

CHAPTER I

INTRODUCTION

1.1 Research Background

Learning is an activity in order to acquire knowledge, skills and positive values by utilizing a variety of sources for learning. Learning involves two parties namely the students as learners and teachers as facilitators. The most important activity in learning is a learning process. The learning process has several features the following: (1) Learning to realize its nature, in this case the student feels that he is learning, arise in him the motivation to have a knowledge of the expected. (2) Results obtained with the process of learning, in this case knowledge is not acquired spontaneously and instantly, but gradually.

Education is very interesting to be discussed, because education determines the future of all people. Success in teaching and learning process in education is mostly determined by the ability of teacher in managing the teaching and learning process. So, to improve the quality of education, the teachers have to make the suitable method, material, media and etc in teaching and learning process, especially for chemistry which is used as a target of this research.

One of the problems of education is often expressed in news is the tendency of the low quality of education at several levels and units of education, especially secondary education. Various attempts to improve the quality of education continues 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 shown significance increase (Musclish,2007). Learning innovations to improve students achievement in chemistry subjects is necessary because it deals with improving the quality of graduates to fill jobs in the field of chemistry.

According to Silitonga (2005), the reality is often faced by teachers in school is that students often think chemistry is a difficult lesson so that it is not unusual for a student to feel unable to advance in studying chemistry. These difficulties have an impact on students' learning results that are less satisfactory. Chemistry is an experimental science, cannot be learned only by reading, writing or listening to it. Chemical Sciences not only learn to master a body of knowledge of facts, concepts, principles, but also is a process of discovery and mastery of the procedures or the scientific method. Therefore, in teaching chemistry there are two important issues that must be considered, namely the chemical as a product of the scientists in the form of facts, concepts, principles, laws, and theories of chemistry as a process of scientific work.

To improve the effectiveness and efficiency of teaching and learning process in schools, it takes a breakthrough to improve the quality of teaching and learning process itself. Improving the quality of education should be done through innovation. Improving the quality of education carried out by setting goals and standards of educational competence in order to anticipate future changes and demands that will face students as citizens of a nation, so they are able to think globally but act locally. One effort to improve the quality of education is through the provision of quality textbooks (William, 2002).

To implement the effective teaching needed some conditions (1) learning is active, both mentally and physically, (2) motivation, (3) planning before teaching, (4) The influence of suggestive teachers, should be given also to the students, (5) The teacher must be able to create a democratic condition in school, (6) the presentation of materials to students, teachers need to provide a stimulating issues to think (Slameto, 2003).

Improving the quality of education should always be performed continuously conventionally or through innovation. Improving the quality of education carried out by setting goals and standards of educational competence in

order to anticipate future changes and demands that will face students as citizens of a nation, so they are able to think globally but act locally. One effort to improve the quality of education is through the provision of quality textbooks (William, 2002). Text book or teaching module is one book that contains descriptions of educational materials about the subjects, compiled systematically and have been selected based on specific objectives, learning orientation, and development of students. With text books, learning program can be implemented in a more regularly, cause teachers as implementers of education will get clear guidance material.

The effectiveness of Learning module for Senior High School chemistry on Thermochemistry need to be noticed, because the student's often has misinterpretation with the materials in teaching and learning. It is caused by the inappropriate of curriculum material content and the way of teacher to teach make the student confuse and the student achievement will be low.

Module is a learning materials that can be used by students to learn independently with as minimal as help of the others. Thus a good selection of modules will be able to help students learning and understanding the topic of discussion that is being discussed or studied. Chemistry is one of interesting subject for SHS if the teacher could teach chemistry in various methods. Therefore, choosing the right teaching method is very important for chemistry teacher. One of the real evidence in individual learning is give the students a module. Using module as a source of learning is one strategy of active learning process, because in this process students not only as listeners but they are also active in the learning process. This is the reason the writer interested in doing research with the title: **“The Effectiveness of Learning Module to Increase Student's Achievement on the Teaching of Thermochemistry”**.

1.2 The Identification Problem

Based on the background explained above, there are some problems are identified to make the research be focused, they are:

1. Chemistry learning module could be used as a learning media when the teaching process is done in Senior High School.
2. The chemistry topic in Thermochemistry is difficult subject to be understood by students and to improve students learning outcomes in order it can be used to help students to learn chemistry?
3. The affectivity of learning module in topic Thermochemistry by looking the student's achievement on solving problems after using learning module compared with conventional teaching method.
4. The effectiveness of learning module on the subject of Thermochemistry can improve student's achievement in studying chemistry.

1.3 The Problem Statement

Based on the research background above, the problem statement can be gotten of this research are:

1. How the learning modules according to the demands of Thermochemistry can improve learning outcomes of students Senior High School (SHS)?
2. Is there the difference in student learning outcomes using Thermochemistry learning module with conventional teaching method?

1.4 Scope of The Study

To make this research be more specific, the scope of the development and standardization of learning modules for the teaching of Thermochemistry for RSBI students which is taught in XI grade Senior High School in odd semester at academic year 2011/ 2012 are:

1. Assessment and revision of these modules to teachers and students until the resulting product of the learning modules.
2. Developing a learning module on the subject of Thermochemistry that refers to the standard of the content, presentation and language.

1.5 The Objective of The Study

The objective of the study are:

1. To arrange the sequence of chemistry module in order the topic of thermochemistry is easy to be learned and based on the curriculum education unit.
2. To know the learning modules on the subject of Thermochemistry can improve the student's achievement class XI, academic year 2012/ 2013.
3. To observe chemistry teacher's perception on the standard learning module in topic thermochemistry
4. To investigate the effectiveness of learning modules on the subject of Thermochemistry improving the student's achievement.

1.6 The Benefits on the Study

The significances of the study are:

1. The result of this study will be used as module of Thermochemistry topic in Senior High School in order to improve the effectiveness and efficiency of teaching and learning process in school.
2. For chemistry teacher and students to use learning module as an effort that can improve the student's achievement.

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