# **Chapter Three**

#### Methodology

This chapter consists of six parts, including the research design, research participants, research setting, research instrument, data collection method, and the last is data analysis. In the research design, the researcher explains what kind of research design used by the researcher. The research participants section aims to elaborate the participants of the research. The research setting gives the information about where and when the research is conducted. The research instrument section aims to explain what kind of instrument used by the researcher. In data collection method, the researcher reveals how the data is obtained. Data analysis describes the way the findings are analyzed.

# **Research Design**

The objective of this study is to find out the EED of UMY students' perception on the use of gadgets as tools in learning English, including the advantages and disadvantages of using gadgets in the learning process. It also reveals kinds of gadgets that students always used. Based on the objectives above, the researcher used qualitative research design in this study because the researcher wanted to reveal the students' perception, and the researcher allowed the participants to explain their experiences. It is supported by Hancock, Ockleford, and Windridge (2009) who state that qualitative research is suitable in answering questions dealing with:

(a) Why people behave the way they do; (b) how perceptions and attitudes are formed; (c) How people are affected by the events that happened

around them; (d) how and why cultures and practices have developed in their way (p.7).

In this study, the researcher used descriptive qualitative method. The researcher used this method to get the complete data that are related to the research title which is English Education Department of Universitas Muhammadiyah Yogyakarta students' perception on the use of gadgets as tools in learning English. The reason why the researcher used descriptive qualitative method was that the researcher wanted to know the real picture that really happened in the students' learning situation. In addition, Lambert (2012) stated that "the goal of qualitative descriptive studies is a comprehensive summarization, in everyday terms, of specific events experienced by individuals or groups of individuals" (p. 255).

# **Research Setting**

This study was conducted at EED of UMY. Since it supports the use of technology in English language learning, proven by the existence of five courses that support the use of technology, namely Computer Literacy 1 (Offline Computer), Computer Literacy 2 (Online Computer), Information and Communication Technology in Language Teaching, Innovative Technology and Digital Technology in Education. The second reason is that it was easier for the researcher to manage the place and time to collect the data from the participants, since the researcher is also a student at EED of UMY. In order to collect the data, the interview was conducted in May 2017. The reason was that, at that time, the students still had classes in the university; that is why the researcher could easily find the students around the department.

## **Research Participants**

The participants of this research were students of EED of UMY who use gadgets to assist their learning process. There were two criteria and several steps in determining the participants. The first criterion is currently enrolled students of EED of UMY. In this case, the currently enrolled students mean that students who still become a student of EED of UMY when the data were taken. The second criterion is students who already have their own gadgets and students who used their gadgets to facilitate in English learning process.

Afterward, the researcher did an observation to find the participants. After finding the participants, the researcher asked each participant related to the criteria. The criteria and steps were required to obtain the information from the participants. Then, after the requirements were fulfilled, the researcher asked the students to become the participants in this research.

#### **Research Instrument**

The instruments of this study consisted of interview guideline and smartphone recorder. In the application, the function of the recorder was to record the data from the participants, to make it easier for the researcher to analyse the data. Then, to organize the question and to make easier in delivering the questions, interview guideline was applied by the researcher. The researcher used some of the theories experts' definition in determining the interview guideline, then, found out the problem in the real context of this research. To make deeper understanding and avoid misunderstanding between the researcher and participants, the interview was done in *Bahasa Indonesia* since the participants and the researcher are the native speaker of *Bahasa Indonesia*.

### **Data Collection Method**

In this research, the researcher used the interview as a data collection method, and to gain more information, the researcher chose interview in this study. Mack, Woodson, MacQueen, Guest, and Namey (2005) stated that, "interviews are optimal for collecting data on individuals' personal histories, perspectives, experiences, particularly when sensitive topics are being explored" (p. 2). By doing an interview, the researcher felt easier to gain the information based on the participants' experiences of using gadgets as tools in learning English. In order to help the researcher to get deeper information and more comfortable in delivering the questions, this study used semi-structured interview, since this method allows a new idea from the participants during the interview, although the researcher already had an interview guideline.

The open-ended question was selected by the researcher as the data collection method. Open-ended questions provide much more diversity of answers (Reja, Manfreda, Hlebec, & Vehovar, 2003). In an open-ended question, the queries are arranged in sequence in asking the questions. So, it is helpful for the researcher in asking questions, and also reduces interviewer effects and bias when several interviews are used. By using open-ended question, students are free to answer each question using their own words, and these answers will be more complex rather than "yes" or "no" answer (Mack, Woodson, MacQueen, Guest, & Namey, 2005).

The procedure of data collection is mentioned one by one. First of all, the researcher prepared questions, and made the interview guideline. Second, the researcher recruited the participants, and made an appointment. Third, the

researcher executed the interview with the participants. In order to secure anonymity of the partipants, the researcher changed participants' names into P1, P2, P3, P4, so that the participants can give the information freely and honestly. The length of interview was about 8-12 minutes. After the data were gathered, the researcher transcribed the data from the recorded data to the text data. Later, the researcher conducted a member checking to know whether the data and transcriptions were correct or not. Member checking is the accuracy and validity checking process in which the researcher asks one or more participants (Creswell, 2012). In delivering the member checking process, the researcher sent the data through their email since the researcher and the participants were separated by the distance. The participants did not give any comment in the data reported, which means they give an agreement related to the transcriptions of the interview.

# **Data Analysis**

In this study, data analysis takes an important role. According to Burns and Groove (2003), data analysis is a mechanism process in order to reduce and organize data and then produce it into findings by researcher interpretation. Therefore, the researcher reduced and managed data to produce findings by arranging, organizing, and categorizing the data. The next step was coding. Saldaña (2009) stated that coding is the process of qualitative research using a word or short phrase that symbolically capture the important things. The process of coding was divided into three sections. First was an open coding; second was axial coding, and the last was selective coding. Open coding is the process of labeling parts of the transcribed text (Konecki, 2011). In open coding, the researcher broke down the data into smaller units, then after that, the results were placed in the next step, which is axial coding. According to Böhm (2004), axial coding is a process of filtering and distinguishing the data into some categories. In this step, the researcher created some categories in order to put the data from open code. The last step was selective coding. Böhm stated that in selective coding, the researcher takes an important part which is in this part, the researcher identifies the core categories from the previous data. So, in this process, the researcher identified the core of categories that had been filtered before. The final results from selective coding was the findings of this study that are related to the research questions