

## **Chapter Three**

### **Research Methodology**

This chapter discusses how the research was conducted and how the data were gathered. It identifies the research design, setting and participants, data collection method and data analyzing technique. Research design is used to explore about kind of research design was used in this study. Setting and participant present where the data was gathered and also what types of participant were chosen as the subject of this research. In the data collection method, the researcher describes how to collect the data, while data analysis presents steps to analyze the data.

#### **Research Design**

The purpose of this research is to investigate the lesson plan implemented by the students of EED UMY. In conducting this study, the researcher needs to know and choose which type of methodology that is supposed to use in order to answer the problems of the research. Choosing the right methodology can help the researcher to find a way to reach the purpose of the research. Furthermore, the aim of the research is to describe, explore, solve, conclude or summarize the problems of the research in a convinced way.

In line with the purposes, this study was conducted using qualitative methods. According to Creswell (2012) qualitative is one of analysis data to explore a problem and develop a detail and understanding of a central phenomenon. In addition, this study used descriptive qualitative design because the result of this research is

phenomenon and opinion of people that is not quantifiable. By using descriptive qualitative research, it can give detail information to this study. Knupfer and McLellan (2000) mentioned that descriptive qualitative research brings the ability to describe in greater as needed to focus on various elements of different research technique and to organize information in meaningful ways.

### **Setting and Participants**

**Setting.** This study took place at SMA Muhammadiyah 4 Yogyakarta which is located in Prenggan, Kotagede, Yogyakarta. There were three reasons why the researcher chose SMA Muhammadiyah 4 Yogyakarta as the research setting. First, SMA Muhammadiyah 4 Yogyakarta was one of the schools where the internship program of EED UMY was conducted. Second, the internship program at this school was still running, so there was a chance for researcher to observe the pre-service teachers at that school. Third, the EED UMY pre-service students did the teaching individually at this school, so the researcher only focused on one participant during the observation. Besides, in the other school conducted group teaching for one class. The observation was conducted from April until May 2017.

**Participants.** The participants of this study were pre-service teachers of EED UMY batch 2014 who did the internship program at SMA Muhammadiyah 4 Yogyakarta. Three EED UMY students of batch 2014 were chosen by which several criteria were applied using purposive sampling technique, or judgment sampling. Etikan, Musa, and Alkassim (2016) revealed that the purposive sampling technique is called judgment sampling. It is non-random technique that does not need

fundamental theories or a number of respondents. These three participants were selected in this study because of some reasons. First, these students had already learnt several subjects related to designing lesson plan and the way to implement their lesson plan. Second, these students had experiences in teaching practice in semester two and semester four. In the internship program they had written lesson plans to conduct teaching and learning process. In addition, the researcher used the pseudonym in reporting the result in order to protect the identity of the respondents.

### **Data Instruments**

The data instruments used by the researcher to collect the data were documents, field note and interview protocol.

**Documents.** Documents were used as the researcher's guideline when the researcher did the observation. The documents that the researcher used were the participant's lesson plans. The researcher asked the participant's lesson plan long before the day of observation. So, the researcher could read and learned the lesson plan before the observation in order to understand what the participants would do in the classroom. The documents that the researcher used were presented in appendix 2, appendix 3 and appendix 4.

**Observation checklist.** The observation checklist was conducted to help the researcher note points that were going to be in the classroom. There were aspects which were observed in the observation checklist. The aspects were the objectives of the lesson, the materials, the activities, and the assessments. According to Brown

(2001) which quoted by Sesoriona (2014) objectives, media, activities and assessments are the essential elements that should be included in lesson plan. All of the aspects observed were based on the participant's lesson plans. So, during the observation the researcher judged the aspects based on the lesson plan; whether the aspects were implemented in the classroom or not.

**Interview protocol.** Interview protocol was used as one of the data instrument for this research. According to Cohen, Manion, & Morrison (2007) the purposes of interview is to gather the data about the participants experience in their life situation. The researcher made interview protocol in order to ask some unclear information from the observation and to identify challenges faced by EED UMY students in implementing lesson plans. The researcher used *Bahasa Indonesia* in interview protocol to ease the participants and the researcher to communicate because both of the researcher and participants is Indonesian. The researcher used a mobile phone in the process of the interview to record the conversation. Interview protocol was presented in appendix 5.

**Video recorder.** Video recorder was utilized to help the researcher record the activities in the classroom during the observation. The researcher used a mobile phone to record the activities happened. Video recorder was to help the researcher recall things that happened in the classroom. During the live observation the researcher only focused on the observation checklist so that the researcher needed a tool to recall the things that happened in the classroom. Using the recorded video, the researcher could recheck what she got from the checklist.

### **Data Collection Method**

The methods used by the researcher to collect the data are observation and interview.

**Observation.** Observation was conducted to get detail information. By using observation, the researcher had an opportunity to watch events and activities in the classroom directly. According to Creswell (2012), “observation is the process of gathering open-ended, firsthand information by observing people and places at research site” (p.213). Of the three participants, the researcher conducted the observation three times, meaning that each student was observed once. Before doing the observation, the researcher learned the lesson plan that they designed earlier, so the researcher understand what the participants would do in the class.

According to Cohen, Manion and Morrison (2011), there are three types of observation; highly structured observation, semi-structured observation, and unstructured observation. In this research, the researcher used highly structured observation, because the researcher had known what she wanted to observe. The researcher observed the implementation of lesson plan in teaching practice by EED students of UMY and the researcher also had preparation to do the observation.

In this research, the researcher observed the phenomenon in the classroom as a non-participant observer. Creswell (2012) assumed that outsider or non-participant observer is an observer who sits on some advantageous place (e.g. the back of the classroom) to watch and record the phenomenon under study. Besides, the researcher

also used document study method in which she should prepare the observation sheet to help her note points that was going to be observed. The researcher also prepared a video recorder as the instrument to record teaching and learning process when the students or pre-service teachers implemented their lesson plan in the classroom.

During the observation, the researcher filled the checklists about the implementation of lesson plan in the classroom. So, in this study the researcher noted whether pre-service teachers implemented their lesson plan in the classroom or not based on the lesson plan that they made. After the researcher had done checklist note, then she categorized the result of the observation into some aspects such as written in the lesson plan. The researcher also recorded the teaching learning processes by using video recorder so that after the observation she could watch the video. It helped her to make sure that things she noted on the checklist were correct. When the researcher found out some aspects in the lesson plan which was not implemented in class room, then she clarified it or asked the participants by conducting in-depth interview.

**In-depth Interview.** The interview was conducted to clarify some unclear information from the observation and to identify challenges faced by EED UMY students in implementing the lesson plan. Boyce and Neale (2006) argued that, “in-depth interview is a qualitative research technique that involves conducting intensive individual with a small number of respondents to explore their prospective on a particular idea, program or situation” (p.3). This study used interview guide approach as the instrument. By using interview guide approach, the researcher interviewed participants based on the observation by asking something which was unclear during

the observation and also identified what challenges faced by participants. Cohen, Manion and Morrison (2011) argued that the strength of interview guide approach is making the outline increases the comprehensiveness of the data and makes data collection systematic for each respondent.

The researcher used tools to conduct the interview. First, audio recorder was used to record participants' voice in answering the questions. Second, a notebook and a pen were used to write additional information. After that, the researcher made an appointment with the participants to do interview. After the researcher and the participants had an agreement, the researcher asked the leisure time of the participants.

The researcher asked the participants to watch the video of their teaching practice that they conducted previously, so they could remember what the activity that they had and had not been implemented in the lesson plan. Then, the researcher started the interview to the participants. If there were aspects in lesson plan which were not implemented in the classroom, the researcher investigated it. During the interview, the researcher used Indonesian language in order to gain clear and detail information. Both of the participant and the researcher were Indonesian so the information was easier to obtain if they used their native language.

### **Data Analysis**

To analyze the data, the researcher used descriptive qualitative analysis. Lacey and Luff (2009) mentioned that “qualitative data analysis is the mass of words

generated by interviews or observational data needs to be described and summarized” (p.6). The processes of analyzing data started from analyzing the result of the observation through the observation checklist. The researcher changed the result based on the observation checklist into written text in the form of table. Then, the researcher made the result became narrative text based on the situation during the observation. The second step was transcribing the interview record into written text. Creswell (2012) argued that “transcription is the process of converting audiotape recordings or field notes into text data” (p.239).

The next stage was coding analysis. Coding analysis is a process to make sense out of text data, divide into text or images segments, label the segments with codes, and examine codes for overlap and redundancy into board themes (Creswell, 2012). Coding has three steps; open coding, axial coding, analytical and selective coding. Open Coding is making new label and breaking down the data into the smaller units and then examining until categorizing the data. According to Cohen, Manion and Morison (2011) who said that axial coding is a category label ascribed to a group of open codes whose referents are similar meaning. Analytic coding is in depth descriptive code. Further, selective coding identifies the core categories of text data, integrating them from a theory (Cohen, Manion and Morison, 2011). Those items were used by researcher to analysis the data.

### **Interpreting Issues**

Interpreting issues was conducted in this research in order to ensure validity of the translation of the interview. According to Temple and Young (2004),



translation and interpretation issues generally discuss validity in terms of ‘correct’ interpretation, register, ethics, and matching of social characteristic and neutral stances. Translation and interpretation were used to translate from other languages to English, in this study, from Indonesian into English.

In-depth interview with the participants was conducted as one method for this research. During the interview, the researcher used Indonesian language because both of the researcher and the participants were Indonesian, so the information was easier to obtain if they use their native language. In this research, the researcher needed an interpreter to translate the result of interview. Temple and Edward (2002) said that “the translator, the interpreter is pivotal to the final research product” (p.6). It was used to ensure that the language used in the translation is ‘correct’ interpretation. Here the researcher tried to translate the data interview by herself, but to make sure the translation was correct she asked for help to one of the lectures in the Universitas Muhammadiyah Yogyakarta in order to check the translation.

### **Trustworthiness**

Trustworthiness of qualitative research generally is questioned by positivists as the concepts of validity and reliability (Shenton, 2004). Trustworthiness in this study was used to ensure that the data can be trusted. There are four types of trustworthiness such as credibility, transferability, conformability, and dependability. Of these types of trustworthiness, credibility or how the researcher feels confident with the truth of the finding, was used (Anney, 2014). Thus, credibility determines whether or not the findings represent reasonable information from the participants’

original data and it has correct interpretation of the participants' original view (Anney, 2014). In analyzing the data, the researcher ensured that the data which she took were true. Trustworthiness of this research was then maintained by member checking. Creswell and Miller (2000) mention "member checking consists of taking data and interpretations back to the participants in the study so that they can confirm the credibility of the information" (p.127). So, the participants checked the interview transcripts to make sure that what were written were truly their words. Shenton (2004) mentioned that member checking should involve verification of the investigator's emerging theories and inferences as these were formed during the dialogues.