### **CHAPTER III**

# **RESEARCH METHODOLOGY**

This chapter discusses the research methodology and data collection strategy. It consists of videotaping classroom interactions, observing classroom interactions (note taking), and interviewing the teacher.

#### 3.1 Research Design

The aim of this study is to get a clear description of classroom interaction by using Suherdi's model (2010) about patterns of exchanges. This study is qualitative and descriptive in nature since it is focused on finding the teacher-students interaction patterns in the classroom and how the Teacher Talk as a part of teacher-students interaction affects the teacher-students interaction patterns in the classroom.

The qualitative method is used since the researcher use Suherdi's framework (2010) about patterns of exchanges as a part of classroom discourse analysis. The qualitative research is addressed adequately for discourse analysis (Creswell, 2009). Moreover, in qualitative method, the descriptive method is used because the researcher describes the collected data from the field where the participant's problem occurs through observing behavior and interviewing (Creswell, 2009).

Besides, qualitative method has more advantages in giving details of certain phenomenon and issues by approaching the problems directly with high flexibility for the researcher to choose the way of doing the research (Alwasilah, 2002).

This research also uses a case study approach. The case study approach is chosen to analyze the interaction between teacher and students in the classroom and the types of classroom interaction patterns that occur during classroom interaction in an eleventh grade of a Senior High School in Cimahi.

## 3.2 Site and Respondents

# 3.2.1 Sites

One of the Senior High Schools in Cimahi is chosen as the site of the study. The school is chosen due to writer's accessibility to the school. Another reason is because the writer teaches in this school while doing one of tasks from the university named *Program Pengalaman Lapangan* (PPL).

#### 3.2.2 Respondents

This study involves one pre-service teacher and an eleventh grade class. The preservice teacher is chosen because of the consideration as a new sample in this field, since in some previous researches, they tend to use English teachers as their samples. Besides, the researcher only needs one pre-service teacher as the sample to see the types of patterns of exchanges which occur in the classroom interaction in different sessions of a teacher. While eleventh graders are chosen because they are considered as students who are mature enough to understand English and brave enough to convey their thought in English. Brown (2001) stated that the questions and instructions that the teacher ventures can be more accepted by the higher of the proficiency level. The other reason is that because the pre-service teacher teaches in eleventh grade classes.

### 3.3 Data Collection

In qualitative research, there are four most commonly methods for gathering the data; observations, interviews, archival or textual analysis, and transcription (Furlong, Lovelace, and Lovelace, 2000).

However, in this research, the data are only collected by using several methods which are video-recording the classroom activities (transcription), note taking, and interview.

# 3.3.1 Video-recording of the Classroom Activities

Considering the naturalness of interaction between teacher and students, the video-recording is chosen as the technique of gaining the interaction between teacher and students in the classroom. Alwasilah (2002) stated that without video-recording the data could not be said as a valid data. Moreover, video-recording gives several advantages for the researcher in gathering teacher-students natural interaction since it may be an unobtrusive method of collecting data, it provides an opportunity for participants to directly share their reality, and it is also creative in that it captures attention visually (Creswell, 2009).

The video-recordings are taken on 3<sup>rd</sup> April 2014, 10<sup>th</sup> April 2014, and 24<sup>th</sup> April 2014. 2-hour lesson (90 minutes) is recorded for each lesson. While the video is recorded, the researcher does not involve in the interaction.

## **3.3.2** Classroom Observation (Note-Taking)

Besides video-recording, classroom observation (note taking) is used in this research to support the data in order to make data analysis more objective. Observing the classroom interaction helps the researcher to pull out the conclusion and respondent's point of view, phenomenon, event, or observed process (Alwasilah, 2002).

Therefore, classroom observation (note-taking) is used in this research to see the whole classroom activities based on the recorded video.

### 3.3.3 Interview

The interview is chosen as one of ways of collecting the data. The interview is used for crosschecking the data from classroom observation and supporting the data. Moreover, interview gives some advantages to the researcher, it provides useful information which cannot be provided from directly observing participants since it gives the participants opportunities to describe detailed personal informations, and the interviewer can ask specific questions to elicit the needed information (Cresswell, 2009; Alwasilah, 2002).

In addition, Alwasilah (2002) stated that in qualitative tradition, interview and observation are the most important methods in collecting data beside text analysis and transcription which helps the validity of the data.

#### **3.4 Establishing Rapport**

In conducting a research, establishing rapport becomes an important thing that cannot be neglected. Having a good relationship with the respondents helps the researcher in doing the research. Establishing rapport is needed in order to have a negotiation with the objects or respondents because without it a research cannot be conducted (Alwasilah, 2002). Therefore, before doing the research, the researcher asks permission to the school and the class where the data are taken, and also to the pre-service teacher who taught in this classroom. And while doing the research, the researcher tries to keep maintaining a good relationship with the school, class, and pre-service teacher by meeting them personally. Moreover, a good relationship has been maintained with institution and participants even before the research data are taken because the researcher also teaches in the school as a pre-service teacher to accomplish her teaching practicum program.

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# 3.5 Establishing Reliability and Validity

The validity and reliability are needed in conducting a research. Validity is the truth and veracity of a description, conclusion, explanation, interpretation, and all kind of reports (Alwasilah, 2002). Moreover, Cronbach (1982 as cited in Alwasilah, 2002) stated that the way a conclusion is stated and communicated are also giving the validity beside data collection and analysis. Whereas reliability refers to how far the findings of the research can be replicated (Alwasilah, 2002).

Therefore, some techniques are provided to maintain the reliability and validity of this research, such as triangulation, member checking, and feedback.

## 3.5.1 Triangulation

Triangulation refers to the methods of collecting the data from many sources (Alwasilah, 2002: 150). It helps the researcher in decreasing the risks of limited conclusion of certain method and sources, and increasing the validity of conclusion (Alwasilah, 2002).

This research uses some methods in collecting the data such as video-recording, classroom observation (note taking), and interview. Those three methods are triangulated in collecting the data, the data collected from recording and observation (note taking), and also the interview's response from the pre-service teacher. The researcher records the interaction between teacher and students in the classroom in order to capture the naturalness of their interaction. The next one is observing the classroom interaction that is done after watching the video-recorded and the last is comparing the findings with the result of pre-service teacher's interview. By conducting those various methods, the researcher reduces bias which can be caused by the subjectivity.

#### 3.5.2 Member Checking

After the triangulation, the next one is member checking. Member checking is the most important thing to do related to the validity of research data which is given by the respondents of the research (Alwasilah, 2002). Moreover, Alwasilah (2002) stated that it is the most useful technique to: (1) prevent misinterpretation of respondent's answer from the interview, (2) prevent misinterpretation of respondent's behavior in observation, and (3) confirm respondent's perspective of ongoing process.

In this research, the researcher asks the pre-service teacher as the respondent to check the transcripts and data interpretation as one way of achieving validity of the research.

### 3.5.3 Feedback

Feedback in a research is necessary to have. Feedback prevents the invalidity, bias and researcher's assumption, and debilities of research logic of ongoing research (Alwasilah, 2002). Feedback can be asked from some individuals that are already familiar with the topic of the research or not (Alwasilah, 2002).

Thus, while doing the research, the researcher asks feedback from some people such as, the supervisors, an expert in classroom discourse (who actually becomes as one of the supervisors), and also some friends with the same research focus.

# 3.6 Data Analysis

After having the gained data, the data are then analyzed by using some steps as follow:

a. Transcribing the video

The video that has been recorded are then transcribed. The transcribed data are used to analyze the classroom interaction patterns and to see the language used by teacher and students during the lesson. The observer labels teacher's utterances with 'T', 'S1', 'S2', 'S3', etc for students' utterances, and 'Ss' for group of students' utterances.

### b. Coding and Analyzing the Data

After the data are transcribed, the transcribed data are coded by using some labels as shown in chapter II mainly the moves and exchanges. Coding and analyzing the data help the researcher in: (1) identifying a phenomenon, (2) counting the frequency of a phenomenon, (3) showing the relation of code frequence with inclination of findings, (4) arranging the categorization and sub-categorization (Alwasilah, 2002: 159).

The data are coded using Berry's work (1981) and underpinned by Suherdi's work (2010) for coding the exchanges and moves. The coded data are then analyzed using Categories of Exchange Structure proposed by Suherdi (2010) in order to see the classroom interaction patterns which occur in the eleventh grade classroom. After the data are analyzed using Categories of Exchange Structure proposed by Suherdi (2010), the data are then categorized into types of Teacher Talk and students talk using FLINT (Foreign Language Interaction Analysis) proposed by Moskowitz (1971). Finally, the types of questions are then analyzed from the data using types of questions' proposed by Ellis (1994).

# c. Calculating the frequency of data in percent

After the transcribed data are coded and analyzed, the next step is calculating the data. The analyzed data of classroom interaction patterns are calculated in order to find out the dominance patterns that occur in the classroom. Moreover, the frequency of occurrence of Teacher Talk and students talk, and types of questions

in the classroom are also calculated based on the analyzed data. The frequency of Teacher Talk and students talk are calculated using FLINT adopted from Moskowitz (1971). Whereas to seek the frequency of occurrence of types of questions are then calculated using types of questions' proposed by Ellis (1994).

## d. Interpreting the Data

After the data are analyzed and calculated, interpreting the data become the next thing to do. The researcher interprets the data attempted to answer the research questions of this research. The result of the answers of research questions are displayed in some tables. Using tables, ideas and interpretation of the researcher can be clearer and permanent because it helps in reducing the complex data into the simple ones, concluding researcher's interpretation towards the data, and serving the data as a whole (Alwasilah, 2002). From the tables, the researcher describes followed by the description of phenomena occurred based on the table. The findings of research questions are connected to each other in order to obtain phenomena and present them into deep discussion.

## e. Finishing

The findings are found through several stages explained above, the transcriptions, and interpretation the data are rechecked before presenting the findings and discussions in conclusions and suggestions to illustrate the research as a whole.

## 3.7 Concluding Remark

This chapter has focused on the research methodology and data collection strategy. It consists of videotaping classroom interactions, observing classroom interactions (note taking), and interviewing the teacher. The whole research findings and interpretation will be delineated in the next chapter.