

CHAPTER I INTRODUCTION

1.1. Background

The textbook and the teacher's manual are of primary teaching resources. Even in state school systems where teachers with a better level of training are employed, textbooks are often the major teaching resources used. In the survey of ESL teachers in secondary schools, the teachers reported that their primary teaching resources are textbooks, supplementary materials, and audio tapes. The primary functions of the textbook are to provide practice activities, a structured language program for teachers to follow, language models, and information about the language. Most teachers reported that they do not rely on a single textbook, but many using a separate textbook for listening, reading practice, and writing (Apple, 1991). Further, Shannon (1987) reported that textbooks, because they package learning content effectively, are seen as an efficient way of achieving learning. Bybee also said that (1997) Textbooks determine 75-90 percent of the instructional content in schools nationwide

However, process of teaching and learning activities between teachers and students will not be separated from the book, although teachers can explain the material clearly and completely. The need for the textbook in teaching learning still becomes an important priority. Textbooks on the market must be thoroughly tested quality as a source of learning media (Wibowo, 2005). Every textbook that will be used in schools as a resource and learning media must be through assessment process as a national standard of textbooks. But textbooks on the market still has many fundamental mistake, the subject matter offered in the books being used in Indonesia, left 50 years of the latest discoveries, from the aspect of presentation, the condition is no less concerned. The textbooks are too materialistic, dry and not arouse of student's affective awareness. Although the textbooks is for cognitive-oriented, but intellectually unable to move the critical power and curiosity of readers (teachers and students).

The problem of education is often stated in various meetings and mass media in Indonesia is the tendency of the low quality of education on several levels and units of education, especially primary and secondary education. Various efforts to increase the quality of education is done started from training to improve the quality of teachers, improving curriculum periodically, repair facilities and educational infrastructure, and improve the quality of school management. But indicators to quality of education still have not shown significant improvement (Mulisch, 2007). Improving the quality of education should be done continuously, conventionally or through innovation. Improving the quality of education is done by setting goals and standards of educational competence in order to anticipate future changes and demands that will face students as citizens, so they are able to think globally and act in accordance with local characteristics and potential.

One effort to improve the quality of education is by facilitating 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 (Jippes, et all, 2009). The World Bank suggests that reforms be initiated in relation to textbooks in developing countries; textbooks being a “critical part of education, as necessary as classroom itself, as indispensable as the classroom teacher” (DeGuzman et all, 2000). Through qualified textbooks, children learn vocabulary that they may not necessarily encounter in daily conversations and learn about conventions of print and the syntactic structure of language. Children's decontextualized language skills have been shown to be related to conventional components of literacy, such as decoding, understanding story narratives, and print production.

In this post-modern world of technological advancement, rapidly changing markets and increasing competition, teachers are faced with new academic and pedagogical challenges. In order to prepare students, teachers must teach more challenging and extensive subject areas develop different instructional strategies and reach a wider range of students. Having a high-quality curriculum to guide instruction is an important part of meeting these challenges. Therefore, curriculum

reforms need to take place in such a way that gaps between the curricular framework and the textbook are bridged and the needs of learners from diverse backgrounds are reflected in curricula and textbooks. Curricula and the textbooks should be more meaningful and relevant for the life experiences of the students and should prepare them for real life (Mohammad and Kumari, 2007).

Educational innovation is a plan or pattern that can be used to build the curriculum, designing instructional materials and as director of learning activities within or outside the classroom. Innovation in education is often associated with the renewal that comes from creative thinking, finding and modification that includes ideas and methods used to solve a problem of education (Riskin et al., 2006). Learning innovation by using textbook is necessary to do in increasing student's achievement so that impressions of learning take long remember by students (Tompkins et al, 2006). In order the innovation on teaching is succeed due to the purpose of learning so it is important to concern several things such as: theoretical rationale, the justification of learning, and the scope of the study. Innovative teaching can approved if it can be widely used in learning and proven effective in improving student learning outcomes (Douthwaite et al, 2009)

The main purpose of chemistry lessons is to acquaint students with nature or everyday phenomena and help them to understand what is going on in nature: all guidelines for chemical education, schoolbooks and most curricula should aim at achieving this goal. The curriculum is currently used in the system of education in Indonesia is the educational level curriculum (KTSP). KTSP are applied by the government since 2006. The educational level curriculum (KTSP) is a curriculum that oriented to the achievement of competencies, which extend the creative participation of teachers, school administrators, and students in the learning process based on basic competencies. Furthermore KTSP requires changes in the structure of matter, and orientation of learning and assessment. Suitability of the content of books and curricula must be properly addressed appropriate with the demands of curriculum based on standards of competence and basic competences in force. But in reality many textbooks available in the market gives the concept of a subject matter described differently with KTSP. The largest proportion of

books that are traded when connected to the curriculum does not appropriate with knowledge. Research and interview data focus only on the marked text and vocabulary. Depth research to find most textbooks provides too many topics and poorly developed. All text later includes activities not relevant to the key ideas or do not help students relate to what they're doing with the basic idea. (Ortlieb, 2010)

Textbook choices determine curricular themes such as science content, concepts, and processes, and how instruction was delivered textbooks are the most widely used reading materials in science classrooms (Alvermann and Xu, 2003). The survey that conducted by a team of researchers at several book stores in the city of Medan, and based on the type of chemistry books are used as textbooks in high school chemistry in mind that books are marketed and are commonly used chemistry textbook written and published outside of North Sumatra, namely: Jakarta (53.5%); Solo (17.9%); Klaten (10.7%), Bandung (7%), Bogor (3.6%) and Semarang (3.6%). Analysis of the book based on an assessment of the textbook contents according to KTSP is known that textbook is very slightly to have a local content of North Sumatra. If those textbooks used in schools only based on the textbook without the creativity of teachers in the learning achievement of the desired chemical materials based KTSP demands will not be realized because the curriculum and syllabus are described in textbooks without content to integrate local, namely the potential of North Sumatra. Thus one of the efforts to improve the quality of learning can begin to fix the quality of high school chemistry textbook, so that educational objectives set out in the curriculum can be realized is through the use of good quality textbooks that integrate local content.

Developing of textbook had researched by Suja (2010), "the resulted shown that the implementation of textbook could increase the student's activities as well as their achievement. Furthermore, the students' response towards the learning process was very positive". Based on describing above, so writer will make a research whose title is: "The Development and Standardization of Senior High School Chemistry Textbook for Year XI at Semester one RSBI Class Based on Contents Standard of KTSP"

1.2. Problems of Identification

- 1) Chemistry textbooks available in the market give the concept of a subject matter described differently with KTSP.
- 2) The local content of chemistry textbooks in the market is still very poor
- 3) It is still has a fundamental mistake
- 4) The quality of education is less on several levels and units of education, especially primary and secondary education

1.2. Scope of the Study

The scopes of this study are:

- 1) The textbooks to be analyzed consist of 4 textbooks that are used of senior high schools of RSBI class in north Sumatera.
- 2) The textbooks to be analyzed and developed are for year XI of senior high schools of RSBI class at semester one.
- 3) The analysis of subject matter according to content standard of KTSP.
- 4) The respondent teachers must have minimum 3 years in service.

1.3. Problems of the Study

The problems of this study are formulated as follows:

- 1) Are the chemistry textbooks for year XI senior high school that use of RSBI class in north Sumatera appropriate with the content standard of KTSP?
- 2) What subject matter that exact to be taught in year XI senior high school at semester one RSBI class?
- 3) How the development of standard chemistry textbooks that proper to use in year XI senior high school at semester one of RSBI class?
- 4) What the responds of the teachers about the product of chemistry textbook development of senior high school for year XI at semester one RSBI class?
- 5) How the effectiveness of standard chemistry textbook of senior high school for year XI at semester one RSBI class?

1.4. Objectives of the Study

The objectives of this study are:

- 1) To analyze the chemistry textbooks of senior high school for year XI at semester one of RSBI class which use in north Sumatera based on contents standard of KTSP.
- 2) To know the subject matter that proper to be taught for year XI senior high school at semester one RSBI class so that easy to understand by students.
- 3) To get the standard chemistry textbooks that proper to use in senior high school for year XI at semester one RSBI class.
- 4) To know what the teachers' responds for the standard chemistry textbook development of senior high school for year XI at semester one RSBI class.
- 5) To know the effectiveness of standard chemistry textbook of senior high school for year XI at semester one RSBI class.

1.5. Significances of the Study

The significances of the study as follows:

- 1) To be an input for teachers and school holders in order selective in using chemistry textbook in school and make teachers and students easier to understand the content of textbook.
- 2) To be an input to publishers so that concerns the suitability of material with content standard of KTSP.
- 3) To obtain the standard chemistry textbooks of senior high school for year XI at semester one RSBI class of north Sumatera.
- 4) Researcher will be able developing herself in developing an arranging chemistry textbook for senior high school on class of XI at semester one RSBI class.