

CHAPTER III

RESEARCH METHODOLOGY

This chapter deals with research methodology. It aims to find out the answers of the research question stated in the first chapter. In this chapter, there are research design, the technique and instrument used in collecting the data, the population and sample, the technique of analyzing the data, and clarification of the terms.

3.1 Research Method

This research employed a qualitative case study, especially textual analysis with the aim of analyzing and elaborating translation procedures. Qualitative study is the activities of collecting and analyzing data, developing and modifying theory, elaborating or refocusing the research questions, and identifying and eliminating validity threats are usually all going on more or less simultaneously, each influencing all of the others (Maxwell, 1996, p. 3; Alwasilah, 2000, p. 128).

Textual analysis is one of the methods employed by qualitative research (Travers, 2001, p. 2). Qualitative researchers typically study a relatively small number of individuals or situations and preserve the individuality of each of these in their analysis, rather than collecting data from large samples and aggregating the data across individuals or situations (Maxwell, 1996, p. 19). Stake (1985, p.

278) cited in Emilia (2005, p. 191) says that a case study was carried out in “a small scale, a single case”.

Furthermore, Moleong (2000, p. 6) also argues that qualitative research is descriptive. The data collection is in the forms of words of pictures rather than numbers. In addition, Lincoln and Guba (1985, p. 39-44) cited in Moleong (2000, p. 6) also describe that descriptive is one of qualitative method characteristics.

Thus, it can be said from the previous explanation that the most appropriate method applied in this research was qualitative case study especially textual analysis.

3.2 Subject of the Research

The subject of the study is the book *Biology 1: Bilingual Student Text Book for Senior High School, Year X*. Actually, the biology books are also written for year XI and XII. Considering the limited time of the research, only the book *Biology 1: Bilingual Student Text Book for Senior High School Year X* is chosen in the research. Another reason why the book *Biology 1 Student Text Book Year X* is chosen, because the biological terms found in the book are popular and understandable by the researcher who learnt Biology only at Elementary, Junior High School, and Senior High School.

3.3 Technique of Data Collecting

In doing the research, some steps in collecting data were applied as follow:

- a. Reading closely the *Biology 1 Student Text Book for Senior High School, Year X*.
- b. Collecting all biological terms of English version and Indonesian version.
- c. Calculating the reoccurrences of all biological terms to find out the frequent occurrences that are found in the book.
- d. Classifying the word based on its origin language. For categorizing the terms based on its origin language, the sage's dictionary (2010), oxford advanced learner's dictionary (1989), *kamus latin istilah biologi* (2009) and several internet resources are used. After checked by using the dictionaries and internet resources, the categories are divided into English original words, Greek/Latin original words, and the mixed language original words.
- e. Grouping the data based on nouns and noun phrases, since this research paper only collected the noun terms. After categorizing the data from nouns and noun phrases then all the terms are classified again based on their affixes.
- f. Categorizing all biological terms based on its translation procedures applied by translator by using the procedures of translation.
- g. Analyzing and interpreting the data to find the translation procedures applied by the translator by using the procedures of translation as suggested by Vinay and Darlbenet (1958); Catford (1965); Larson (1984); Newmark (1988); Delisle (1999)..

- h. Determining the percentage by presenting all numeric data as simple scaling for translation procedures by using this formula:

$$P = \frac{f}{N} \times 100\%$$

P = Percentage

F = Frequency of translation procedures

N = Overall number of translation

After determining the percentage, the most dominant procedure in each classification would be found.

- i. Asking three biology teachers who teach in the International schools project or *Rancangan Sekolah Berbasis Internasional* for the justification of the biological term translation – in order to see the appropriateness of the translator's chosen procedures – because there has not been a particular procedure in translating a biological term. The justification is identified by four criteria, which are poor (if the terms are not translated correctly, cannot be understood by TL reader, and not sound natural in target language), fair (if the meaning of the translation is correct, cannot be understood by TL reader, and not sound natural in target language), good (if the meaning of the translation is correct, can be understood by the TL reader, but not sound natural in target language), and excellent (if it is rendered completely and correctly, understandable, easy to be read by the reader, and sound natural in target language).
- j. Making conclusions.

Conclusion of Chapter III

This chapter describes the research methodology. It explains the method used to find the answers of the research questions. It includes research questions, aims of study, research method, research procedures, and technique of data collection. The next chapter will provide the data presentation and discussions.

