

CHAPTER I

INTRODUCTION

1.1. Background

The development of innovative learning module is very important as it is known that innovative teaching and learning is able to motivate students to learn effectively that may improve student's achievement in chemistry. Especially in fulfill high quality of learning material that used by students in Senior High School or Madrasah Aliyah that available with curriculum 2013 in North Sumatera (Situmorang, 2010).

The book is one component in the process of teaching and learning activities. Textbooks are one source of knowledge for students in the school who was really a process of teaching and learning support. Therefore, a good textbook and quality in addition to being a source of knowledge that can support the success of student learning can also guide and direct the learning process in the classroom towards quality learning process as well. The process of teaching and learning activities of teachers and students will not be separated from the book, although the teacher can explain the material clearly and in full, but the book holds a very important role in teaching and learning in education.

Education is one of the foundations that determines the toughness and progress of a nation. Educational paths can be obtained through formal education and non-formal education channels. Schools as institutions of formal education required to perform a good learning process and optimally so as to print the nation's youth are intelligent, skilled, and high moral character. The learning process helps students to develop its intellectual potential, so the main goal of learning is the work done so that each student can grow intellectually (Drost, 1999:3-4).

One branch of the subject is considered difficult by students of chemistry. Effendy (2006: 1) defines chemistry as: "Chemistry is a branch of science the which deals with the properties of matter, structure of matter, changes in matter, the laws and principles describing these changes, and the concept and

theories that interpret them". During this time, the tendency of the learning process chemistry just focused on the student's ability to memorize, but in reality they do not understand in depth the substance of the material, how to connect between what is learned in real life and how to leverage the knowledge to support life. Chemistry subjects become very important position in the society as a chemical always be around us in everyday life. Chemistry is the study of the subject matter and the changes that occur in it. But as long as there are still many students who have difficulty in understanding and following the chemistry lesson. It is not independent of the material being studied in chemistry are more abstract. So that teachers find it difficult to teach chemistry in the learning material in the classroom. Therefore, it is necessary that proper teaching materials and effective so that students gain a clear picture and details related to the material being studied. Teaching materials is one of the components in the learning system that plays an important role in helping students to achieve the indicators specified in the standard of competence and basic competences. Teaching materials should be designed so interesting to make the students as learners will be more eager to read it.

Development of essential teaching materials made by educators that learning is more effective, efficient, and does not deviate from the competencies to be achieved. One of the teaching materials that can be used to help the learning process is a module. The module is a book written with the aim that students can learn independently without or with the guidance of the teacher, so that the module contains most of the basic components of teaching materials that have been mentioned previously (Abdul Majid, 2006:176). Made by Russell (2009: 230), the system will make the learning module learning more efficient, effective, and relevant. Excellence and excess module has a module is self instruction that allows students to learn independently using the module and the teacher is no longer the only source of learning for students. Development of teaching materials shaped module will allow students to understand the learning materials.

Government efforts in education are to enhance the Education Unit Level Curriculum (KTSP) to Curriculum 2013 in a more effective learning and

emphasis on character education. This curriculum requires teachers to be more patient, attentive and understanding, as well as having the creativity and dedication to growing confidence of learners. With the implementation of Curriculum 2013, the learning process began to be improved by using a variety of approaches that put more emphasis on learner competence, which includes knowledge, skills, and activities of learners in thinking and acting. The implementation of this learning demand that students should no longer only regarded as an object of study, but should be given an active role in the learning process so that students act as agents active learners while teachers act as facilitators and mediators creative changes must be followed by a teacher who is responsible for organizing learning in school.

Curriculum 2013 need to be implemented starting in 2013 and therefore the teaching and learning process, and therefore the study is processed on the development of chemistry module to meet the requirement to achieve their competence.

Based on the above problem, steps need to be taken researchers is to create teaching materials chemistry. Chemistry teaching material is shaped modules compiled by researchers in order to help provide clearer information and systematically to students and may ultimately serve as a source of learning. Researchers will develop a chemistry module of SMA / MA class XI with the subject matter of acids and bases. Subject matter is chosen because it is a lot of material related to everyday life. So that students are able to apply and associate knowledge with everyday life. So it is necessary to conduct research entitled "The Development of Innovative Learning Module on the Teaching of Acid and Base Solution Based on Curriculum 2013".

1.2. Problem Identification:

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

1. Innovation development of teaching materials is indispensable as an effort to improve the quality of education

2. Students' understanding of chemistry concepts is low because the chemical is considered an abstract lesson
3. Efforts to increase student interest and learning outcomes cannot be separated from the active role of students and teachers
4. Chemistry students' learning achievement can be viewed from a variety of cognitive, affective, and psychomotor
5. Chemistry teaching materials based curriculum in 2013 is indispensable to support the development of curriculum 2013

1.3. Problem Formulation:

The problem formulation of this research is:

1. How to develop chemistry innovative learning module of acid and base solution to meet student's competence based on chemistry curriculum 2013?
2. How the design of innovative learning module through integration of laboratory activity, outside activity, and learning media into chemistry material of acid and base solution?
3. How to standardize chemistry innovative module to obtain standard and innovative module on the teaching of acid and base solution?
4. How effective in the developed innovative module to improve students achievement on the teaching of acid and base solution?
5. Are the students interested on using standard innovative module to meet the requirement on student's competence in curriculum 2013?

1.4. Problem Limitation

Based on the number of outstanding textbooks and used in some high schools vary widely in the scope of the research is limited special class XI High School second semester. Therefore, research is limited to:

1. Analyzing responses chemistry teachers and students of class XI second half of the textbooks used.

2. Compiling a module chemistry teaching materials in improving student achievement and facilitate students in learning.
3. The trials of teaching materials chemistry second semester of grade XI to see the responses of teachers and students towards a solution of acid and base solution.

1.5. Research Objectives:

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

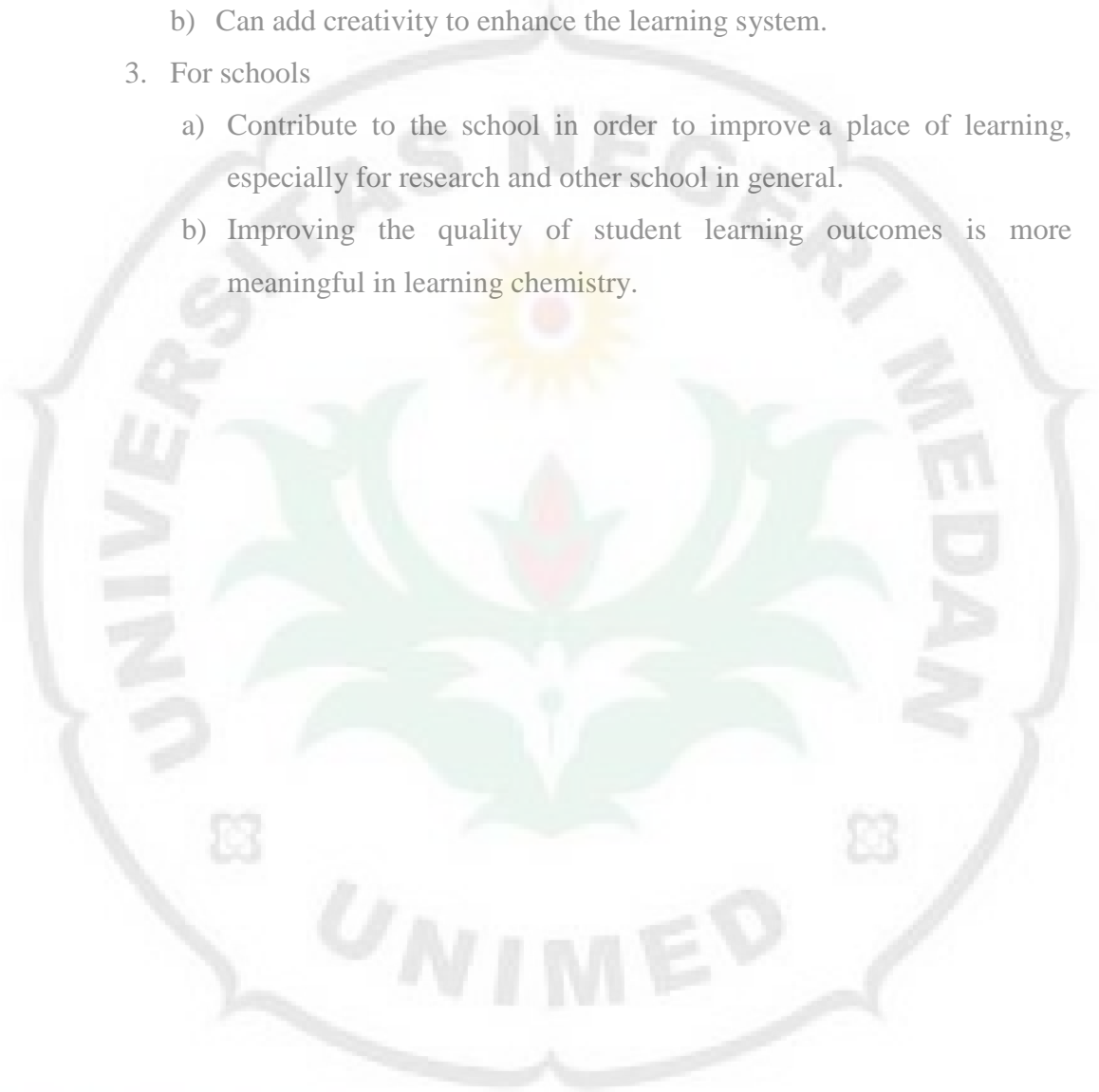
1. To develop chemistry innovative learning module of acid and base solution to meet student's competence based on chemistry curriculum 2013.
2. To design of innovative learning module through integration of laboratory activity, outside activity, and learning media into chemistry material of acid and base solution.
3. To standardize chemistry innovative module to obtain standard and innovative module on the teaching of acid and base solution.
4. To know find out how the innovative module can improve students' achievement on the teaching of acid and base solution.
5. To know the effectively in the developed innovative module to improve students' achievement on the teaching of acid and base solution.

1.6. Research Benefits

The results of this study are expected to be useful to:

1. Student
 - a) Increased activity of students in the study of the teaching materials.
 - b) Increased student learning outcomes on acid-base material.
 - c) The growth of student motivation in the learning process.
2. Teacher
 - a) Can be obtained by a device that is capable of learning involve students actively and creatively making.

- b) Can add creativity to enhance the learning system.
3. For schools
- a) Contribute to the school in order to improve a place of learning, especially for research and other school in general.
 - b) Improving the quality of student learning outcomes is more meaningful in learning chemistry.



THE
Character Building
UNIVERSITY