CHAPTER III

RESEARCH METHOD

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

A. Research Design

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) 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), 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 level of self-efficacy. The data collection did through survey by distributing questionnaire in order to know the level of self-efficacy as the answer of first research question. The second phase, it was focused on qualitative involve case study to investigated more about the

phenomenon happen with the subjects which used subject selection to collect data information through interview and followed by documents review to collect detailed views from subjects.

B. Target Population, Sample, and Sampling

Population refer to an aggregate or totality of all objects, subjects, or member that conform to a set of speifications (Polit & Hungler, 1999). This research was conducted at IAIN Tulungagung in academic year 2016/2017. The target population of this research included all of eighth semester of English Department students. The number of all students who were active in eight semester were 106 students. Then, the sample of qualitative phase were selected randomly about 50 % of the number of population with the formula 50% times the number of population (50/100 x 106 = 53). So the students who were included as sample were 53 students. The sample taken randomly based on my authority. Then, collected the data from them to know their level of self-efficacy.

For the qualitative phase, to know the English students' strategies to develop their self-efficacy, it involved purposeful sample, which implied intentionally selecting individuals to learn to understand the central phenomenon (Miles & Huberman, 1994). The idea was to purposefully select informants, who will best answer the research questions and who are "information rich" (Patton, 1990, p. 169). The informants were selected by subject criteria as follows :

1. The students whose level of self-efficacy are high

2. The students who have taught in a certain school as an English teacher.

C. Data and Data Sources

Data are the most significant information in the research. Because the data were needed to answer the problem. According to Krippendorff (1991) says the data is information of indication has to be written in whole of writing process. In quantitative phase the data of this research was the percentage of self-effiacy level. Then, in qualitative phase the data were the subjets' information about their strategies to develop self-efficacy.

Data sources are from where or whom the data we got. Ary (1985) stated that the primary data is which are corrected directly from the sample. The data sources were taken from 53 of eighth semester of English Department students at IAIN Tulungagung to know self-efficacy level. Whereas, the data of students' strategies to develop self-efficacy were taken from 3 students who met criteria of subjet selection which students should have high level of self-efficacy, also have taught in a certain school as the English teacher.

D. Research Instrument

Instrument is a tool to collect the information then sellected the data needed to answer the questions. In this research I used questionnaire as the instrument to collect quantitative data. The questionnaire used to measure the level of self-efficacy in this research was the short form, 12-item, Teachers' Sense of Efficacy Scale (TSES) as stated in Appendix 1 , sometimes referred to as the Ohio State Teacher Efficacy Scale constructed by Tschannen-Moran and Woolfolk Hoy (2001). Tschannen-Moran and Woolfolk Hoy indicated that the short form is sufficient in length and is as valid and accurate a measure of self-efficacy as the long form, 24-item TSES. This scale measured the perceptions of how capable a teacher thought he or she was at bringing about student learning. The answers are scaled on a unit continuum from 1 to 9 with anchors at $1 - 2$ *Nothing*, $3 - 4$ *Very Little*, $5 - 6$ *Some Influence*, $7 - 8$ *Quite a Bit*, and $9 - A$ *Great Deal*, and to determined whether the level was high and low I corelated the instrument with the theory about level of self-efficacy from Bandura.

In qualitative phase used the interview guide and followed by documents review to collect data. The interview guide, I adapted theory from Bandura about some ways to develop self-efficacy beliefs. There are 15 number of questions as stated in   Appendix 2.

E. Data Collection Method

In this research, the method were used to collect data first I focused on quantitative phase through survey by as following technique :

1. Distributed questionnaires to 53 respondents

2. Collected the questionnaires done by respondents

3. Read the each of questionnaire

In second phase, the technique of collecting data involved qualitative through interview by WhatsApp application followed by documents review as follows :

1. Selected subjects from the respondents who had high level of self-effiacy also have taugh in a certain school as the english teacher

2. Interviewed subjects only once of each because the time was enough to get the informations were needed. It was done in different date because I adapted with subjects' free time. The process interview using WhatsApp can be seen in Appendix 3.

3. Read the result of interview in each subject

4. Sellect the subjects' informations needed to answer the research question

5. Review the subjects' documents related with their ways to develop self-efficacy. The documents can be seen in Appendix 4.

F. Data Analysis

In quantitative phase I analyzed the data using descriptive statistic such us mean. It was used to know level of self-efficacy, then counted the percentage to know how many percent were the high and low level of self-efficacy. The steps of data analysis were as follows :

1. Counted the mean to know the scale of each students' self-effiacacy with formula. It was shown in table 3.1 below:

Table 3.1 Formula to Count Mean

$$\text{Mean} = \frac{\text{Number of Scale}}{\text{Number of Questions}}$$

4. Categorized them based on the level whether high or low

5. Count the persentage of each level by using formula as shown in table 3.2

Table 3.2 Formula to Count Percentage

$$\% = \frac{\text{Number of students whose level}}{\text{Number of sample}} \times 100\%$$

After knowing the percentage of each level, I analyzed and gave definition about each level means that why it should be low and high based on the theory of Bandura and Tschannen-Moran and Woolfolk Hoy

Second phase, analyzed qualitatif data with result of interview and followed by subjets' document such as sertivicate or other document which supported and made data powerful.

Bogdan & Biklen (1998) states data analysis is the efforts made by working with the data, organize data, sorting out into manageable units, synthesize, search and find patterns, find what is important and what is learned, and decide what can be told to others. The activity in the data analysis is devided into three, involves :

1. Data Reduction

Data reduction was summarizing, choosing and focusing on information that are important which can be the data to answer research problem, looked for the information about their way to develop self-efficacy. After read the result of interview many times, then I made a transcription as stated in Appendix 5, and reduced data as stated in Appendix 6. After that, coded the data based on the number of subject to indicate each subject and single capital letter for the subjects' information about the strategies they used to develop self-efficacy that can be shown in Appendix 7. Coding used to select data needed to answer the second research question which related with their way to develop self-efficacy with supported by the document they had, and the informations that were not relevant with second research problem about their way to develop self-efficacy would be reduced.

2. Data Display

After the informations were reduced, then the next step was displayed the data in the form of table based on the coding done. Looking at the data display help us understand and found what their done to develop their self-efficacy as the data to answer the second research problem.

3. Conclusion Drawing / verification

The last step of data analysis is drawing conclusion. After the data was displayed, then drew a conclusion based on what I found which were about the subjects done to develop their self-efficacy so that their self-efficacy were high. Finally, the researcher can get the result and conclusion of the research.

2. Trustworthiness of Data

In quantitative phase, the data were trusted through validity and reliability. Validity included Internal and External Validity. Internal Validity measuring what it is supposed to measure. External validity measured hold across different setting, proedures and participants. Reliability was the cconsistency of a set measurements of measuring instrument. In this phase, I was sure this data were trusted, because the instrument used are developed by theoritists such as Tschannen-Moran and Woolfolk Hoy combined with Bandura's theory. The instrument have been used many times in some researches related with self-effiacy as like Donna, Susanne, Jayne (2011)

Megan (2015), Waitshega & Ntonghanwah (2015), Tracy (2016), Anna & Karla (2016), and etc.

In qualitative research, there was a common technique that is usually used to increase the research data validity. The technique was called Triangulation. Triangulation was defined as technique of collecting data by combination of some different data sources, methods, researchers, and theories. According to Denzin in Moleong (2006:330) triangulation used to analyze data based on sources, method, investigator and theory. In this research, I used a triangulation of methods, means the methods of collecting the data were interview, then combined with document review to ferify the data. In verifying data from interview, it will be added from documents' subject for having a crossheck that the subjects' information were trusted. In this phase, expert validity also used to make the data were trusted. The validity from expert can be seen in Appendix 8.