

CHAPTER III

RESEARCH METHODOLOGY

This chapter explains the methodology of the research. To obtain the clearer picture of teaching Science in bilingual classes implemented in the setting of the research, the researcher engaged a qualitative study. Through this qualitative study, the researcher tried to answer the research questions; (1) How does the IRF sequence exchange happen in the CLIL classroom interaction? (2) What type of question does the teacher use as initiation move in promoting IRF interaction with the students? (3) How does the code-switching operate in CLIL classroom interaction?

Given those primary guiding research questions, as well as the purposes of the research, a qualitative study represented an appropriate means of obtaining data. In the first sub chapter of this chapter, the researcher begins with a description of the setting and participants of the research. Overall, this chapter presents setting, participants of the research, research design, data collection and data analysis. Each sub chapter is described as follow.

3.1. Research Design

Based on the research questions mentioned above, this study employs qualitative research design by using descriptive and identification method. Moreover, qualitative research tends to be a research design describing the data in descriptive form which consist utterance, written data or human behavior (Bogdan –Taylor, 1992).

This research is conducted under a qualitative study and is designed to get a better understanding about the phenomenon of IRF exchanges in the students-teacher interaction in CLIL classroom (Content-Language Integrated Learning). Furthermore, this research is grounded on the data from the field (through observation and video recording). Therefore, based on those reason, the qualitative research design is employed in this study.

Furthermore, in order to support qualitative research design, the descriptive and identification method are attempted by the researcher. The descriptive method tends to describe and discover the data taken from observation and video recording about the existence of IRF pattern in teacher-students interaction in Bilingual/CLIL classroom. Descriptive method is the method when the data are gathered from existing situation, then the data interpreted without manipulating data (Sowell-Casey, 1982). This study uses the descriptive method because it describes and interprets the data in the form of description. Moreover, the use of identification method means that the study is attempted to identify the data to the theoretical foundation related to this study.

The identification method assists the researcher to identify which data or items fell into what categories based on the theoretical foundation. Since this research deals with the investigation of a phenomenon or case in a real-life context it is called a qualitative descriptive case study. Furthermore, the research is conducted through several steps; collecting, interpreting, classifying, making conclusion and reporting.

3.2. Samples and Participants of the Study

Participants' selection is first determined to decide the respondents who are involved in the study. As Polkinghorne (2005) stated that the respondents' selection is based upon the

consideration whether people can provide significant contribution for the experience under investigation. Arikunto (2002) adds that source of the data in the research is the subject where the data are achieved from. Since this study investigates discourse realization, the selection of the respondents involves a high standard for their linguistic abilities, majors, communicative and sociolinguistic competence. By using communicative and sociolinguistic competence, the subjects of the research expected to be able to produce communicative learning.

The data of this study is collected from one of State Junior High School in Bandung. There are several reasons why the researcher chooses this school as a research location. The first reason is based on the information that this school has provided Bilingual class (in this study it's called CLIL), for more than three years now. So researcher makes a conclusion that the first party participants (teachers) have had enough experience in delivering content subject material in English. Related to the research questions stated earlier, researcher thinks this school is able to give the data about the interaction between the teacher and the students, and the pattern of their interaction clearly.

The samples of this study are 9th grade students and their Science teachers. The researcher assumes that this combination of students and their Science teacher in this school can provide the good picture of communicative learning.

3.3. Data Collection

In order to gain the natural interaction between students and teacher in the classroom, researcher used video recording technique. Video recording can be valuable in providing researchers with objective first hand data for analyzing data of teacher-students behavior in the classroom (Burns, 1999). Van Lier (1990) also recommended that discourse analysis normally

used transcript and videotaped interaction as its database. Transcripts have three advantages: a) they overcome the limitations of intuition because they enable repeated scrutiny and visits of the data; b) other researchers have access to the data about claims which are made; and c) data can be reused and reexamined for new investigations (Silverman, 1993).

The second technique used in this study was observation, it was held to support the data elicited recording in order to make data analysis more objective. As stated by Creswell (2008) there are four options in observation technique; those are complete participant, observer as participant, participant as observer and complete observer. Upon this theory, researcher decided to choose the last type of observation; complete observer, which means that the researcher observes without participate in the teaching learning process.

Many researchers have argued for the presence of the researcher in the research site, observing and writing down the participants' behaviors. The fundamental assumption in this data-collection method is that watching and listening are the best ways for the researcher to discover what is happening and to capture the most important events, which tend to be taken for granted in a setting (Morse & Richards, 2002). By being there, the researcher can "get a "feel" for the atmosphere of the setting" in a multi-dimensional way.

3.4. Data Analysis

As stated by Suherdi (2006), there are 4 steps suitable in this research; transcribing the video-recording, coding and analyzing data, interpreting data and finishing. 1) Transcribing the video-recording. Looking to the fact that the researcher get main data from video-recording taken from the classroom, the researcher responsible to transcribe the video-recording into a transcript, as suggested by Allwright-Bailey (1991), researcher must tend to use transcript as a database for

discourse analysis. 2) Coding and analyzing the data. In this step, the data that have been transcribed are coded using label such as: category of knower, move based on IRF pattern, kind of moves, name etc. Therefore, in this study researcher have several strategies, as followed:

1. Dividing the transcript based on IRF exchange pattern
2. Analyzing and coding the exchanges found earlier by the kind of knower degree, move classification, category in each move, function of the move, etc
3. Analyzing the type of questions used by the teacher based on Kinsella (1997) and Bloom's (1956) theory of categories of questions to find in what type does the questions given by teacher categorized into.
4. Quick reviews of the code-switching phenomena happen in the interaction.

3) Interpreting the data. In this phase the researcher tries to answer the research questions as stated earlier based on the findings analyzed by two strategies above. As known that the research put two research questions, so in this phase, researcher also gives the explanation and relation of how those questions connect each other and lead into complex discussion. 4) Finishing. The researcher provides the findings and discussion in conclusion and suggestion to illustrate the study as a whole.