CHAPTER III
METHODOLOGY

This chapter gives information on how the study was conducted. It gives information on how the data were gathered and analyzed to answer the problems. This chapter consists of the research type, the nature and sources of the data, the research setting and participants, the technique of collecting the data and analyzing the data.

A. Research Type

This research investigated the students' perception on the use of mind mapping technique in reading. The methodology that was employed in this research was qualitative. The researcher expected to find out the answers to the research questions (1) how do the students perceive on the use of the mind mapping technique in reading? and (2) what are the strengths and weaknesses on the use of the mind mapping technique in reading?

In depth information analysis was applied in this methodology; this type is expected to help the researcher understand the participants' perception about their learning experience during mind mapping technique in reading course. On the other hand, based on the characteristic of generic qualitative research, it seeks to discover and understand the phenomenon, a process, or the perspectives, (Meriam, 1988, p.11).

B. Nature and Sources of the Data

The nature of the data is the participant's audio-recorded data during the interview with the researcher. The sources of the data are: (1) six participants of the research. (2) audio-recorded interviews.

C. Research Setting and Participants

1. Setting

The research was conducted at the English Education Department of Universitas Muhammadiyah Yogyakarta. There were two reasons in choosing the English Education Department of UMY to be the setting of this research. The first one was that the English Education Department was a new study program which was established in 2010. There was no previous research about students' perception on the use of the mind mapping technique in reading at Universitas Muhammadiyah Yogyakarta. Therefore, the researcher was interested in conducting the research about the topic. In addition, the result of this research will be beneficial for the institution in evaluating its programs, especially the *Basic Reading and Writing Course*. The second reason was that term of accessibility. The researcher is also a student of the English Education Department of Univeristas Muhammadiyah Yogyakarta. Thus, it will be easier for the researcher to conduct the research.

2. Participants

According to Cresswell (2008) purposive sampling is the most common sampling technique applied by many qualitative researchers. In this method, the researchers did not randomly select the participants of the

research but she selected the participantsin a strategic way so that the sample is relevant to answer the research question (Bryman, 2012). In addition, Lewis (2003) suggests that purposive sampling is particularly suitable for studies which involve subject with particular features. They argue that it is essential to decide which criteria used purposive selections: "the choice of purposive sample criteria is influenced by a review of the aims of the research" (Ritchie and Lewis. 2003. p. 97).

The participants of this research were six students of the Englih Education Department of Universitas Muhammadiyah Yogyakarta academic year 2010/2011. The reason of choosing them as the participants was because these students had experienced the mind mapping technique in the learning process of *Basic Reading and Writing,* when they were in the first semester.

In determining the number of participants to be interviewed in this research, the researcher relied on the concept of theoretical saturation. According to Lewis (2003), theoretical saturation is the general rule in determining the number of the respondents, in which there is no new data or theme from the interview, the interview can be stopped.

Based on data, gathered from the six participants the interview is stopped to until the sixth participants, as the data are considered enough to answer research questions.

D. Technique of Collecting Data

In this research, the researcher used semi-structured interview. According to Bloom and Crabtree (2006), a semi-structured interview involves asking a series of structured question and then probing more deeply with open-form question to obtain additional information. The researcher chooses this type of interview because it provides more focus question than the informal approach, in which no predetermined question will be asked, but it still allows a degree of freedom and adaptability in getting information from interview.

Before conducting the interview section, the researcher did piloting project to participants, prior to the collection of data at Universitas Muhammadiyah Yogyakarta site, a pilot study was completed to evaluate the effectiveness of interview for data collection purposes. A pilot study gave the researcher the chance to practice parts of the research study on a smaller sample to help confidence as a researcher (Basit, 2010). During the pilot study for this research project, students in academic year 2010/2011 were interviewed in a semi-structured. This provided the opportunity to not only practice the interview questions but also the techniques involved in conducting a semi-structured interview.

Based on the result of the piloting interview notes, the researcher gained some important insights from this interview; however it also left her with some queries and questions related to the topic. This is also helpful as it provides the researcher with a base from which the researcher can write more

questions for future interview. The researcher also planed and carefully analyzed question, the researcher wrote to ensure that they are suitable and can be easily understood by the respondents. Future interview questions were examined by the researcher with a non-vested interest. This was ensured that each question can be clearly understood and fits appropriately with research topic.

Member checking was the last step in the process. Member checking is to allow a participant to read portion of the draft the report that includes information about them. Participants were asked to reconfirm the data when interpretation is not credible. (Merriam, 1988: 52). After the researcher got the data, then read and re-read them and when found unconvincing ideas or opinions, the researcher reached the participants again and made sure the data were true. The participants were then given the data found in the interview and asked to give confirmation whether the data were based on their perceptions. Furthermore, when the researcher needed more information, the researcher asked further questions to the participants.

E. Technique of Data Analysis

Data analysis can be defined as the process of bringing the order, structure, and interpretation to the mass of collected the data. In this research researcher used qualitative data analysis. Qualitative data were analyzed without using number. The researcher gets the qualitative information from data interviews, (Sugiyono, 2008).

In analyzing the data for the first step, the researcher collected the data

researcher analyzed the data interview. After conducting the interview, the researcher transcribed the data from the audio-recorded interview to transcription and then analyzed the data by using coding. Coding is the process of segmenting and labeling text to form description and broad themes in the data (Creswell, 2012 p. 243). Besides that, there are three stage in coding. To begin with, open coding. According to (Straus and Corbin, 1990, p.61). Open coding or classification of concepts. This classification is discovered when concepts are compared one against another and appear to pertain to similar phenomenon. Second stage is axial coding; it is a set of procedures whereby data are put back together in new ways after open coding, by making connections between categories. (Straus and Corbin, 1990, p. 96). The final stage is selective coding; selective coding refers to final stage of data analysis to be completed after core concepts emerging from the coded data categories and subcategories have identified through open and axial coding, Straus and Corbin (1990). This in the process, the researcher intentionally selected the specific data which are related to the specific or answer the research questions. After the data had been coded, the researcher developed categories. Categories are the broader idea which covers similar codes (Creswell, 2012). The categories would be referred to the literature in which, benefit of mind mapping technique based on Buzan (2003). However, in case the codes were not capturing any category that is suggested in the theories used in this study the researcher would develop new categories. Afterwards, the researcher interpreted the data. This data analysis is known as inductive data analysis (Backer, 1958)