CHAPTER I
INTRODUCTION

1.1. Background

Learning is a very important part in human's lives. It is the acquiring or getting knowledge of a subject or a skill by study, experience or instruction, or learning is relatively permanent change in a behavioural tendency and is the result of reinforced practice (Brown: 2000). Learning process happens every time and everywhere and expected a better change (Sagala: 2009).

The present and future national development must emphasize the importance of human resource (HR) development and quality in order to achieve excellence in an era of global competition. This has been enshrined in the preamble of Constitution, 1945, which one of the purposes of the establishment the State of the Republic of Indonesia is to educate the nation's life. Intelligent life of nation can only be achieved through the system and attempts a good education so that the quality of education will appropriate with the expected goal. It means that all cities in Indonesia should prepare and develop the education for their students to face the globalizations. The method that’s using are international standardization school, that’s known as “RSBI” and “SBI”. Here, the schools offer the student to slowly change the teaching and learning process.

Biology is the living science that consists of so many vocabularies, in which it has different meaning and purpose to another science. Most of vocabularies in biology are adapted from Latin. By far, this reason make people think that biology is difficult to be learned. Biology itself actually is not difficult to learn as long as the teaching process is proper to the learner’s ability.

However, it’s so often encountered boring and passive class during learning biology, it may be caused by less variety on teaching. Students cannot be active and difficult to take something to establish their self in a positive interaction during learning process. Ironically makes students unable to save memory of lessons for a long period of time and bring them to low learning outcome. There are several kinds of models and medias that can be used to

increase student's learning outcome, such as puppets, picture cards, card games, crossword, toys and etc. Students can learn through playing so they are more interested on teaching-learning process (Daryanti: 2008).

Based on observation at SMA Negeri 1 Tebing Tinggi, it was found problems on learning Molluscs, i.e. model, method and the media that used to provide to introduce Mollusc were less interactive to facilitate students for understand about Mollusc. Students are not introduced directly to the objects that had been studied, so students got note knowledge rather than understanding. Rotting is not necessarily means that student has learned or understood. Another obstacle is uninteresting package of teaching mollusc, especially to review topic and understand the terminology on Mollusc. Teachers usually only used textbook and PowerPoint to tell or review students about terminology, so students didn't involve to find it by them self. Learning in that way finally would make students feel tired and bored and have low outcome as the consequence. SMA Negeri 1 Tebing Tinggi has minimum completeness criteria (KKM) for biology that is 75. Actually their authentic score cannot reach minimum completeness criteria, but because of remedial test that's held by teacher, all of student can reach KKM. According to the data from biology teacher, the average score for Mollusc topic of students in academic year 2010/2011 was only 68,5 without remedial. It indicated that they have not passed the completeness criteria which are 75 on a scale of 100.

Basically, process of teaching by far is not something that's not good, but along development of education from time to time, it has been found new teaching models that's would give a better effect to improve student learning outcomes and activities on learning process. *Bingo model* is one of alternative model, where in *Bingo models* have an educative game namely *Bingo games*. By using *Bingo* students are able to learn biology teminology joyfully and actively, include when learn about Mollusc. *Bingo* game could be applied and suitable for students in X grade that still categorized into young age student. Overall, *Bingo* was a useful ancillary learning tool; helpful in identifying key concepts, contributing to students learning, and engaging them in collaborative practice. The *Bingo* games

make students feel challenged to the games, compete fairly to their classmate, confidence when found the answer and answer question bravely in front of their friends. Using a specially designed *Bingo* games provides an easy and engaging way for students to review concepts in preparation for a test (Williams: 2007).

According to Moore and Dettlaff (2005) the use of games in classroom can be an effective tool. Games can add flexibility to the classroom, allowing students to adjust to the way in which they learn best. It allow students to work in groups or alone, to be competitive or not, to be creative, and to have fun while learning (Davis: 2009).

BINGO by Mel Silbermen (2007) is a model in active learning strategy, in which has game media that is square-shaped, consist of twenty-five small square or grid where the point in the game is shaping up to horizontal, vertical or diagonal lines. The winner on games retrieved from the formation of horizontal, vertical or diagonally lines.

On the previous research has been done by Rob Weisskirch a student from California State University (2007). From his journal *Playing Bingo to Review Fundamental Concepts in Advanced Courses,* Ninety-two university students rated their understanding of developmental psychology theories before and after participating in a modified *Bingo* exercise designed to review the fundamentals of the theories and concepts. Students reported an improvement of their perceived knowledge of developmental theories and for each of the theories reviewed. They rated the exercise as academically challenging, helpful to learn concepts, and not a waste of time. Overall, on a scale of 1 being bad and 10 being good, the students rated the activity, on average, 8.65 (*SD* = 1.53). Students who reported being able to explain the theories to others at the conclusion of the exercise had higher test scores. Based on the description above, so the research about "**THE IMPLEMENTATION OF *BINGO MODELS* TO IMPROVE STUDENTS' LEARNING ACTIVITIES AND LEARNING OUTCOMES OF MOLLUSC FOR 10TH GRADE STUDENT SMA NEGERI 1 TEBING TINGGI ACADEMIC YEAR 2011/2012**" has been done.

1.2. Problems Identification

Based on background above, so the problems are:

1. The student learning outcome was below KKM (on previous year for mollusc topic). The average biology score of students was 68.5.
2. The using of teacher-centred in teaching learning process, so students were less interactive in learning Mollusc.
3. Students were not introduced directly with objects that have been studied (Molluscs) so that their knowledge was just rote and difficult to develop their capabilities and build knowledge.

1.3. Research Scope

Based on problems identification above, scope of this research limited on:

1. Research has been done at class X-3 in SMA Negeri 1 Tebing Tinggi.
2. The model that used was *BINGO* by using *BINGO* games media for Mollusc.
3. This research has been conducted to look at student activities and outcomes in learning by using *BINGO*.

1.4. Research Question

The formulation of the problem in this research were:

1. How *BINGO models* is implemented on Mollusc topic for 10^{th} grade student SMA Negeri 1 Tebing Tinggi?
2. Is there any improvement of students' learning activities by implementating *BINGO models* on Mollusc topic for 10^{th} grade student SMA Negeri 1 Tebing Tinggi?
3. Is there any improvement of students' learning outcome by the implementation of *BINGO models* on Mollusc topic for 10^{th} grade student SMA Negeri 1 Tebing Tinggi?

1.5. Objectives of Research

The purposes of this research include:

a. To know the implementation of *Bingo models* of Mollusc for 10^{th} grade student SMA Negeri 1 Tebing Tinggi.
b. To know the improvement of student learning outcome by the implementation of *BINGO* of Mollusc for 10^{th} grade student SMA Negeri 1 Tebing Tinggi.

c. To know the improvement of students' learning activities by implement *BINGO* on Mollusc topic for 10th grade student SMA Negeri 1 TebingTinggi.

1.6. Significance of Study

The benefits of this research are:

1) Student
   1. Increase students learning interest on Mollusc by using *BINGO* games.
   2. Improve the students' learning activity and outcome on Mollusc topic by a new learning model.
2) Teacher
   1. As contributions for teachers in selecting teaching strategies and models that appropriate and suitable in achieving learning objectives.
3) School
   1. As references for the school to improve the students' learning outcome and optimize the teacher quality.
4) Other Researchers
   1. As a reference for other researchers in applying *BINGO* learning model.

1.7. Operational Definition

1) *Bingo model* is an active learning model based on constructivism learning theory in which the model use *Bingo* game as the media, where this media was using square shaped cardboard that has grids and the point of this game pressed to form a horizontal, vertical or diagonal line on grids. *Bingo* game is effective to improve students' skill to find the key concept of Mollusca topic.

2) Students' learning outcome is the results of the study or the level of mental development (cognitive process) in which becomes better after the process of learning occur where in this research will be shown by the objective test (pre-test and post-test) and also observer sheet.

3) Students' learning activities is an activities or engaged in of students for the purpose of acquiring certain skills, concepts, or knowledge, whether guided by the teacher or not and for make sure that all activities during the class will suitable to the syntax of *Bingo model*, where in this research will be shown by the data of observer note/sheet during learning process.