CHAPTER I
INTRODUCTION

1.1 Background

Textbook is one of learning media which is used by teacher in the learning-teaching process. Textbook has function as a tool, tutor, guidebook and gauge in the classroom. (Kulm, *et al*. 1999). The changing of Indonesia education paradigm from teacher center learning becomes student center learning makes textbook present become more necessary (Muljono, 2007). Student center learning places teacher as the facilitator in the classroom. It makes the student must be more active by himself in mastering their knowledge. Textbook as a main source in the classroom will be determine the successful of knowledge transferring.

Textbook is also applied as principal curriculum and source of lesson by teacher around the world (Liang and Cobern, 2013). Chiappetta and Fillman (2007) identified that textbooks in all school grade are often applied as the subject matter fundamental coordinator which students are supposed to studied and give an complete description of subject to be informed. Supriadi (2001) determined that the student achievement in Indonesia has correlated with the textbook ownership.

Albach and Kelly (1998) in Ramnarain and Padayachee (2015) said that in science class, the textbook assist to interpret the intentions of curriculum to the class implementation by indicating the objective of science learning, such as understanding the nature of science and science content, developing inquiry skills, understanding the interrelationship of science, technology, the environment and society. It is usual use textbook in teaching biology (Kuechle, 1995). So, textbook is one of crucial factors to determine the biology student learning outcomes.

Recently, the Indonesia education quality in science is concerned. This can be noticed by some indicator like the Indonesia grade in International competition. A survey held by Trends in International Mathematics and Science Study (TIMSS) in 2011 describe Indonesia students have not yet do adequately. In

1

science literation, Indonesia was standing in 40 from 42 countries followed with score 406. Indonesia score in science is under the International average score, 500. Meanwhile in International Reading Literacy Study (PIRLS) 2011, Indonesia student has position in 42 from 45 country with score 428 (Driana, 2012). While, a study held by PISA (Progamme for International Students Assessment) in 2009 explain Indonesia's student also don't do satisfy. Indonesia ranked 57 in reading competition, 61 for mathematics, and 60 for Science from 65 countries (Kemdikbud, 2015).

The presence of textbook is crucial in classroom, the textbook quality must be considered more aggressively again. In Indonesia textbook quality assessment carried out by National Education Standard Agency (BSNP). Based on Government Regulation No. 19 of 2005, textbooks were evaluated by BSNP based on eligibility of content, language, presentation, and graphic in accordance with Minister Regulation. In addition, based on the Regulation of the Minister of National Education good book is a book that can be used during a period of at least five years, both in terms of content and the physical. It is intended to accommodate the significant changes in the development of science and technology, and considerations in economic terms for users (Muljono, 2007)

Indonesia high school textbook quality is very diverse (Muljono, 2007). It because there are so many publisher in Indonesia, like Erlangga, Bailmu, Tiga Serangkai, Yudhistira, PT Wangsa Jatra Lestari, etc. Government has an effort to provide a qualified textbook. One of them is the textbooks assessment conducted by the Center Book of Education Department to school textbook. Although, there are many textbooks that have not been assessed and require an assessment in order to fulfill the standards set based on Government Regulation No. 19 of 2005 and Minister Regulation No. 22 and 23 of 2006 (Muljono, 2007). This makes some of Indonesia textbook do not have guaranteed quality.

There are some factors which makes student bored in reading book. Muslich (2008) said that factors consist of : the textbook gives less attention to the students' understanding abilities in reading textbooks; the textbook's design does not comply with the educational curriculum; teaching materials in textbooks

sometimes found not fulfill the environmental conditions and student learning; used teaching materials is outdated. Adisendjaja (2009) also state that the published textbook is materialistic, not attract the student affective realization (emotional), although it has a strong cognitive domain, but can't active the reader's critical thinking and curiosity (teacher and student). This factor is founded in some Indonesia textbook

Research on the quality of the book is quite a lot in Indonesia. But studies simply compare the quality of books among fellow publishers in Indonesia as an example of "Analysis of Conformity Textbook Biology Based on Content Standards KTSP grade X Semester I in Medan Senior High School" by Aryeni and Hasruddin (2012), "Analysis of Depth and Breadth of Content In Textbook of Biology Regarding the Concept of Middle and High School Digestive System of Food by Mulyani (2013). As for the comparative study of textbooks in Indonesia with foreign countries are very rare. In fact, Indonesia needs a reference from developed countries education about the quality of a good book.

Based on the previous statement, it is necessary to do a study to compare the content's completeness, breadth, and depth of high school biology textbook between Indonesia's publisher and overasea's publisher. This study conducted in Nervous System topic. It has tightly relation to daily life and one of difficult topic to understand in biology learning (Tekkaya, *et al*. 2001). So, a study with a title **"The Completeness, Breadth, Depth: A Comparison Between Indonesian and Cambridge High School Biology Textbook for Nervous System Topic"** have been done**.**

1.2 Problem Identification

Based on the previous background, there are identified problem such as:
1). Textbook is one factor that causes the rank of Indonesia's student in science international competition and biology learning outcome is low
2). Student textbook in Indonesia has same concept although the curriculum change and out of date.
3). Comparative study of textbooks in Indonesia with foreign countries is limited.

4). Nervous system is one of biology topic that is difficult to understand has tightly relation to daily life.

1.3 Problem Scooping

This research just discuss about the senior high school textbook that come from Indonesia's publisher such as Esis, Erlangga and Ministry of Education (Buku Standard Elektronik) and textbook from Cambridge's publisher. The books is purposively selected because of its popularity while other books are based on acknowledge by themselves Education Ministry and can be found in Indonesia. The book published by Cambridge was choosen because it was used by International school in Indonesia, Singapore and Malaysia and easily to found in researcher's location. The area comparison in this research is just the completeness, breadth, and depth in each textbook. It will use the instrument based on the Badan Standard Nasional (BSNP) assessment to evaluate the best textbook and syllabus that used in each country. The topic that is researched just the nervous system.

1.4 Research Question

Based on the background and the problem scooping, the problem formulation is:

1). How is the difference of completeness aspect between texbook published by Indonesian and Cambridge in nervous system topic?

2). How is the difference of breadth aspect between texbook published by Indonesian and Cambridge in nervous system topic?

3). How is the difference of depth aspect between texbook published by Indonesian and Cambridge in nervous system topic?

1.5 Research Objective

The objective of this research is to:

1). Compare the textbook content's completeness between Indonesian and Cambridge high school biology textbook for nervous system topic.

2). Analyze the differences of the textbook's content breadth Indonesian and Cambridge high school biology textbook for nervous system topic.

3). Evaluate the textbook concept's depth between Indonesian and Cambridge high school biology textbook for nervous system topic.

1.6 Research Significance

The benefit in this research is:

1). to get the description of the completeness, breadth, and depth in Indoensian's and Cambridge's publisher, so government can make a review how to analyze the good textbook

2). Teachers can use the knowledge from this thesis to select the good textbook for student and it can be references for teachers if they want to write a book.

3). Publisher can use this knowledge for make the best textbook for student.

4). Be a references for teacher, government, and publisher to do correction for textbook especially to Indonesia.

1.7 Operational Definition

1). Completeness is an aspect that assessing the textbook content completeness. It means all content cover all the material which present in Standard and Basic Competence.

2). Breadth is the assessment aspect which discuss about the scope of textbook content. The textbook content must reflect and support the Basic competence or learning outcomes.

3). Depth is the aspect which evaluates the present of the textbook material in detail, discuss the problems specifically not generally. The content must comprise of introduction, definition, output display, example, case, exercise, procedure and accordance with syllabus