

CHAPTER III

RESEARCH METHODOLOGY

This chapter presents a brief elaboration regarding how the research is prepared and what kind of design used for answering the research questions. This chapter will be focusing on research design, site and participants, data collection, and data analysis. The result of the pilot study is also presented as part of data analysis

3.1 Research Design

This research uses content analysis which includes both quantitative and qualitative methods. It is because the purposes of this research require both numerical and coherent data from students in different achievement level in relation with the role of students' spoken language analysis in exchange structure. Weber (1990, p. 117) defines content analysis as "a research method that uses a set of procedures to make valid inferences from text..." Weber (1990, P. 117) also mentioned that "the best content analysis studies include both qualitative and quantitative operation on text." A similar definition is also given by Mayring (2014, p. 10) who defines content analysis as "a mixed methods approach: assignment of categories to text as qualitative step, working through many text passages and analysis of frequencies of categories as quantitative step." Furthermore, Weber (1990) also indicates that the purposes in using content analysis are: Includes the coding of open-ended question; focuses on individual, group, or institutional; describes the pattern and trend in communicative content that involves the use of statistical data (as cited in Cohen, Manion, & Morrison, 2007). For that reason, this method is appropriate to investigate students' behavior during the speaking test.

Firstly, to start the content analysis of this research, the quantitative approach is needed. According to Anderson and Arsenault (1998), there are three features in processing the quantitative content analysis: Breaking down text into

unit of analysis, undertaking statistical analysis of the unit, and presenting the analysis in economical form as possible (as cited in Cohen *et al.*, 2007) . It is in line with this research analysis procedure. The data from the transcript will be analysed based on the students' roles in exchange structure as receiver and producer. It is used as guideline in answering the first research question. The second research question requires the comparison of number between each category in every achievement level. It is in line with Mayring (2004, p. 22) understanding that states “the simplest method of a content-analytical procedure is to count certain elements in the material and compare them in their frequency with the occurrence of other elements.” Therefore, this research has fulfilled the criteria in conducting the content analysis in quantitative approach.

Next, as mentioned in the definition of content analysis by Weber (1990) and Mayring (2014), text is the main source of analysis. According to Krippendorff (2004), text is always qualitative, even though there will be numbers and statistical data involved, the content analysis will result in verbal answers to research questions. Moreover, Mayring (2014) also mentions that the purpose of qualitative approach in content analysis is to “retain the strength of quantitative content analysis”. The concept is to follow the rule of step by step analysis with the categorized materials that employed theory-guided procedure.

3.2 Site and Participants

The research was conducted in one of private junior high school in Bandung. The participants involved in this research are eighteen students from three different classes in grade eight and another six students from different classes for the pilot study. Each class represents equal numbers of low, middle, and high achiever students as participants. From teacher interview, it was believed that they were in the early level of English proficiency which made them considered as novice learners. Each student is labelled with a number and status of achievement level, for example SL1 as student with low achievement level number one.

The reason in choosing grade eight students in their first semester was because they had learnt the basic principle of language learning. With that in mind, the researcher expected that the students are able to answer simple questions related to daily life. Since the participants require specific condition which is their English achievement level, the researcher needs to seek some help from the teacher in duty.

The researcher chooses teacher interview to help in choosing the perfect candidate for this research. As mentioned earlier that the participants were students from low, middle, and high achiever level; thus, it was important for the researcher to gather some references and recommendation in choosing the participants. In this case, the teacher who knew his students best was the most appropriate one. This type of interview requires the teacher to reconstruct the past memory of students' performance in the classroom. For this research, the use of informal retrospective interview is chosen. It is because the researcher chose to use casual conversation with the teachers in their free time to find out what they think of their chosen students. Moreover, Fraenkel, Wallen, & Hyun (2012, p. 452) believe that, 'retrospective interview gives more accurate and reliable data for qualitative research.' The questions mainly focusing on: "Which students do you think is suitable as low, middle, and high achiever?"; "How their performances were in the classroom?"; "How their results were in the score report?" There are not any recording of this interview, since it was only used as preparation references for the actual interview with the students.

3.3 Data Collection

In this research, the source of the data comes only from observing students' assessment in the form of interviews as media to assess students' spoken language.

The students interview, in this case, refer to the material for analysis itself. The participants were chosen based on teacher interview and the method used was semi-standardize or semi-structured interview. This type of interview allows the researcher to give feedback and ask other questions beside the prepared one (Berg.

2001). This will allow the researcher to lead and to confirm students' answer freely. However, this interview was taking form as assessment as mentioned before in chapter II. Therefore, the use of recording is very important in students interview. In regards to its validity, the uses of multiple sources are important; hence, the researcher was using both audio and video recording.

3.4 Data Analysis

In relation to this study, the analysis of the students observation was carried out in order to “converge findings, validate other form of data, and transform data for comparison” (Creswell, 2006, p. 118) for answering the statements of the problem. The first question was answered through the analysis of students' observation using qualitative method to find out what types of role do the students have in their language. Meanwhile, the answer for the second question was using the same data with additional information in it, which is the frequency of the reaction in students' language as producer and receiver. The material had to follow several steps before it was presentable. The procedural steps of the analysis were conducted as follows.

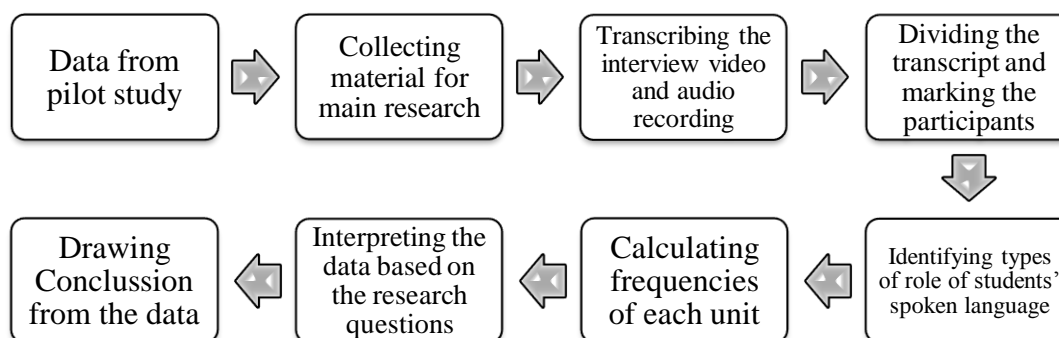


Figure 3.1 – The Process of Analysis

The explanation of each step is elaborated as follows.

Step 1: Pilot Study

The pilot study was conducted in order to test the instrument as well as to provide a general view on the way of preparation in collecting data and analysis stages, especially in testing the speaking test material which will be used in the main research. Thus, the instrument is able to be fixed in order to be used for the main study. In brief, the result of this pilot study is presented in the following chapter.

Step 2: Collecting materials for the main research

The error and mistakes found in the pilot study were used to enhance the preparation in collecting the main research. The most important thing is to make sure that the material presented in the interview was suitable for grade eight students.

Step 3: Transcribing the recording.

The results of students interview were preserved in form of audio and video recording. The recordings were transcribed into written text which is the requirement to conduct the content analysis research. In the transcription, both teacher and student's conversation are included. Moreover, as for student's talk, both verbal and non-verbal communications were also transcribed.

Step 4: Dividing the transcript and marking the participants.

In this step, the transcripts were divided based on three categories: low, middle, and high achiever. Each category was labelled based on who is talking, for instance, 'T' stand for teacher and 'S' for student. However, since there are 6 students in each category, special label is given as follows.

Table 3.1 – Participants Code

Students	1	2	3	4	5	6
Low	SL1	SL2	SL3	SL4	SL5	SL6
Middle	SM1	SM2	SM3	SM4	SM5	SM6
High	SH1	SH2	SH3	SH4	SH5	SH6

The label ‘S’ stands for Students, while L, M, and H stand for Low, Middle, and High. The number in the label represents the number of students. For example, SL1 means Students 1 from low level. Thus, when the reader wants to find the detailed information related to roles of certain student, the label will help in finding it in the appendices.

Step 5: Identifying types of role of students’ spoken language.

The next step was to identify the transcript content. The content of students talk was analysed based on the interpersonal layer of Berry’s exchange structure which is related to the role of students’ spoken language. The analysis was conducted to find out what types of role of students’ spoken language appeared in the data to answer the first research question.

Step 6: Calculating frequencies of each unit.

Each type of role of the students’ spoken language was then counted and presented in the form of table as prepared to answer the second research question.

Step 7: Interpreting the data.

In this step, the result of analysis of the text was presented in order to answer all the research questions and to connect it with the underlying theory and the pilot study.

Step 8: Drawing conclusion from the data.

After interpreting the data, the conclusion was given to provide the general view of the research result.

3.5 Validity and Reliability

Validity and reliability are important, even for qualitative content analysis (Mayring, 2014). The reliability was drawn using test-retest design while the validation was based on feedback. To provide better reliability data, the researcher used three media as a source for coding the data; Audio recording, video recording, and notes related to students reaction during the interview.

3.5.1 Test-retest Design

This type of design requires some time-lapse from the first analysis and also another researcher. The second researcher needs to reread, re-categorize, or reanalyze the same text (Krippendorff, 2004). Afterwards, the second data can be compared and discussed for the final result.

3.5.2 Feedback

The last step is to ensure the validity of the research, The researcher decided to ask the supervisor and the colleagues who have the same knowledge about this topic.