

## CHAPTER I

### INTRODUCTION

#### 1.1 The Research Background

The development of learning module of solubility and solubility product for Standard International School (SBI) and Pioneer of Standard International School (RSBI) students is very interesting to be discussed and implemented, because many students often has misinterpretation with the chemistry materials in teaching and learning process. Many students think that chemistry is very difficult subject. The inappropriate of curriculum material content and the way of teacher to teach can make the student confused and then their motivation to learn chemistry have done low therefore their achievement will also be low. 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).

According to Muslich (2007), Educational issues in Indonesia facing the low quality of education at every level and educational unit. In fact, there are still many teachers who teach with conventional methods, lectures, it is not uncommon most students to be tired and boring in learning process that is one direction. Various attempts to improve the quality of education have been carried out, from training to increasing the quality of teachers, improving curriculum periodically, education facilities and infrastructure improvements.( Aritonang, 2011).

In recent years, there are articles discuss about RSBI. It is within the framework of the globalization era. RSBI is born based on appointment educational system law (UU No 20 Year 2003) chapter 50 verse 3 state that government declare at least one educational unit for all level education to be developed be Standard International School. RSBI or SBI is the improvement by looking the quality of education where interpreted the graduated student can use English even tough not left Indonesian language as national language especially for now and next is the main indicator for student as posted by Kusmin, 2009. The most important is the teacher should able to make improvement in teaching and

learning process compare to regular class like the teaching strategy, method and media that should be suitable for students in RSBI or SBI.

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 that is by innovation. One effort to improve the quality of education is through the provision of quality textbooks (William, 2002). 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, 2001).

In 2006 the government launched a curriculum that expands the creative participation of teacher, school administrators, and students in teaching and learning based on a formula specified competency. Correspondence the between curriculum based on standards of competence and basic competence is in force but does not give effect to the achievement of competencies required by students as required in the curriculum. Most textbooks provide the topic too much but each topic is not well developed so that the text that includes classroom activities is not relevant to the key ideas or do not help the students related They were the resources persons doing what with the basic idea (Situmorang, 2010).

According to Kirk (2001) to ensure access to the material in the textbook for all students, teacher could 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. When teachers use the textbook as a resource and reference, students learn to do the same. The implementation of individual learning that gives confidence in individual ability makes they confidence to study independently should be developed in learning process.

One of the real evidence in individual learning is give the students a module. Because According to Arshyad (1996) 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 is able to help students learning and understanding the topic of discussion that is being discussed or studied. 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. Module as learning media, make teachers act only as facilitators that make students active in the learning process because module is communicatively and two direction .Not only has that usage of modules also implemented of using multi-media and various methods, so usage of module make students became learn not only in classroom. Most textbooks provide the topic very much but each topic is not well developed, that is why learning module is needed to be developed and standardized. So from the learning problem the above, the writer interested in doing research with the title: **“The Development of Learning Module of Solubility and Solubility Product for SBI and RSBI Students”**.

## **1.2 The Problem Identification**

Based on the above research background, problem identification of the development of learning module of solubility and solubility product for SBI and RSBI students are:

1. Chemistry module could be used as teaching media when learning and teaching process is done in Senior High School.
2. The Solubility and Solubility Product and topic in chemistry is categorized as a difficult subject to be understood by students due to the presentation of materials.
3. Teaching module of Solubility and Solubility Product is needed to obtain a standard teaching module for Senior High School.
4. The performance and sequence of chemistry topic in teaching material can improve student's achievement in studying chemistry.

### 1.3 The Scope of the Study

To make this research be more specific, have made scope of the study that is to establish and develop a learning module in chemistry topic of Solubility and Solubility Product, which is taught to XI grade Senior High School that is RSBI and SBI in even semester at academic year 2011/2012 in Medan.

### 1.4 The Problem Formulation

From the research background, problem identification and scope of study can be gotten the problem of the development and standardization of learning module on the teaching of solubility and solubility product for SBI and RSBI student are:

1. How the chemistry lecturers, teachers and international students' opinion on the standard learning module in topic Solubility and Solubility Product?
2. How to develop learning module that is suitable for Senior High School student in topic of Solubility and Solubility Product?
3. Is the using of learning module in class can increase student achievement?
4. How the effectiveness of learning module as media in topic Solubility and Solubility Product?

### 1.5 The Objectives of the Study

Based on the above problem statement, so the objectives of the development of learning module of solubility and solubility product for SBI and RSBI students are:

1. To get or know the opinions of chemistry lecturers, teachers and international students' about standard learning module in topic Solubility and Solubility Product.
2. Good and standard chemistry module could be developed in order to be used as learning media on the teaching of Solubility and Solubility Product for SBI and RSBI students.

3. The using of learning module in class can increase student achievement.
4. To investigate the effectiveness of developed and standardized chemistry module as media in on teaching Solubility and Solubility Product for Senior High School student.

### **1.6 The Significance of the Study**

After doing the research about the development of learning module of solubility and solubility product for SBI and RSBI students' significances that have done got are:

1. For students, they can get a module on chemistry topic Solubility and Solubility Product in Senior High School which is good quality and standard with innovation learning materials local content North Sumatera demanded by KTSP.
2. For Chemistry teacher, to use learning module as an effort that can improve learning outcomes.
3. For other researcher, to make a further research related to the study.