

CHAPTER I

INTRODUCTION

This chapter presents an introduction. It covers the background of the study, problem statements, the purpose of the study, significances of the study, scope and limitations of the study, and definitions of the key terms.

1.1 Background of the Study

Bilingual education is an instruction in two languages and the use of those two languages as instruction in any part of the school curriculum (Andersson, Boyer, & Southwest Educational Development Laboratory, 1970). In Indonesia, cause of RSBI/SBI (international school) had eliminated since January 2013, a school which using bilingual learning at before, now they are changing to a new program those are International Class Program (ICP) or Bilingual Class Program (BCP). That class program using English in the instruction for all subjects except local content in implementing learning activities, and using Information Technology (IT) in the learning process. Bilingual program has many advantages for the students and the teacher itself. That program can develop their capabilities in mastering the International language and face the globalization era. In Indonesia, at Junior high school only use bilingual in science and mathematics. Mathematics is the queen of the sciences that is why mathematics is one of the subjects in the International Class Program (ICP) or Bilingual Class Program (BCP) that must use English as the language of instruction. In English mathematics there are so many terms and vocabularies. Vocabulary in

mathematics is very different in general. They have a special term in the English language for a particular subject. Some difficulties language in learning mathematics which includes: Learning vocabulary or mathematical terms, and phrase. Vocabulary in mathematics has a special word in meaning, such as equations, algebra, etc., compared with the daily vocabulary which has a different meaning when used in the context of mathematics. In fact, there are some mathematical terms not translated well and it makes students should more attention about what they have learned. For examples: symbol / explain that in mathematical the sign means 'divided by' but in Indonesian that sign has a meaning 'or', and for another example is 'five (is) divided by two and when 2 added by a number, the result is 12; find the number', by Irujo (2007). Mathematics also uses words to produce a sentence became have a specific meaning such as the set and the square roots.

Many students who do not have knowledge of academic English, it makes difficult for them to learn and use specific vocabularies about mathematical sentences. The difficulty of reading the text and understand the language of mathematics is a challenge for students to have more attention. This will be a challenge too for the teachers to teach the mathematics and make it easier for their students in the learning process. Teachers required using English as an introduction as well as a challenge for students to not only learn mathematics but also learn English as a language of instruction in the learning process. The role of the teacher in teaching and delivering the material from the textbook is very influential on students' understanding of the mathematics itself. It is about how the

teacher implements the textbooks during the teaching learning process and the student may have some misunderstanding with what the teacher's explanation is.

This research is related to the use of English for mathematic textbook in the bilingual class program. Considering from the fact, this research conducted which is aimed at finding about how the teacher implements the English for mathematics textbook in teaching and what the problems faced by the students in learning is. The research done by the researcher was at SMPN 2 Gresik Junior High School. The researcher found that in this school has implemented an English edition mathematics textbook in the Bilingual Class Program. Another reason about why the researcher considered not taking the data from other school because since the RSBI had eliminated from the favorite school in Gresik, only SMPN 2 Gresik that have a good program of Bilingual class which implemented in seven, eight and nine grades, the school also implements the Mathematics and Science using English.

1.2 Statements of the Problem

Based on the background of the study above, the problem's statements are:

1. *How does the teacher implements English for mathematics textbook IA published by Erlangga in teaching?*
2. *What problem do the students have in learning English for mathematics textbook IA published by Erlangga?*

1.3 Purpose of the Study

The purposes of this research are first to investigate how the implements of English for mathematics textbook 1A published by Erlangga in the teaching process. The implementation here is about the language of the teacher when teaching mathematics in English, and how the ways the teacher deliver the materials of mathematics in English. The second purpose is to describe the problems of the students in learning English for mathematics. The problems here are about the difficulties of the students in understanding the language, the terms, and the instruction.

1.4 Significance of the Study

Theoretically, this research will bring inspiration to other researchers in observing teaching and learning activities, especially in the process of teaching English for mathematics in the bilingual class. This research is also expected a source of other literature in Junior High Schools.

Practically, for teachers, they able to know how to apply the proper language and teaching in delivers English for mathematics textbook 1A published by Erlangga. For students, they could develop their understanding about the structure of language, terms and instructions in the textbook or in the process of learning English for mathematics in a class.

1.5 Scope and Limitation of the Study

First, the scope of this research is about implementation of English for mathematics textbook 1A published by Erlangga, and the limitation is for how the

ways teacher applies the material of English for mathematics 1A published by Erlangga. The Second scope is about the students' problem in learning process of English for mathematics, and the limitation is for the difficulties of the students in understanding the language, terms and instructions in English for mathematics.

1.6 Definitions of Key Terms

In order to avoid a misunderstanding the researcher will explain, define key terms as follows:

Bilingual class is a class where students and teachers using two languages, namely Indonesian and English in the learning process.

English for mathematics is the use of English in delivering mathematics textbook that has English edition; it is specially used for bilingual class programs. In this research, the textbook is *English for mathematics textbook 1A published by Erlangga*.

Implementation is a process of pre, whilst and post teaching in the learning process and about how the way a teacher delivers the material of English for a mathematics textbook in a class.

The problem is difficulties about the language, terms and comprehend the instruction that faced by the students to learn English for mathematics.