

CHAPTER I INTRODUCTION

1.1 The Background of the Study

Learning is a complex process that happens to everyone all his life. Learning process occurs because of the interaction between person and his environment. Therefore, learning can occur anytime and anywhere. One sign that a person has learned is that there is a change in this person's behavior was caused by the change in level of knowledge, skill, or attitude. (Arsyad, 2009). Models of teaching can also be regarded as models of learning when we help students to get information, ideas, skills, values, ways of thinking, and the purpose of expressing themselves we actually teach them to learn. (Joice, et all 2009)

Development of science and technology increasingly encourage reform efforts in the utilization of technology in the learning process. The teachers are required to be able using the tools (i.e. textbook, media, module, power point, etc) that can be provided by the school, and did not close the possibility that accordance with the development demands of the times (Arsyad, 2009). Regarding with the development of science and technology, the teacher should use technological things such as computer in teaching learning process. It will make students easy to understand the study materials.

Nowadays the government is promoting a new learning process, i.e. learning model *PAIKEM* (*Pembelajaran Aktif Inovatif Kreatif Efektif dan Menyenangkan*). This model system based on students learning center is demanding that the students have to work actively in the learning process. Teacher only acts as a facilitator, manager, and advisor, no longer using the system of teacher learning center. It means that the teacher will not become central in the learning process anymore. In this case, the students will have big roles in learning process.

In Indonesia, educational issues facing the low quality of education at every level and educational unit. Program RSBI was born based on the provisions of law the national education system (Law No. 20 of 2003) Article 50, Paragraph 3 which states the government and / or local governments conduct at least one unit of education at all levels of education to be developed become international standard education units. To meet these requirements, particularly the Ministry directorate general of elementary and secondary education management has initiated several schools that are expected to apply quality standards to the international school (Rianto, 2009).

RSBI teachers are required to be able to explain the material by using English as instruction language, they also can choose textbook or media as addition in teaching process. In fact, there are still many teachers who teach with conventional methods and lectures. It is not uncommon that most students feel tired and bored in learning process which only applies one direction method. Various attempts to improve the quality of education have been carried out, from training to increase the quality of teachers, improving curriculum periodically, education facilities and infrastructure improvements. (Muslich, 2007)

Science teachers must become critical consumers of their science textbooks. They must be willing to question the use of their textbooks, and they must discover what the content of the textbook will offer in terms of teaching and student learning. Teachers should reflect on the results of their search for good textbooks, what this means in relation to their own thinking about content, and how to most effectively facilitate instruction (Kirk, et all 2001).

In 2006, the government launched a curriculum in order to expand creative participation of teacher, school administrators and students in teaching and learning based on a formula specified competency. There should be relation between curriculum based on standards of competence and basic competence but it does not give effect to the achievement of competencies required by students as required in the curriculum. The largest proportion of book is not in accordance

with the content of curriculum. Most textbooks provide too many explanations in each topic. However, it is not well developed so the materials are not relevant to the key ideas and do not help the students in understanding the basic idea of the topic (Situmorang, 2010)

To ensure access to the material in the textbook for all students, teacher in order to provide study guides with questions and activities. These guides assist students as they read selections, highlight key points, and provide a structure for reflection. Teachers might also highlight the text when possible. By providing alternative reading materials and activities, using audiotapes, or giving students opportunities to read the text aloud, teachers can support the text. When teachers use the textbook as a resource and reference, students learn to do the same. By designing their own activity or lab-focused lesson, teachers can employ alternative technologies and reading sources (Kirk, 2001)

According to the Silaban (2010) research in master program about book analysis, the correspondence of the suitability about content with standard competence and basic competence also other component from five books which has been analyzed is not enough because there are some materials which is not suitable with the indicator. From the result of her research, the conclusion was taken from book A: 82%, book B 70%, book C 65%, book D 88% and E 75%. Thus, it suggested noticing the suitability of content from the arrangement of material systematically so the readers will read the books based on the standardization of BSNP.

On the other hand, besides learning model is currently done by classical methods which are using conventional methods, the class atmosphere is not filled with one character. The students surely have different characters such as well behaved, capable in understanding the materials, big motivation in learning and unwilling in studying. The difference of these characters sometimes pursues the learning process moreover it will take longer time to achieve the competence of the material. One of the relevant ways to solve these problems is the

implementation of individual learning that gives confidence in individual ability and makes students have confidence to study independently. One of the real evidence in individual learning is to give the students a module. According to Arshyad (2009), module is a learning material that can be used by students to learn independently. It is easily understood by the students. Thus, a good selection of modules will be able to help students learn and understand the topic of discussion which is learnt by the students.

Using module as a source of learning is one of strategies of active learning process, because in this process students are not only as listeners but they are also active in the learning process. The using of this module makes teachers act only as facilitators so the students are active in the learning process. The modules do not only apply the using of modules but they also implement the using of multi-media and various methods. Thus, it makes students be able learn the modules by themselves. They can learn anytime and anywhere independently. On the other hand, the largest proportion of book is not in accordance with the content of curriculum. Most textbooks provide the many explanations in each topic but it is not well developed. Concerning with the problems of learning above, the writer is interested in conducting research which is titled “The Development of Learning Module on the Teaching of Hydrocarbon for RSBI and SBI Students.”

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. How is the sequence of chemistry materials to be arranged in the module in order that the topic of hydrocarbon is easy to learn and makes the competence based curriculum?
2. How to make module in the topic of hydrocarbon attractive, easy to understand and to improve students' learning outcomes in order that it can be used to help students to learn chemistry?

3. How do chemistry teachers, lecturers, and students opinion towards the standard learning module on the subject of hydrocarbon?
4. How is the effectiveness of learning modules on the subject of hydrocarbon in improving students' learning outcomes?

1.3 The Problem Statement

As for the formulation of the problem in The Development of Learning Module on the Teaching of Hydrocarbon for RSBI and SBI Students are:

1. How to make module in the topic of hydrocarbon possible to use as a learning media in SBI and RSBI students?
2. How do the chemistry teachers, lecturers, and students' opinion on the standard learning module in the topic of Hydrocarbon?
3. How does the learning modules of hydrocarbon to improve learning outcomes of Senior High School students in Academic Year 2011/2012?
4. How do the effectiveness of learning module on the subject hydrocarbon?

1.4 The Scope of the Study

In this learning, the scope of The Development of Learning Module on the Teaching of Hydrocarbon for RSBI and SBI Students are:

1. Establish and develop a learning module on the subject of chemistry that refers to the standard hydrocarbon feasibility of the content, presentation and language and also will be taught in X grade Senior High School.
2. Assessment and revision of these modules to teachers and students until the resulting product of the learning modules.
3. The examination of learning modules for teachers and students is limited.

1.5 The Objective of the Study

This proposal has objective to know the affectivity of innovative learning module on the teaching of hydrocarbon, and the specific objectives of the study are:

1. To obtain a develop chemistry hydrocarbon module based on curriculum content standards.
2. To know how the opinion chemistry lecturers, teachers, and students toward chemistry learning module on the subject of hydrocarbon.
3. To find out how the learning modules on the subject of hydrocarbon easy to understand and to improve students' learning outcomes.
4. To know how the effectiveness of learning modules on the subject of hydrocarbon in improving students' learning outcomes.

1.6 The Significance on the Study

This study of The Development of Learning Module on the Teaching of Hydrocarbon for RSBI and SBI Students is expected as follows:

1. For Chemistry teacher, to use learning module as an effort which can improve learning outcomes
2. For Students, to increase understanding of chemical concepts, particularly the subject of hydrocarbon.
3. For other researchers, to make a further research related to the study.

1.7 The Operational Definition

There are some operational definition in this study The Development of Learning Module on the Teaching of Hydrocarbon for RSBI and SBI Students that is:

1. SMAN is refers to State Senior High School

2. The develop Hydrocarbon module is a module that obtained from standardization of module
3. SBI (*Sekolah Bertaraf Internasional*) is refers to school that fulfill national standards of education and enriched by reference to the educational standards of one member of the Organization for Economic Development (OECD) and / or country that has certain advantages in the field of education that have competitiveness in the international forum (Administrator, 2010). RSBI (*Rintisan Sekolah Bertaraf Internaional*) is refers to *Sekolah Standard Nasional* (SSN) that prepare students based on *Standard Nasional Pendidikan* (SNP) Indonesia and the internasional standard so expected graduates to have international competitiveness (http://file.upi.edu/Direktori/FIP/JUR._ADMINISTRASI_PENDIDIKAN/197907122005011-NURDIN/PENGERTIAN_RSBI.pdf).
4. HG is refers to a group of students with relatively high achievement in this case can seen from their mark in chemistry lesson, and LG is refers to a group of students with relatively low achievement in this case can seen from their mark in chemistry lesson.