CHAPTER III

RESEARCH METHOD

This chapter covers the research design and methodology including target population and sample, data and data source, data collection method, research instrument, data analysis and validity of data.

A. Research Design

There are two kinds of research method commonly used by the researcher, qualitative and quantitative reseach. The distinction between qualitative and quantitative reasearch are qualitative basically framed in term of using words and opened-end question. While quantitative is bassically framed in term of using numbers and closed-end question. (Crasswell, 2013:23).

Beside two basic research methods, Creswell also proposed another research approach, mixed methods research. Mixed methods research is an approach to inquiry combine two research method, qualitative and quantitative to collect data, integrate the two forms data using distinct designs that may involve philosophical assumptions and theoretical frameworks. This combination provides more complete understanding (Creswell, 2013:32).

According to the three approaches to research by Creswell, this research employed mixed methods design. It is the combination of quantitative and qualitative approach to collect and analyze data (Creswell & Tashakkori, 2007). In recent years, integrating qualitative and quantitative methods becomes common in research (Bryman, 2006:19) because mixed method design can provide detailed and comprehensive data in order to achieve the

research objectives and answer the research questions. According to Teddlie and (Tashakkori, 2009:82), there are four types of mixed method research designs: 1) triangulation, 2) embedded, 3) explanatory and 4) exploratory.

This research most appropriately employed the explanatory model, which contains first descriptive quantitative, because the data were analyzed statistically which is to measure the quantity of error in pronouncing vowels. The data collection did through recorded documentation by recording the reading of short text and some words of vowels in order to determine what type of vowel that commonly error in pronounciation based on the voice recording as the answer of the first research question. The second phase, it was focused on qualitative involve discriptive to discribe and explain the cause of error in pronouncing vowels. The data collection did through interview which asked to all participant consist of many questions related with their learning habit and sources in learning English and followed by document review to collect detail views from subjects.

B. Subjects of the Study

The subject of the research is the students of the fourth semester of English Department in IAIN Tulungagung Academic Year 2018/2019.

The number of all students who were active in fourth semester were 232 students. Then, the sample were selected randomly about 20% of the number of population with the formula 20% times the number of population (20/100 x 232 = 46). So the students who were included as sample were 46 students. The sample taken randomly based on the researcher authority.

C. Data and Data Source

Data are the most significant information in the research. Because the data were needed to answer the problem. According to Krippendorff (1991:28) said the data are information of indication have to be written in whole of writing process. In quantitative phase the data of this research was the total number of type of vowels that often occured error in it's pronounciation. Then, in qualitative phase the data were the subjets' information about their habit and sources in learning English to identify the cause of those error.

Data sources are from where or whom the data we got. Ary (1985:41) stated that the primary data is which are corrected directly from the sample. The data sources were taken from 46 of fourth semester of English Department students at IAIN Tulungagung to know the type of vowel that often occured error in it's pronounciation and the cause of those error.

D. Research Instrument

According to Arikunto (2006:149) , Research instrument is an instrument that is used by researcher in applying a method in collecting the data. In this research the instrument used is spoken test and interview.

In addition, Arikunto (2006:150) states that test is a collection of the question or exercises or other instruments that are used for measuring the skills, intellectual/knowledge, ability or talent that possessed by individual or group. Here, spoken test is not a main instrument that used by researcher to

reading a spoken test will give a data about which type of vowel that often occured error in its pronouncciation and by interview all participant will give information about the cause of those error.

Spoken test is used by researcher is a group of words consist 50 words. Those group of word consist of consonants and all vowel. This test take 2 minutes to be done. Then the researcher interview the participants with structured interviews consisting of 7 questions related to the participants' habit in learning English. The answer of the interview is explanation answer to know more deeply the cause of vowel pronounciation error.

E. Data Collecting Method

The purpose of data collection is to uncover the fact related to the variables (Ardiyani, 2015:20). In this research, the first method that used to collect data was documentation. Arikunto (2006:231) stated that documentation method is technique to find data about something and all variables that are classified into notes, transcript, books, photograph, vidio, vioce recorder, epygraphys, notes of meeting, agendas etc. In this study the researcher used voice recorder to collect data during the spoken test to the participant's voice. The recorder was changed into transcription and was analysed to find which type of vowel that often occured error in its pronounciation. This first method focused on quantitative phase through spoken test by as following technique :

1. The Participant are given the spoken test.

2. The participant read aloud the text.

3. The researcher record participant's voice by using phone when he/she read the test.

4. Then, the researcher listened to the recorded pronunciation several times and transcribed them by using the phonetic symbol from the transcription

The second method that used to collect data was interview. Interview are approproate method when there is a need to collect in-depth information on people's opinion, thought, experience and feeling. (McNamara 1999:18). In this research the researcher revealed the participants behaviour in learning English to find out the cause of their pronounciation error. This second method focused on qualitative phase through interview by as following technique :

1. Asked the participant orally by structured interview questions after they finished conduct the spoken test, without turning off the recorder.

2. Collect the recorded.

3. Listen the recorded

4. Transcribe the recorded into a written form

F. Data Analysis

In analyzing the data, the researcher takes some steps. The first is finding out the error. To find out the error, the researcher listens to the recording of the subjects' utterances. The pronunciations of the words are, then, transcribed into phonetic transcription. The researcher uses Oxford Advanced Learner's

Dictionary by Hornby as a standard pronunciation to decide whether the subjects' English vowels pronunciation is correct or not.

After collecting the data, the next step are classifying the data and analyzing the data. In analyzing the data, the following techniques are conducted

1. The researcher analyzed the students' pronunciation.

2. The researcher made category the students' pronunciation based on the right and wrong pronunciation.

3. The researcher made percentage the students' pronunciation.

4. The researcher found the dominant error of the students' pronunciation produced by the students and the reason why they dominantly made their error.

5. The researcher drew the conclusion and suggestion based on the data analysis.

The researcher employed the percentage descriptive analysis to count all error by using a simple formula as follow: (Aminudin: 2000; 23)

$$\chi 1 = \frac{\Sigma \, \text{Er}}{\Sigma \, \text{W}} \, \text{X} \, 100\%$$

Then, analyzed qualitatif data with result of questionare. Ary et al (2010:283) states that data analysis in qualitative can be broken down into four stages they are Coding, Data Reduction, Data Display, and Drawing conclusion or interpretation. Those can be explained as follows :

1. Coding

The first stage in analyzing qualitative data here involves coding. Coding is analogous to getting ready for data provided. The most common approach is to read and reread all data and sort them by looking for units of meaning-words, pharases and sentences to make it easy to be learned. In this stage, after get the data the researcher collected the data. After all data are collected the researcher places all units have the same coding together. It will be easier to read the data. In short, by coding all data that the researcher gathered, the researcher can underline the significant data that are appropriate with the topic of the research. So, it will be easier to read the data.

2. Data Reduction

The second step of data analysis is data reduction. It is a process of reducing the data occuring repeatedly. Moloeng (2006:92) stated that Reducing the data means summarizing, choosing the main thing, focusing on the important thing, finding the topic and the form. In this stage, the researcher get the data from questionare with the 116 students fourth semester of English Education Departement in IAIN Tulungagung. The result of the questionare shows the participant' habit in learning English to fin the cause of vowel pronounciation error. In this step, the irrevalent data is reduced and the needed data is included.

3. Data Display

After data reduction the next step in analyzing data is Data Display. It is process of displaying data in the form of table or essay so what it gets more understandable. Miles nd Huberman (1984:51) points out" looking at displays help us to understand waht is happening and to do something-further analysis or caution on that understanding. In this research the researcher will use esssay in displaying the data, because it is most common data display used in qualitative research.

4. Conclusion Drawing / verification

The last step of data analysis is drawing conclusion. After the data was displayed, then drew a conclusion based on what the researcher found which the most habit and the sources of the participant in learning English that give effect to their pronounciation which causes error in vowel pronounciation. Finally, the researcher can get the result and conclusion of the research.

G. Validity of Data

For determining the data, it is needed to investigate the data. Sutopo (2006) states that the researcher should be able to choose and to decide the most appropriate steps to improve the validity of the data. To obtain the validity of the data, the researcher used external audit and member checking. In conducting the external audit, the researcher asked the person outside the

research to conduct a thorough review of the study and report back, in writing, the strengths and weaknesses of the project (Creswell, 2012:259).

The external audit in this research used for validly the transcription of the recorded spoken test of the participant and questionare. While, member checking is a process in which the researcher asks one or more participants in the study to check the accuracy of the account. This check involves taking the findings back to participants and asking them (in writing or in an interview) about the accuracy of the report (Creswell, 2012:260). The researcher asked the participants about many aspects such as whether the description is complete and realistic, if the themes are accurate to include, and if the interpretations are fair and representative.