CHAPTER III
RESEARCH METHODOLOGY

This chapter presents the methodology of the study as follows: research design, setting, and context, participant, research procedure, instruments of the study, and data collection.

3.1. Research Design

Qualitative research is a form of social action that stresses the way people interpret and make sense of their experiences to understand the social reality of individuals. It makes the use of interviews, diaries, journals, classroom observations, and immersions; and open-ended questionnaires to obtain, analyze, and interpret the data content analysis of visual and textual materials, and oral history Zohrabi (2013). It is exploratory and seeks to explain 'how' and'why' a particular social phenomenon, or program, operates as it does in a particular context. It tries to help us to understand the social world in which we live, and why things are the way they are Polkinghorne (2005).

This research employed qualitative methods by case study designed and collected data using teaching observation, documentation, and reflection. This aimed to see students' responses of the use of mind mapping in developing their ideas in speaking activities.

3.2. Setting and Context

This study was conducted in the second semester of English students for three weeks. It focused on the academic year of 2020/2021 which consists of 33 students.

In this research, the researcher saw that students' speaking ability of students in this class was still limited. Some students still memorize the sentence, lack vocabulary, or are embarrassed. Then, some students also tend to be silent because they do not find a way to convey their ideas. So they can not speak spontaneously or naturally. So, all students have learned to speak in the speaking class since the first time they studied in the English department, but they have not yet learned the technique of learning to speak using mind mapping in the speaking class. From this, the researcher tried to apply the mind mapping strategy in this class to find out students' responses to mind mapping strategy to help them in speaking.

3.3. Participants

The participant of this is from the second semester of English students in class A of the academic year 2020/2021. The researcher chooses three students for this research.

In this research, the researcher used purposive sampling as a technique to get the participants. The researcher chooses three participants for this study. To get the participant, the researcher chose students based on student activeness in the learning process in the class, the collection of assignments given by the lecturer was always on time, the development of ideas from meeting to meeting

was always developing, and also the chosen participants were suggested by the lecturer. Godambe (1982) mentions purposive sampling can be used with a several techniques in data gathering. The researcher selected participants who met the special criteria needed by the researcher so that the samples taken later by the research objectives can solve research problems and also provide a value that represents the research objectives. This is in line with the meaning of purposive sampling which was a sampling technique in which the researcher relies on his judgment when selecting members of the population for the study. Simply put, the researcher decides what needs to be known and sets out to find people who can and are willing to provide the information by knowledge or experience Bernard (2002).

3.4. The Technique of Data Collection

The researcher collected data by using three instruments to gain information about students' perception of mind mapping strategy in developing ideas in speaking, researcher used students' mind mapping, video recording, and reflection as the instruments of the research.

The first was a student's mind mapping. In this study, the researcher began to collect student mind mapping data in a way, the researcher asked the students' mind mapping that they had made at the first and second meetings for analysis. Furthermore, After the researcher got the student's mind mapping data, then the researcher again asked for a video recording of the mind mapping presentation that had been made by the student as a form in the data collection process by the researcher.

The researcher also uses reflection that needed to complete by the student provided via Google form. The researcher shared a link for students to access in answering the questions in the reflection provided by the researcher. The students needed to complete the questions in a reflection in Indonesian. This was done so that students can more easily convey their thoughts in reflection. Students were given some days to answer the questions in reflection before students send the results of student reflections to the researcher.

3.5. Instrument of the Study

The data for the study collected by using the document study namely: students' mind mapping, video recording, and students' reflection.

The first instrument that the researcher used was a student's mind mapping. This instrument aims to determine the extent to which students can develop their creative thinking or represent words, ideas, or other items that were linked and arranged in a circle around the central keyword or central idea in the mind-mapping concept. Buzan, (1996) said that mind mapping is a graphic illustration using words, images, colors, and branches that extend from the central idea illustration of finer details and association in a nonlinear format. It emphasizes the use of diagrams and pictrue that enhance memory and cultivate knowledge.

The second instrument that the researcher used is a students' video recording. The aims of the researcher using video recordings was to analyze aspects in speaking such as the the way students introduce the topics to be

discussed then, how students convey the main ideas in the mind mapping body, and how students end the topics they have discussed.

Finally, the last instrument that the researcher used was a students' reflection. Reflection refers to students' assessment of what they experience while using the mind mapping strategy in the learning process in the classroom. Reflection here was considered a process that can assist researchers in understanding students' learning experiences. In this case students rethink the course of the learning process, then they answered several questions based on the reflections that have been prepared by the researcher.

3.6. Data Analysis

In a typical qualitative research analysis, there were approximately five main steps these steps were 1) data management (creating and organizing the data), 2) reviewing and familiarization (reading, making notes, and forming initial codes), 3) classification (coding and grouping the data), 4) interpretation (data display, developing patterns, meaning, and making sense of the findings), and (5) representation/visualization (concluding,2 presenting a narrative, story, or visual image in a report) Jackson, (2007).

In the first step, the researcher began to analyze the number of sub-ideas that students have developed from the main idea in each topic in the mind map one by one. Then, the researcher re-analyzes the development of the ideas that exist in the sub-ideas of each main idea. After that, the researcher classified the sub-ideas that existed in the main idea into columns that have been made by

researcher. In the second step, the researcher analyzed students' video recordings. Here, the researcher begins to watch the students' video recordings one by one. In making it easier for researchers to analyze student video recordings, a researcher made a video transcript on Ms. Word for each video. Then, the researcher matched the student explanation video with the mind map they had made. In the third step, After the video transcript process was completed, the researcher analyzed the results of the video transcripts one by one which was categorizing them into three parts tables named introduction, body, and conclusion. In the introduction section, the researcher noted four aspects of speaking when students started presenting their mind map, namely greetings, attention getter, presentation structure, and preview. Then, in the body section, the researcher noted ideas and examples on the students' mind maps while speaking and finally, the researcher identified whether students used a conclusion when ending their percentage. In making it easier for researchers to analyze, the researcher provides a color for each section, for example in the introduction section, the researcher provides yellow, green for the body, and, blue for the conclusion.

Further, the researcher analyzed students' reflections. In analyzing the reflection data, the researcher categorizes students' answers into two aspects. The first aspect was student interested which focuses on things that make students interested in using mind mapping. The second aspect was effectiveness which focuses on the effects of using mind mapping on students. After the researcher categorized the students' answers, the researcher then processes the student reflection data by using coding.

In the coding process, the researcher follows some guides from Braun and Clarke (2006) in using color coding in thematic analysis such as familiarizing yourself with the data, generating initial codes, reviewing and refining codes, grouping codes into themes, applying color coding, analyze the color-coded data, and interpret the findings. Next, the researcher started giving initials to the three students with signs S1, S2, and S3 on the colors. After that, the researcher colored the aspects of the analysis on student reflection data. For the aspect of interest, the researcher gave a yellow color and for the aspect of effectiveness, the researcher gave a green color. Braun and Clarke's (2006) explained color coding system is a widely used method for analyzing qualitative data in thematic analysis. This approach involves assigning different colors to segments of text based on the identified themes or patterns. The colors help to visually organize and interpret the data, making it easier to identify connections and relationships between different themes.

After that, the researcher made a column on Ms. Word which consists of the Interest and Effectiveness columns. Then, the researcher moved the students' reflection answers that had been given a color based on the categories in the column. After the data was analyzed completely, the conclusions were presented systematically.