher's teaching approach, method or model. Out of a number of well teaching model that improve students activities and learning outcomes, i.e NHT (Numbered Head Together) Cooperative Learning Model. Numbered Head Together or NHT is considered a very good model candidate to be studied since this model will improve students learning outcomes, the activities of students in the teaching, and learning process. This model is also considered suitable for a medium class size (20 up to 40 students). And from my observation result in SMA Negeri 1 Medan, the number of the students in XI IPA 1 as the experiment class is 27 students. It is the medium class size. It is suitable to apply NHT (Numbered Head Together) Cooperative Learning Model in this class for my research. Thus, it can make the students active in learning process.

According to Lie (2004), cooperative learning of NHT type may provide benefits both of the students in high, medium and low capability in learning, the students will work together, accomplish the tasks of learning, high-achieving students will be tutors for students which lower achievements. Cooperative learning models not only provide the material, but also learn cooperative skills.

The aims are to launch cooperative skills to learn and work relationships. NHT is also able to provide a broad acceptance of people who differ by race, culture, social, and other capabilities. There are several benefits of NHT (Numbered Head Together) cooperative learning model expressed by Lundgren in Ibrahim in Husna (2010), they are:

1. Self-esteem is higher
2. Improving attendance
3. Acceptance of the individual into a larger
4. Disruptive behavior becomes smaller
5. Conflicts between reduced personal
6. Deeper understanding
7. Increasing cultivation kindness, sensitivity and tolerance
8. Higher learning outcomes

Sitompul (2008) found that on average who were taught human reproduction system at the second semester class XI SMA Negeri 2 using NHT had 89.06 score. Simatupang (2009) found that on 91,25 % of students passed KKM who were taught human sensory system at the second semester class XI SMA Parulian 1 using NHT. Husna (2010) found that on mean 71,19 who were taught human reproduction system at the second semester class XI SMA Negeri 11 using NHT, she said that Numbered Head Together can improve the students learning outcome.

1.2. Problems Identification

Based on the above background, the problems can be identified are as follows:

1. The learning model that is used by the teacher nowadays still can not improve students learning activity and learning outcome.
2. The student learning outcome is low, especially in biology subject.
3. Low of motivation, enthusiasm for learning, and the involvement of the student in the learning process because of the lack of teacher skill utilize the effective learning model.

4. Learning model that is used by the teacher nowadays tends to be monotonous, resulting in students not able to absorb the subject matter maximally and the optimal service learning is not evenly distributed in the learning process in the medium class
5. The social skill of the students is still low. It caused of the individual student learning activities likely resulting with fellow students in the learning process.

1.3. Study Scope

The problems of this research was limited to the students learning outcome and students learning activities. This study was limited the use of two teaching models namely NHT (Numbered Head Together) Cooperative Learning Model and Direct Instruction Learning Model as a baseline comparison. The topic taught in this research was human sensory system and the students learning activities and students learning outcome were dependent variable. This study was planned to be carried out in XI Science Class of SMA Negeri 1 Medan 2012/2013

1.4 Problem Questions

The problems with restrictions on the formulation in this research are:

1. Are the students who were taught with NHT (Numbered Head Together) Cooperative Learning Model more active than students who were taught using Direct Instruction Learning Model?
2. Is students' average learning outcome who were taught with NHT (Numbered Head Together) Cooperative Learning Model higher than students who were taught using Direct Instruction Learning Model?
3. What is the comparison of the students learning outcome and students activity who were taught with NHT (Numbered Head Together) of Cooperative Learning Models and Direct Instruction Learning Model in human sensory system topic for the second semester year XI Science Class of SMA Negeri 1 Medan 2012/2013?

1.5. Research Objectives

Based on the formulation of the problem described above, the objectives of this research to find out:

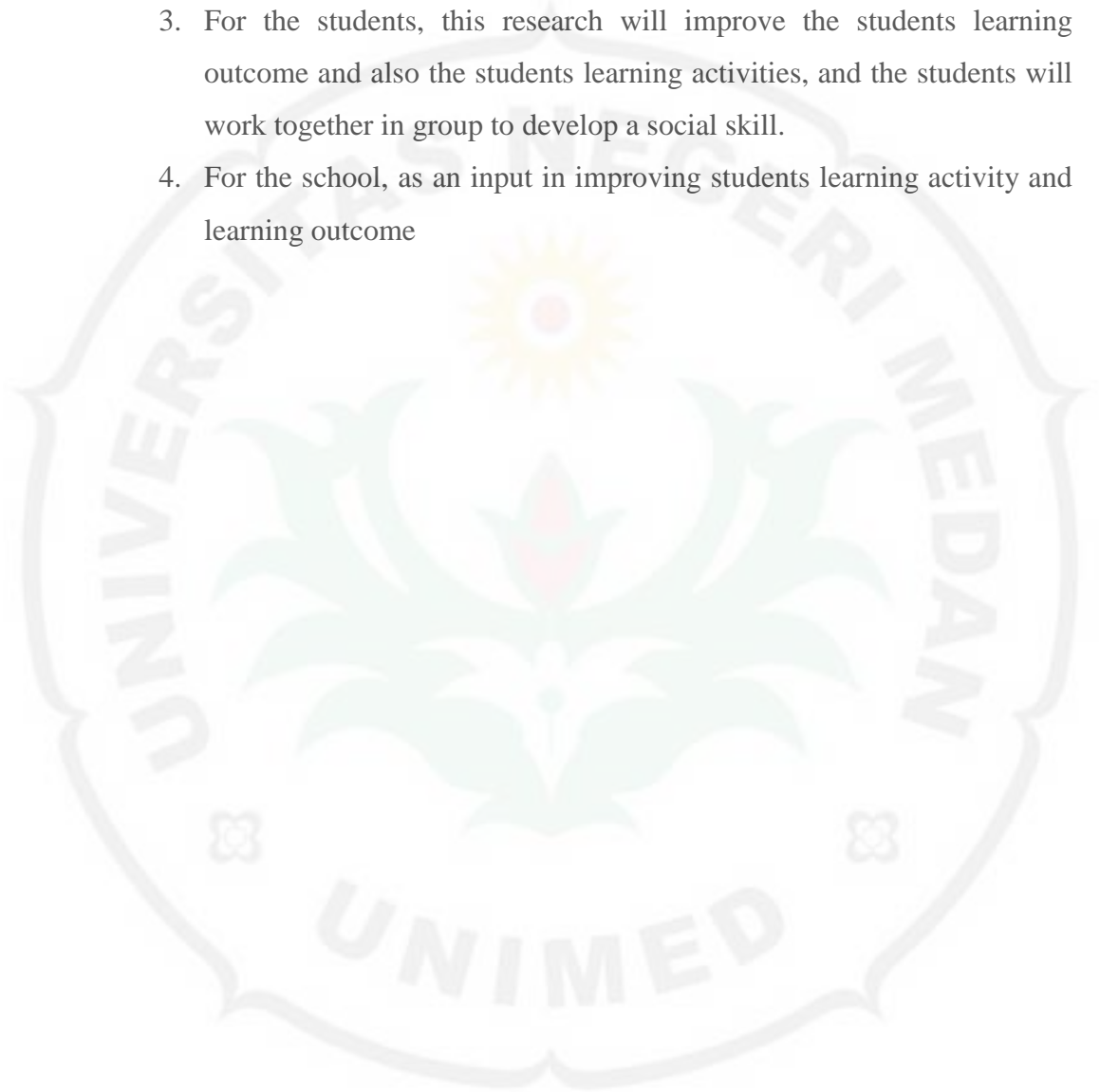
1. The students learning activities who were taught with NHT (Numbered Head Together) of Cooperative Learning Model in human sensory system topic for the second semester year XI Science Class of SMA Negeri 1 Medan 2012/2013.
2. The students learning activities who were taught with Direct Instruction Learning Model in human sensory system topic for the second semester year XI Science Class of SMA Negeri 1 Medan 2012/2013.
3. The students learning outcome who were taught with NHT (Numbered Head Together) of Cooperative Learning Model in human sensory system topic for the second semester year XI Science Class of SMA Negeri 1 Medan 2012/2013.
4. The students learning outcome who were taught with Direct Instruction Learning Model in human sensory system topic for the second semester year XI Science Class of SMA Negeri 1 Medan 2012/2013.
5. The comparison of the students learning outcome and learning activity who were taught by using NHT (Numbered Head Together) of Cooperative Learning Models and Direct Instruction Learning Model in human sensory system topic for the second semester year XI Science Class of SMA Negeri 1 Medan 2012/2013.

1.6. Significances of Research

The expected benefits of research in this study are:

1. For researcher, as an input and motivation to carry out the profession as a teacher.
2. For the teachers, as an input especially, for the teachers of biology in selecting appropriate learning method in learning biology.

3. For the students, this research will improve the students learning outcome and also the students learning activities, and the students will work together in group to develop a social skill.
4. For the school, as an input in improving students learning activity and learning outcome



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