CHAPTER I

INTRODUCTION

1.1 Background

In the beginning of this century, education achievement of Indonesia has decreased drastically if we compare to another country, such as Singapore, Japan, and Malaysia. Moreover, if we observe from human resource index as indicator of education sector, it was decreasing. Whereas, this country is one the world society who have to compete with another one. If we cannot hold out in this competition, so we would be left and chance to get job which is not bordered by country line but move widely start from south east Asia is going smaller. That's why, human resource preparation who have a high quality, competitive, and have superiority should become attention in education sector.

Indicator form this phenomenon is the weakness of education quality which can be seen from student achievement index of Indonesia. From PISA (Program for International Survey Assessment) data 2009, Indonesian students (under 15) sit in position 72 from 79 countries. If we compare to another South East Asia Countries such as Singapore, Malaysia, Thailand, and Vietnam, our country have the latest rank. From Trends in International Mathematics and Science Study Advanced 2007 International Report, Indonesian Student year 8 have development index 0.728 and ranked in position 36 from 59 participant countries, where Singapore in the first position, Malaysia in 23 and Thailand in 24.

Condition of global era which more competitive, in order to Indonesia have preparation to face globalization challenge and able to use every chance available, demand availability Indonesian Human Resource with high quality. Development of knowledge and technology is parallel with competition in international level or global as well as tendency of Indonesian society who want to study abroad with some matriculation programs.

In order to increase Indonesian human development, current department have developed International Standard School. Activity or program of International Standard School is implementation of national scale education with international quality, so national education can be "host" in this own country. Government make regulation about International Standard School like stated on law of National Education System clause 50 verse 3 : "Pemerintah dan/atau pemerintah daerah menyelenggarakan sekurang-kurangnya satu satuan pendidikan pada semuan jenjang pendidikan untuk dikembangkan menjadi satuan pendidikan yang bertaraf internasional".

That's why implementation of International Standard School demands preparation all aspects such as national government, local government (province/district/major), society stakeholders (parent, school committee, school society, education council, and institutes with education movement).

As an international standard school, learning facility is one factor should prepare with international standard. Facility of learning are intimately associated with learning achievements obtained, without facility, students will not be able to absorb the lessons well. If learning process is not helped by textbook as a learning tool that can assist students in absorbing the lessons delivered by teachers, most likely the expected learning achievements are not achieved its full potential. But on the contrary, if the textbook is used as a learning tool, it is possible the expected results achieved to the maximum, of course textbooks are used in accordance with the applicable curriculum in achieving the expected standard of competence.

Educational resources are all things that are used in providing education that includes staff, community, funds, facilities, and infrastructure. (In the Law of the Indonesia Republic number 20 of 2003 on National Education Systems in Chapter 1 General Provisions clause 1, verse 23): "buku pegangan yang digunakan dalam proses belajar mengajar termasuk sumber daya pendidikan, jika sumber daya yang digunakan memiliki kualitas yang baik maka besar kemungkinan hasil pendidikannya juga baik, dan sebaliknya, jika kualitas sumber daya pendidikan tersebut kurang baik dan memadai, maka dikhawatirkan hasil pendidikan itu sendiri tidak baik dan tidak cukup memadai."

In Government Regulation Indonesia Republic Number.19 year 2005 on Chapter VII clause 42 about Content Standards state that: "Standar Sarana dan Prasarana (1) Setiap satuan pendidikan wajib memiliki sarana yang meliputi perabot, peralatan pendidikan, medaia pendidikan, buku dan sumber belajar lainnya, bahan habis pakai, serta perlengkapan lain yang diperlukan untuk menunjang proses pembelajaran yang teratur dan berkelanjutan."

Result of previous research (Rita W : 2006) about the using of textbook in "Analysis of Suitability Physics Textbooks in Senior High School on Competency-Based Curriculum (CBC) in Medan municipal", said that not all textbooks are used in accordance with the applicable curriculum. Research results states that from 5 books are studied, there is a book that is inconsistent with competency-based curriculum that has only a score of 181 (73.33%). Another resource (Rachmawati : 2008) about "Analisis Kesesuaian Materi dan Penyajian Buku Teks Mata Pelajaran Matematika SMP RSBI Kelas VII di Kota Semarang Terhadap Tujuan Pembelajaran Matematika", said that consistency of Mathematics textbook with English medium language doesn't have recognition from Education Department. That's why analyzing of feasibility textbook is really important in order to improve RSBI learning process.

From another previous resource (Liana M : 2010) about the using of textbook in "Study about Textbook used by Teacher related to Senior High School Student Achievement in Barus District", state that from two Physics Text Book, one is invalid (not suitable to use). Another book which is suitable to used, have a higher student achievement.

Previous thesis was taken data from one instrument based on Standard Department of National Education. In this research, the instrument has been developed with some indicators in order to get the best result. Actually, pre international school has enriched their curriculum with Cambridge International Curriculum. So, the content instrument has been developed from Cambridge International Examination.

Book selection is more important since there are so many books with title bilingual book but the content is not qualified. One of solution to solve the problems is a teacher must be able to choose the facility of learning that can make learning physics more fun, as needed and can motivate students to be more active during learning activities take place. In addition, the learning facility is also able to attract students mind to study physics. So it can improve the abilities, interests, and facilitate students in understanding the physics of matter and could ultimately increase physical activity and learning achievements.

Even though so many RSBI School we've find in this city, but students grade X in each school don't use Physics textbook with International Standard. Researcher interesting to observe it and analyze whether textbook used are suitable with the international standard or not.

There are three kinds of Physics textbook used by Senior High School RSBI grade X in Medan:

- Physics For Senior High School Grade X (Mikrajudin Abdullah) is used by SMAS Shafiyyatul Amaliyya.
- Cambridge ICGSE Physics Course Book (David Sang) is used by SMAS Prime One School, SMAS Sutomo, and SMAS St. Thomas 1.
 - 3. Theory and Application of Physics for Grade X (Budi Purwanto) is used by SMAN 1 Medan and SMAS 1 Muhammadiyah Medan.

Based on the description above, this research will apply studies with the title:

"The Feasibility Study of Physics Textbook used by Senior High School RSBI Grade X in Medan."

1.2 Problem Identification

Based on the background of the problems described above, it can be identified issues relevant to this study are:

- 1. Learning facility available is lack
- 2. Incompatibility of textbook that used by the teacher as learning facility
- 3. Ineffectiveness of learning without textbook
- 4. Students don't have textbook, just expecting the delivery of the teacher
- 5. Book used by the teacher as textbook is still not in accordance to the applicable curriculum

1.3 Problem Limitation

- 1. In this study only carried observation by looking at a learning facility (in this case, textbook) which teachers used as a tool in the learning process in the classroom
- This research is implementing in high school of RSBI in Medan academic year 2011-2012

3. The research was conducted only on the teacher who teaches physics at class X of high school of RSBI in Medan academic year 2011-2012

1.4 Problem Formulation

Based on the problem statement, so the justification of this study are:

- 1. How feasibility Physics book used in High School of RSBI grade X in Medan now based on National Curriculum (Education Unit Level Curriculum and Cambridge Curriculum).
- 2. How feasibility Physics book used in High School of RSBI grade X in Medan now based on Cambridge International Curriculum.

1.5 Research Objectives

This study has objectives to:

- 1. Knowing whether grade X Physics textbook High School which is used by RSBI in Medan now is suitable to National Curriculum (Education Unit Level Curriculum).
- Knowing whether grade X Physics textbook used in High School of RSBI which is used by RSBI in Medan now is suitable to Cambridge International Curriculum, especially in content feasibility.

1.6 Research Benefit

This research have some benefits, such as:

- 1. School. This research can give objective data as a reference to choose Physics Textbook with high quality and study to increase physics learning achievement.
- 2. Researcher. While this is a first scientific research for researcher, it can be a writing skill implementation as a basic for the next research in post graduate.
- 3. Other Research. This research gives objective data and reference to apply accurate research.