

CHAPTER I

INTRODUCTION

1.1 Background

One of the problem education is often expressed in news in the tendency of the low quality of education at several levels and units of education, especially in secondary education. Various attempt to improve the quality of educations is continue to be done, ranging from training to improve teacher quality, curriculum improvement, improvement of educational facilities, to improve the quality of school management. However, the indicator towards the quality of education has not show significant increase (Muslich, 2007). Learning innovation to improve students achievement in chemistry subject is necessary because it deals with improving the quality of graduates to fill jobs in the field of chemistry

The success of the learning process is influenced by internal and external factors. Internal factors are everything comes from inside of the student, for example: intelligence, interests, motivation, self-concept, the ability to start and so on. External factors are everything comes from outside of the student, such as: curriculum, teaching methods, learning model, approach to learning, social, economic and so forth. Lack of motivation to study causes them facing difficulties in learning Chemistry. So, their Chemistry learning achievement is not good. Teachers are expected to provide learning experiences in the learning process so it can raise interest and motivation. The teachers have to try to eliminate that Chemistry is boring. They may have bad experience in learning Chemistry but not the science itself.

Some factors causing the lack of mastery of chemical material for students include (1) systematic and sequence of subject matter that have not been able to motivate students to learn by direct teaching the course material is relatively difficult without providing the necessary basic understanding, (2) students often learn by wrote without establish the understanding of chemical

material being studied,(3) floating material so that student can't find the key to understand the lesson being learned,and (4) certain teacher less successfully provide Concept for student's to mastery the subject matter because the lack of master learning model(hahn and polik, 2004;lynch and waters). To improve the basic concept for students to learn could be conducted through providing a good teaching materials such as text books and modules related to the student development (Saragih and Situmorang, 2012).

There are some reason why teacher need to develop learning material those are the availability of materials as demanded by curriculum, characteristic of the target and problem solving in addition the development of learning material must be appropriated by curriculum, where now days the curriculum that used is curriculum 2013

One effort to improve the quality of education is by facilitation of qualified textbooks. Textbook should be able to present the material in accordance with the curriculum, following the development of science and technology, and includes the competencies that have been established (Situmorang, 2013).

To improve the effectiveness and efficiency of teaching and learning process in school, it takes a breakthrough to improve the quality of teaching and learning process itself. Some consider that it needs changes in the learning curriculum, teaching technique, strategies and method of teaching and there is also considered that the changes in various instructional media that is very sophisticated, but there is instructional media that will never be left out of the book (William, 2002)

To implement the effective teaching needed some additional that is (1) learning is active, both mentally and physically, (2) motivation, (3) planning before teaching, (4) the influences suggestive teacher, should be given to the students, (5) the teacher must be able to create a democratic condition in school,

(6) the presentation of the materials to students, teacher need to provide the stimulation issue to think (Slameto, 2003).

The development of innovative learning module on the teaching of electrolyte and nonelectrolyte solution is very important to know that innovative learning need to fulfill learning material that should be have good quality that using by student in SMA/MA according to curriculum demand that used now that is curriculum 2013. Learning material that has good quality can help student to achieved student competence based on topic of subject. Learning material that was develop can be able to motivate students to learn effectively that may improve student achievement in chemistry. By developing of innovative learning module student will be interest to learn chemistry

Curriculum 2013 need to be implemented. The purpose of the implementation of curriculum 2013 is to improve the quality of education especially the quality learning process with lesson plan in school to get the new learning method, learning model, standard assessment, and textbooks or modules. Curriculum 2013 emphasize that student must be more creative, active, innovative, communicative, has good attitude and religion where their knowledge with their attitude will make them become the good personality (Kemendikbud, 2013)

From the detail explanation above,the writer interested to do the research to develop of innovative learning module chemistry topic in curriculum 2013 and interesting learning material to make students interest to learn and easy to understand and increase students achievements with entitled: **”THE DEVELOPMENT OF INNOVATED LEARNING MODULE ON THE TEACHING OF ELECTROLYTE AND NON ELECTROLYTE SOLUTION BASED ON CURRICULUM 2013 “**

1.2 Problem Identification

Based on the above research background, it can be identified the problem as follows:

1. Learning materials are important to improve student's achievement and motivation in learning chemistry subject.
2. Learning materials on the teaching of chemistry subject have to develop to make students easy to understand, interest to learn chemistry to improve student's achievement
3. Teachers have to skill to teach the materials of chemistry by the appropriate methods and models to makes students motivate and active in teaching and learning activity.
4. The effectiveness of learning materials appropriate to the curriculum 2013 are needed to support implementation curriculum 2013.
5. The development of learning materials on the teaching of Electrolyte and Non Electrolyte Solution in curriculum 2013 is needed make student interest to learning chemistry and to improve student's achievement

1.3 Research Scope

The scope of this research ” **The Development of Innovative Learning Module on The Teaching of Electrolyte and Non Electrolyte Solution Based on Curriculum 2013** “ is to arrange and develop innovative learning module to teach chemistry on topic electrolyte and non electrolyte solution for SHS students. The variety of learning material will be developed by researcher that adapted on topic of Electrolyte and Non Electrolyte Solution based on curriculum 2013 establish and develop a learning module on the subject of chemistry that refers to the on electrolyte and non electrolyte solution ,fesibility of the content, presentation, and language and doing

evaluation and standardization of learning materials by chemistry lecturer, teachers and students. The research planned will be conducted to students in grade X in three senior high school in North Sumatera at even semester on academic year 2013/2014

1.4 Problem Formulation

Problem formulation is needed to limit the research that will facilitate discussion of the problems raised. The problem formulation of this research are consist of:

1. How to develop chemistry innovative learning module to meet students competences based on chemistry curriculum 2013?
2. How to design of innovative learning module integration of laboratory activity, outside activity, and learning media in to chemistry material of electrolyte and non electrolyte solution ?
3. How to standardize chemistry innovative learning module to obtain standardized and innovative module on the teaching electrolyte and non electrolyte solution ?
4. How effective is the developed innovative learning module to improve students achievement on the teaching of chemistry electrolyte and non electrolyte solution?
5. Are the students interested on using standard innovative learning module to meet the requirement on students competence in curriculum 2013?

1.5 Research Objective

In accordance with problem formulation of the research, then the research objectives are:

1. To develop chemistry innovative learning module to meet students competences based on chemistry curriculum 2013?

2. To design of innovative learning module integration of laboratory activity, outside activity, and learning media in to chemistry material of electrolyte and non electrolyte solution ?
3. Standardize chemistry innovative learning module to obtain standardized and innovative module on the teaching electrolyte and non electrolyte solution ?
4. To developpe innovative learning module to improve students achievement on the teaching of chemistry electrolyte and non electrolyte solution?
5. To make the students interested on using standard innovative learning module to meet the requirement on students competence in curriculum 2013?

1.6 Research Benefit

The research benefits that expected from the result of this research can generally be described as follows:

1. Create developed learning material based on curriculum 2013 that can improve student's learning outcomes on the teaching of electrolyte and non electrolyte solution
2. Developed learning material based on curriculum 2013 can be used as reference for creating another learning material based on curriculum 2013 in another subject matter in chemistry in senior high school
3. Increase the researcher's knowledge toward developed learning material based on curriculum 2013 that can be used in the teaching and learning process to improve the quality of education in Indonesia
4. As important input for teacher that developed learning module based on curriculum 2013 can be as alternative choice to improve student's achievement

5. To enrich the students' research in addition do the usual research especially to student in chemistry department in State University of Medan.