CHAPTER III

RESEARCH METHODOLOGY

This chapter deals with aspects of methodology used to guide the present study. Some points to discuss are the explanation of the research design, site and participants, data collection technique, and data analysis.

3.1 Research Design

This research deals with analysing the technique of speaking assessment, that is, interview. Besides, this research will also analyse the implication of interview as a technique to assess the students' speaking ability. In conducting the research, the researcher applies mixed methods research as the research methodology. This is in line with Creswell's explanation, in Heigham and Croker (2009), that mixed method is defined as a procedure for collecting, analysing, and mixing quantitative and qualitative data at some stage of the research process within a single study in order to understand a research problem more completely. Johnson defined mixed method in Kumar (2014) as the type of research in which a researcher or team of researchers combine elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the purposes, breadth, depth of understanding, and corroboration. In mixed method research, a researcher collects both numeric information and text to better answer a study's research questions (Heigham and Croker, 2009).

In conducting the mixed method research, the researcher applies the embedded design. Heigham and Croker (2009) argued that the embedded design is used when a researcher needs to answer a secondary research question that requires the use of different types of data within a traditional quantitative or qualitative design. The study by Andrews in Heigham and Croker (2009) showed

the use of the embedded design. The data were collected qualitatively through interviews, classroom observations, and teacher narratives. Meanwhile, the quantitative data were taken in the form of test scores. Figure 3.1 presents the visual diagram of the Embedded Design procedures in this research.
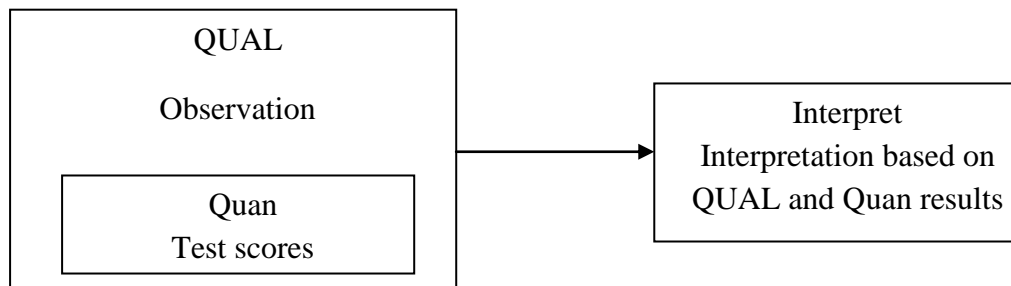

Figure 3.1 Embedded Design Procedures

In this research, the researcher obtained the qualitative data from interviews and observation. Meanwhile, the quantitative data were obtained from the students' TOEIC speaking test score and interview score. The scores from the tests mentioned were produced by using Pearson Product Moment Correlation formula to see the correlation between the scores, whether the correlation was positive or negative. The Pearson Product Moment Correlation formula, adapted from Susanti (2010), is presented as follows.

$$r = \frac{\sum x_i\, y_i}{\sqrt{\sum x_i{}^2} \cdot \sqrt{\sum y_i{}^2}}$$

$$x_i = X_i - \bar{X} \ ; \ y_i = Y_i - \bar{Y}$$

Figure 3.2Pearson Product Moment Correlation Formula

In this research, there was no cause-effect relationship between the TOEIC speaking test score and the interview score. Douglas (2010) believed that in language performance, correlation is based on the assumption that when people perform similarly on two different tasks, similar abilities must be required for the performance. In this research, the correlation coefficient only showed the degree of relationship of TOEIC speaking test score and the interview score. The range of correlation coefficient would vary from -1 to 0 to +1. Hatch and Farhady (1982) argued that A +1 correlation coefficient indicates a perfect positive correlation, a -1 correlation coefficient indicates a perfect negative correlation, and a 0 correlation indicates no relationship between the variables.

Therefore, this research used mixed methods reasearch method by applying the embedded design, because it generated data both qualitative and quantitative. The data were obtained in the form of observation, and students' speaking test score.

3.2 Site and Participants

The eleventh grade students of a public senior high school in Cimahi were selected as sample of this study. This was because students' speaking proficiency was considered adequate, as presented on students' speaking score in the tenth grade, and the materials covered in the eleventh grade of senior high school were comprehensive. The sample were choosen randomly. The students taken as sample are 10 students.

3.3 Data Collection Techniques

In collecting the data, two techniques were employed: observation and tests. Each of these data collection techniques will be discussed below.

3.3.1 Observation

Heigham and Croker (2009) stated that observation is the conscious noticing and detailed examination of participants' behavior in a naturalistic setting. This is in line with Kumar (2014) that observation is a purposeful, systematic and selective way of watching and listening to an interaction or phenomenon as it takes place. The emphasis during observation is on understanding the natural environment as lived by participants, without altering or manipulating it (Gay, Mills, and Airasian, 2009).

In this research, the observation was used to analyse students' speaking ability while being interviewed by the teacher. The steps in interview were also be the focus on the observation. The type of non-participant observation was used. In this case, the researcher did not get involved in the activities of the group but remained a passive observer, watching and listening to its activities and drawing conclusions from the activity (Kumar, 2014). The observation was only conducted during the assessment and was purpose to observe the behaviour or personality traits of each student.

3.3.2 Tests

Brown (2001) defined a test as a set of techniques, procedures, and items that constitute an instrument of some sort that requires performance or activity on the part of the test taker. Brown (2001) added that a test measures a person's ability and competence.

The tests conducted in this research were TOEIC speaking test and interview test. The TOEIC speaking test was conducted by asking students using TOEIC sample questions to gain students' speaking proficiency level. Meanwhile, the interview was conducted after the TOEIC test to see the students' speaking score using the researcher's interview design.

ETS (2012) argued that TOEIC speaking test is a valid assessment of a person's ability to speak in English. In the relation with interview, Kvale in Dörnyei (2007) defined interview as a one-to-one 'professional conversation' that has a structure and a purpose to obtain descriptions of the life world of the interviewee with respect to interpreting the meaning of the described phenomena.

3.4 Data Analysis

After collecting the data through observation and interview, the data were analysed to draw the conclusion. The analysis of data was elaborated below.

There were several steps conducted in analysing the data collected in this research. The analysis was intended to answer the research questions stated in the previous chapter.

The first data analysis conducted was data analysis from observation. The observation was conducted during the interview. The analysis was based on what the researcher had been observed and noted. After that, the conclusion was drawn to answer the research question on the implementation of interview.

The second data analysis was the data from test. The first test conducted was TOEIC speaking test. The testwas audio recorded. The students' answerfrom the test were transcribed, scored, and interpreted to see the speaking proficiency level of the students. The students' answers were scored based on the criteria of speaking assessment by ETS. The second test conducted was the interview test. The students' answer were also transcribed based on the video recording. Then, the researcher scored the students' answer based on the combination ofthe speaking assessment criteria by Adam and Frith and IELTS.The speaking assessment criteria included fluency and coherence, lexical resource, grammatical range and accuracy, and pronunciation.

After that, the score for each student was obtained based on the result of TOEIC speaking test and interview test. Then, the correlation between students' TOEIC speaking test score and the students' interview score was computed by using Pearson Product Moment Correlation formula. Finally, the interpretation of the data was elaborated to answer the research questions.