CHAPTER III

RESEARCH METHOD

3.1 Research Design

Research design is a strategy in choosing the approach to answer the issue in the study. Creswell (2009) stated that there are three kinds of methods in research design; qualitative, quantitative, and mixed research. The current study applies a mixed research method in answering the research problems. The qualitative research method is used to answer the problem with more detailed explanation for this research. According to Apuke (2017), quantitative research method is described as the process of gathering data in numerical form and analyzing it using mathematical methods, especially statistics, to explain a problem or phenomenon. The important goals in the quantitative method are to get data that has measurement validity, generalizability, and causal validity (Schutt, 2019). Furthermore, Guba and Lincoln (1994) suggest that qualitative method is a term that has been set as descriptive types of method. It is stated by Lewis (2015) that a qualitative method is research that uses inductive data analysis to understand the meaning of participants' hold about a problem. Qualitative method is established by recording data, transcription, and intercoder agreement. The important goals in the qualitative method are discovery, which is developing holistic, comprehensive descriptions of systems, theories, and processes, and identifying factors and working hypotheses that require further research (Jason and Glenwick, 2016).

In this study, the researcher applies mixed-method research. According to Almalki (2016), mixed-method research is a type of study in which researchers combined qualitative and quantitative research methods. This design is used to investigate students' perception about ESP (English for Specific Purpose) speaking materials at the Informatics Department using mixed method research design. Students' perceptions will be used as feedback for a better

system in ESP speaking materials in University of Muhammadiyah Malang. Research participants will describe their feelings and desires to the researcher about ESP speaking materials. The data that was collected by the researcher was in the form of words.

3.2 Research Subjects

Research participants are people who contribute to someone's research. Research participants are usually chosen according to the topic of a research. Because this study focuses on ESP speaking materials and students' perception toward ESP speaking materials, the research participants of this study were students of the 2nd and 4th semesters in the Informatics Department at University of Muhammadiyah Malang. The 2nd semester students were still taking ESP, while the 4th semester students had finished learning ESP speaking. Based on preliminary research, it was found that speaking skills had a high demand in ESP class because the proficiency and fluency in speaking skills could help them fulfil the requirements in the work-field. In addition, the students found that speaking skill was the toughest skill to acquire. Thus, the researcher chose the participants by applying purposive sampling method with snowball sampling technique. Purposive sampling method is used to select respondents who are most likely to provide appropriate and useful information (Kelly, 2010: 317) and is a way to identify and select cases that will make effective use of limited research resources (Palinkas et al., 2015). In the other hand, snowball sampling technique usually start with an individual who has the desired characteristics and use that individual's personal relationships to bring in others with the same characteristics.

3.3 Data Collection

In this study, the researcher used documentation, interview, and questionnaire to collect the data. To facilitate the data collection from the document, a form of checklist which was designed to identify the data regarding the ESP' speaking materials provided by the teacher, to

make the interview effective, an interview guide was used to help the researcher remember what questions to ask during the interview, and to get a clear information towards students' perception in ESP speaking materials, a questionnaire was prepared.

3.3.1 Documentation [Research Question No 1]

The following Checklist of ESP speaking materials was utilized to identify and collect the data about the ESP' speaking materials provided by the teacher in teaching speaking skills.

Speaking Materials Provided by The Teacher	Yes	No	Notes
Self-introduction			
Presentation			
Role-play			
Suggestion and opinion			
Interview			
Invitation			
Advertisement / promote product			
Handle complaint			
Debate			
Telling procedure			
Others			

The steps of documentation analysis are as follows:

1. Developing the checklist of the ESP speaking materials;

2. Consulting and validating the checklist to the teacher;

3. Applying the checklist to identify the ESP speaking materials.

3.3.2 Interviews [Research Question No 1]

Interview is a face-to-face question-and-answer activity between the interviewer and the interviewee to obtain further data or information related to the problem under research. Interviews provide in-depth information relating to participants' experiences and perspectives on a particular topic. The other data collection technique used in this study was an interview equipped with an interview guide as the instrument. Five individual respondents were conducted in English in a setting of the participant's choosing. We recorded and transcribed each interview and assigned each interviewee a pseudonym. Interviews explored the topics that included participants' perceptions of speaking materials in ESP.

The steps taken to collect the data from the interview were as follows:

1. Contacting five respondents via WhatsApp messenger;

2. Giving questions that have been prepared by the researcher to each respondent;

3. Recording each respondent's answers by using a smartphone;

4. Transcribing the answers from each respondent.

3.3.3 Questionnaire [Research Question No 2]

The questionnaire was used to answer the second research question, namely students' perception towards ESP speaking materials. The questionnaire contained eight questions using a Likert scale of 1 – 4.

The steps taken to collect the data from the questionnaire were as follows:

1. Contacting one of the class leaders of Informatics students who was in the 2nd and 4th semester in via WhatsApp messenger;

2. Asking the class leader for permission to share a Google Apps Form's link containing more or eight questions to their respective class groups;

3. Collecting the answers from each respondent.

3.4 Data Analysis

The steps in analyzing the qualitative data obtained from the documentation and interview were as follows:

1. Categorizing the data that had been collected based on the type of ESP speaking materials;
2. Describing each type of ESP speaking materials;
3. Drawing a conclusion based on the results of the data analysis.

The steps in analyzing the quantitative data gathered from the questionnaire were as follows:

1. Categorizing the data that had been collected based on the positive perception and negative perception;
2. Tableting based on two categories, positive perception and negative perception;
3. Finding out score based on the formula used by Faurianda, 2020 on her research below:

$$P = \frac{F}{N} \ x \ 100$$

Information:

P: Percentage

F: Frequency of each answer that the respondent has chosen

N: Number of Respondent

Interval:

Score 8 – 16   : Negative perception

Score 17 – 23 : Neutral perception

Score 24 – 32 : Positive perception

4. Drawing a conclusion based on the results of the data analysis.