CHAPTER I

INTRODUCTION

1.1. Background

The future of a nation is very dependent on the quality of its human resources and the ability of its students to master quality knowledge. The success of an educational process cannot be separated from the implementation of learning activities in schools. Learning activities in schools are the efforts of teachers to help students carry out learning activities so that students gain skills and knowledge that are useful for life. The success of student learning processes in schools can be observed from the student's motivation and learning achievement achieved.

According to Sardiman A.M (2012)learning motivation is a factor psychic that is non-intellectual. Motivation plays an important role infoster passion, pleasure, and enthusiasm for learning. Motivation to learn good students can lead to good learning processes too interpreted in the learning activities if not through a process based on good motives, or maybe because of fear, forced; clearly will produce pseudo learning achievement, not authentic and not durable. The higher the learning motivation of students and the quality of teaching of teachers in schools, the higher the learning achievement of participants students. External factors are factors that originate from outside one learner including family conditions, school environment, teaching methods, and models, curriculum and learning facilities and infrastructure. The achievement of high learning achievement as an indicator of success in the learning process is influenced by internal and external factors (Baharuddin and Wahyuni, 2010)

Redox is subject matter in the even semester in class X of natural sciences. In this chapter there do many concepts, sufficient understand, because this material will continue to be studied until the XII grade of Natural Sciences? This material requires memorization and good understanding because students will be introduced to oxidation and reduction numbers. Therefore we need a prospective teacher to improve student achievement in teaching and learning activities. The

lack of teachers motivates students in teaching and learning activities, including taking actions that are not important, only carrying out assignments, and creating learning processes that make students bored, thereby affecting student achievement. One indicator of teachers who are not creative is that they do not use varied learning models.

The development of appropriate learning models aims to create learning conditions that enable students to learn actively and fun so that students can achieve learning achievements (Aunurrahman, 2011)

The teaching and learning process does not only involve the teacher, but students must also be active in the teaching and learning process, so the authors use the cooperative learning model of the types of team games tournaments (TGT).Cooperative learning is a learning model where students learn with small groups that have different levels of ability (Shoimin, 2016)

In this model students play games with other team members to get extra points for their scores TGT (team games tournaments) can be used in a variety of subjects, from the exact sciences, social sciences and languages from the Basic education level (elementary school, junior high school) to college. TGT (team games tournaments) is perfect for teaching-learning objectives that are formulated sharply in one correct answer. However TGT (team games tournaments) can also be adapted for use with objectives that are formulated less sharply by using open-ended assessments such as essays or performance (Austrian, 2015)

Another factor that supports teaching and learning activities is the use of instructional media. Some of the benefits of the media in the learning process of students, namely: (I) can foster student motivation because teaching will attract their attention; (II) the meaning of teaching materials will become clearer so students can understand and allow mastery and achievement of teaching objectives; (III) teaching methods will be more varied, not solely based on verbal communication through words; and (IV) students do more activities in learning activities, not only listening but also observing, demonstrating, doing direct, and acting (Nurseto, 2011)

Many type of learning media can be used by teachers to support teaching and learning activities. One is the index card match and make a match. In the

index card match method and make a match, both media are designed so that students can think, express opinions, give opinions and help each other with other colleagues. This is done to encourage students' ability to be creative and to know the extent to which each student's ability to follow the subject matter presented, to support the achievement of learning objectives.

In a study conducted by Yola Adhysta (2014) found that the problem based learning (PBL) model assisted by index card match against student learning outcomes in the materials of compound names improves the learning outcomes of chemistry students who apply problem based learning (PBL) models to the index card match media in comparison to the student learning material conventional learning on compound nomenclature material in class x is 82.90% > 69.31%. Doni Oka Syahriza (2017) entitled the difference of student learning chemistry learned by students using cooperative learning models TGT type (team games tournaments) with snake media students and passed cards in the cooperative learning model of TGT type teams (teams games tournament) with the snake media of ladders and index card match in the cooperative learning model (teams games tournament) using ladder snake media and student learning outcomes with the TGT cooperative model (team games tournaments) using index card match on redox subjects.

Relisda Tampubolon (2015) entitled the effect of application of problem based learning model using make a match method on results of chemistry learning of high school students in hydrocarbons discussion states that the results showed, the average pretest value for the experimental class was 35.56 and for the control class was 27.60 while the posttest average value for the experimental class was 79.06 and for the control class was 74.70. the hypothesis test in this study is the right-side t-test and the correlation hypothesis test obtained by $t_{counts} > t_{table}$ which means H_a is accepted and Ho is rejected which shows that there is an influence of the application of the problem based learning model using the make a match method to student chemistry learning outcomes on the subject hydrocarbons. Padang, et all, (2018), thereis differences in learning outcomes student civic education using Index Card Match method with expository method. The learning outcomes student civic education using Index Card Match method with an average

value of 89,33, while the learning outcomes student of civic education using expository method obtained an average score of 84.00, (2) There is a difference in learning outcomes student civic education has a belief High learning motivation with low learning motivation. Students who have learning motivation with the average value of civic education learning outcomes of 89.59, while students who have low learning motivation to get the average value is 83.94, (3) There is interaction learning method and learning motivation in affecting learning outcomes student civic education.

Ainun, et all (2013) The results showed that (1) There is a significant difference in learning outcomes between students who are taught by the media card combined with and without practicum, and direct Instructio(DI), (2) There is a difference in the attitude of honesty are significant between students who are taught by the media card combined with and without practicum, and direct Instruction (DI), (3) There is relationship between the character of honesty to the learning outcomes of students
who are taught by the media card combined with and without practicum, and direct Instruction(DI).

Rahayu and Nugraha (2018) The result of this research is TGT type cooperative model effect the improvement of cross cultural skills of elementary school students of Talaga Kulon I. This is seen from the comparison of pretest and posttest score and statistical test showing improvement especially on indicators "Harnessing social and cultural differences to work together effectively

Based on the above background, Researchers interested in conducting research will the tittle **"The Difference of TGT Cooperative Learning Model with Index Match Cards and Make a Match on Student's Motivation and Learning Achievement"**

1.2. Identification of Problem

Based on background above, so can identify the problem that consists of:

1. Student achievement in school is low
2. Lack of student motivation to learnlearning is focused on the teacher so students are not active in class
3. The learning model used is too ordinary

1.3.   Scope of Problem

To clarify the scope of the discussion, the made the limitations in this study, namely:

1.   The model is the TGT cooperative learning model and the learning media used are index card match and make a match.

2.   The object of research is only limited to students of class X IPA semester I SMA Negeri 2 Precut Sei Tuan T.A 2019/2020.

3.   The learning material in this study is only limited to redox material

1.4.   Formulation of The Problem

Based on the description above, the formulation of the problem in this research are follows:

1.   Is there differencein student motivation taught by the TGT cooperative learning model with index card match compared to the TGT cooperative learning model with make a match on redox material?

2.   Is there difference in student learning achievement taught by the TGT cooperative learning model with index card match compared to the TGT cooperative learning model with make a match on redox material?

3.   Is there significant of correlation between student's motivation and learning achievement?

1.5   Research Purpose

The purpose of the study is based on the formulation of the problem above is as follows:

1.   To know the difference student motivation taught by the TGT cooperative learning model with index card match compared to the TGT cooperative learning model with make a match on redox material?

2.   To know the difference student learning achievement taught by the TGT cooperative learning model with index card match compared to the TGT cooperative learning model with make a match on redox material?

3.   Knowing the significant the correlation between student's motivation and learning achievement?

1.6   Benefits of Research

The benefits of this research are as follows:

1. This researcher can add experience that can be used in the teaching and learning process in the future.

2. For students can create a pleasant learning atmosphere and can help students obtain better student's motivation and can increaselearning achievement

3. For teachers, this research is expected to give an overview to the chemistry teacher in improving student's motivation and learning achievement by using the right models and methods in the teaching and learning process