

## **Chapter Three**

### **Research Methodology**

This chapter presents the methodology used in this research. The researcher explains the research design, research setting, participants, data gathering/collection technique, data collection procedure, and data analysis technique. Research design explains about the approach of the research. Research setting explains about time and place of the research. Research participant explains about who and how much the participants of the research. Data gathering method/collection technique explains about how the researcher gathering the data of the research. After that, data collection procedure explains about the steps of collection data. Last, the chapter explains about data analysis.

#### **Research Design**

This research adopted a descriptive qualitative design. Descriptive qualitative was appropriate for this research because this research analysed student's opinions about using mind mapping to support their writing skills. In addition, the research was aimed to know students' problems in using mind mapping. The design of descriptive qualitative was appropriate for the study because it is about the phenomenon which is not quantifiable. Qualitative is best suited to overcome a research problem (Cresswell, 2012) as well as give detail information to this study.

In line with the purposes, this research used a qualitative method. Cresswell (2012) asserted that qualitative is one of the types educational research

methods that is best to develop a detailed, exploring, and specific understanding of the main problem.

### **Research Setting**

**Setting of Place.** The research was conducted in English Language Education Department (ELED) of Universitas Muhammadiyah Yogyakarta. The researcher had some reasons; the first reason is in this department had been taught mind mapping in “Interpretive Reading and Argumentative Writing” subject. The second, there were possibilities that some problems happened in using mind mapping.

**Setting of Time.** This research took seven months in order to get maximum, clear, and precise results. This research was conducted from November 2018 to April 2019. During that time the researcher wrote the background on the first chapter and the literature review. Furthermore, the researcher wrote a research methodology, such as what methods were used, where and who was involved, what the techniques were used when retrieving the data, and how the researcher analyzed the data. The gathering of the data was conducted in May, the researcher needed one week to analyze the data. Then, the researcher needed three weeks to do the chapter four and chapter five that explained about findings and discussion. Finally, this research completed in May 2019.

### **Research Participants**

The participants of this research were students of ELED of Universitas Muhammadiyah Yogyakarta. The participants were chosen by several specific

criteria. First, they were the students who already used mind mapping. Then, they were students who had taken “Interpretive Reading and Argumentative Writing” class. The reason of choosing this course, because this course had taught about mind mapping. Also, the students had used mind mapping as their writing strategy. The researcher found the first participant from recommendation of her friend.

The researcher asked the lecturer who has taught the students to use mind mapping to confirm the statement about mind mapping in courses. The researcher asked the lecturer about how many class that have taught mind mapping and how the lecturer taught about mind mapping. Then, the researcher chose the participants with the criteria. The participants were from batch 2017, because batch 2017 was the last batch that got mind mapping in “Interpretative Reading and Argumentative Writing”.

Furthermore, the sampling technique in this research was snowball sampling. Cohen, Manion, and Morrison, (2011) mention "the researcher identifies a small number of individuals who have characteristics in which they are interested" (p. 158).

The researcher found the first participant from recommendation of her friend. Then, the researcher found the other participants by asking previous participants. The researcher asked them to recommend their friends who have the same criteria with them.

There were four participants and all of them had used mind mapping and they were female, because from recommendations of participants, they recommended their friends who also use mind mapping and happen to be all female. The researcher wanted to know the participants' perceptions of using mind mapping in their writing. The researcher used the pseudonym to protect the identity of the participants in reporting the result.

**TABLE**  
**Profile of Participants**

<b>No.</b>	<b>Name</b>	<b>Class</b>	<b>Age</b>	<b>Gender</b>
1.	Emma	F	20	Female
2.	Ammi	C	20	Female
3.	Arra	E	18	Female
4.	Rara	D	20	Female

### **Data Gathering Technique**

This research used individual interviews for research instruments. Ling stated interview is objective or subjective, but it is intersubjective (as cited in Cohen, Manion, & Morrison, 2011). The interview is a flexible way for data collection, enabling multi-sensory channels to be used; hear and speak, verbal and non-verbal (Cohen, Manion & Morrison, 2011). The reason of choosing this instrument was because it can make easier for the researcher to understand the answers of participants during the interview.

Furthermore, the research used a standardized open-ended interview as the type of interview. Patton mentioned the questions already created and the participants will answer the same questions given by the researcher. Then, the researcher used open-ended items as the construction of schedule in the research. Open-ended questions are flexible, it means the researcher can get more information to clear up any misunderstanding (Cohen, Manion, & Morrison, 2011). Related to his argument; the researcher showed some interview guidelines to the participants. So, the participants can prepare well to answer the questions of the interview.

Moreover, the researcher used indirect questions for question formats. Tuckman described indirect questions is a way in asking of something when the answer is open answered such as the opinion of participants. Indirect questions can produce an honest answer and open responses (Cohen, Manion, & Morrison, 2011). The researcher also used general issues to ask the participants to find how the participants respond to issues and to find out the information from the participants. The researcher was asked the participants about writing techniques that students can be used. In addition, the researcher used unstructured response as the response modes. Unstructured response is flexible response for participants, it means the participants have the freedom to give their answer (Cohen, Manion, & Morrison, 2011). This response allowed the participants to give their answer in whatever way they choose.

## **Data Gathering Procedure**

The researcher used interview for collecting the data. The researcher asked some questions about mind mapping to the participants. Before the researcher gave some questions, the researcher created the interview questions for participants that were related to research questions. The researcher used *WhatsApp* to contact the participants to make an appointment. After the researcher and the participants had an appointment, the researcher prepared well about the interview questions.

The interview was conducted at campus or in the conducive places such as boarding house or café. The researcher used Indonesian language to avoid misunderstanding with the participants. The researcher used an audio recorder, pen, and notebook to facilitate her when she analysed the data. While doing the interview the researcher gave a flexible time to participants so that participants can answer all of the questions without a rush. First, with Emma, the researcher and Emma met on Friday, 12 April at 12.30 p.m. in cafeteria and had the conversation during 00.11.38 minutes. Second, with Ammi, the researcher and Ammi met on Friday, 12 April at 03.30 p.m. in library and had the conversation during 00.15.34 minutes. Third, with Arra, the researcher and Arra met on Sunday, 14 April at 01.00 p.m. in cafeteria and had the conversation during 00.11.04. Then, with Rara, the researcher and Rara met on Sunday, 14 April at 06.00 p.m. in café and had the conversation during 00.15.46 minutes.

## **Data Analysis**

The researcher transcribed the recording after collecting data with interview. Transcribing the data is the first step to produce the result of this research. The researcher transcribed the data by using a pseudonym for each participant's name. First, the researcher transcribed the record of the interview. Heyner mentioned transcription is also non-verbal and paralinguistic communication is not only noting the statement (as cited in Cohen, Manion & Morrison, 2011).

Then, the researcher conducted interpretation and marked the answers of the main questions and follow-up questions. These steps are a way to make sure which questions had been answered by participants. The researcher also conducted member checking to explain the accuracy of the interview result. Next, probing in which the researcher conducted the probing to complete the data. The aim of probing is to get more data and to avoid misunderstanding (Saldana, 2009). The researcher confirmed the participants if the researcher finds incomplete data. Three for four participants confirmed which the data represent enough and there was no other addition for the answers and the statements and one of the participants confirmed which the data was have some addition for the answers and the statements.

The researcher chose and categorized the data by using coding. Coding is the ascription of a category label to a piece of data, that is either decided in advance or in response to the data that have been collected (Cohen, Manion & Morrison, 2011). Firstly, the researcher conducted verbatim in which the

researcher changed the data from audio into the piece of words. In this step, the researcher also gave the codes for every kind of data. The researcher created different codes for the first data of the participant and other participants. The aimed of this step is to facilitate the researcher in finding the data. Based on Saldana (2009), the result of the data recording must be transcribed in sentence form as the original result of observation and interview.

The next step is breaking down text which the researcher reconstructed the narrative data into the complex sentence. The aim of breaking down text is to get the psychological facts of the data to choose the facts separately. The researcher reconstructed the participant's answer into good sentences. Then, the researcher made an interpretation of a reconstructed sentence. Next is categorization in which the researcher conducted the categorization step in this section. In the categorization step the researcher categorized the data to facilitate the researcher when created narration the data. The final step is narration which the researcher explained the finding of the analysis data in a descriptive way. All of the data created on descriptive narration. Then, the researcher showed the result of the research questions.

### **Trustworthiness**

While the quantitative research uses reliability and validity to ascertain whether the data is valid or not, the qualitative research has trustworthiness which has a function that research is true. According to Guba and Lincoln (1986), the purpose of trustworthiness to support the argument that finding inquiry is worth to paying attention (as cited in Elo, Kaariainen, Kanste, Polkki, Utirainen, &



Kyngas, 2014). Guba and Lincoln (1986) also stated that there are five types to develop trustworthiness in qualitative data; credibility, confirmability, dependability, transferability, and authenticity. For this research, the researcher used credibility because this type is suitable for the researcher's study.

The researcher used credibility to maintain trustworthiness in this research. Based on Polit and Beck, credibility refers to the truth of the data or perspective of participants and their interpretation and representation by the researcher (Cope, 2014). In reporting the result, the researcher ensured the correctness of the data that has been taken. The researcher used the trustworthiness to make sure the data is valid or not. The researcher did trustworthiness the data by member checking. The researcher contacted back the participants to ask some participant's answers that have invalid answers. The researcher used a pseudonym to protect the identity of the participants. The researcher labels the participants with Emma, Ammi, Arra, and Rara.

Therefore, the researcher conducted member checking to re-check the result of interview to confirm the credibility of the data (Saldana, 2009). Thus, to ensure that the data written is completely correct in which the researcher re-checked the interview transcript. Three for four participants confirmed which the data represent enough and there was no other addition for the answers and the statements and one of the participants confirmed which the data was have some addition for the answers and the statements.