

CHAPTER 3

RESEARCH METHODOLOGY

This chapter provide the research design of the study, which focuses on employing a qualitative approach using descriptive method to explore the research topic. It provides details regarding the selection of the research site and participants. Furthermore, the chapter explains the methods of data collection, including document analysis, classroom observation, and interviews. The process of data analysis is also discussed in this chapter.

3.1 Research Method

The research method that will be used in this research is a qualitative approach because, it allows for a detailed exploration of participants' experiences, perceptions, and the contextual factors that influence their learning. Creswell's (2007) state that qualitative research method is used to explore and understand the meaning held by individuals or groups in the context of a social problem. This is also notes that qualitative research emphasizes the construction of reality and understanding of meaning, so the process, events, and context are essential in this type of research.

In qualitative research, researchers also need to consider research ethics, such as obtaining participant consent, maintaining data confidentiality, and prioritizing participant well-being (Abdussamad, 2022). In the study "an analysis of multimodality in teaching EFL students," researchers must adhere to research

ethics when collecting data from students and teachers. According to Fadli (2021) there are several stages in qualitative research design:

4. Defining the research question

Researchers need to determine clear and specific research questions to guide the entire research process.

5. Selecting research participants

Researchers must identify research participants who are relevant to the research questions. Participants can be selected through purposive or snowball sampling.

6. Data collection

Researchers should choose data collection methods that are appropriate for the research question, such as interviews, observations, or documentation.

7. Data analysis

Researchers need to analyze the collected data carefully to ensure that the obtained data can be effectively narrated, resulting in meaningful research outcomes

In the study "an analysis of multimodality in teaching EFL students," researcher can employ various qualitative data collection methods, such as interviews with a teacher, classroom observations, or document analysis, such as class notes or student assignments. Data analysis can be conducted using qualitative analysis techniques such as thematic analysis or narrative analysis to obtain a profound understanding of students' experiences in utilizing multimodality in English language learning as a foreign language.

3.2 Research Design

The design of this study is case study. The case study research examines a specific case or phenomenon within a society in-depth to study its background, condition, and system interactions. This case can be a program, activity, event, or a group of individuals in a particular state or condition. According to Yin (2013), a case study is an empirical inquiry that investigates a phenomenon within its real-life context, where the boundaries between the phenomenon and context are not clearly evident, and multiple sources of evidence are utilized. As an inquiry, a case study does not have to be conducted over a long period of time, nor does it have to rely solely on ethnographic data or participant observation. In fact, according to Yin (2013), a researcher can conduct a valid and high-quality case study without conducting extensive fieldwork, depending on the topic being investigated.

Based on the above explanation, it can be concluded that the qualitative research method of case study used in this study aims to understand how the use and implementation of multimodality in English language learning as EFL (English as a Foreign Language).

3.3 Research location

This research was conducted at SMPS Panglima Polem Rantauprapat (PPR), in the X-A classroom of SMP S PPR located in the city of Rantauprapat, Labuhan Batu, North Sumatra. The selection of this location was based on preliminary research such as:

1. The school already has green literacy, which means that the school has good output from its learning outcomes and can be an example for other schools in improving their educational literacy.
2. The school has adopted the *merdeka* curriculum and the school has integrated technology there are in-focus, networking and using smartphone while teaching process.

Therefore, considering these reasons, the researcher decided to choose SMPS PPR as the research location, which aligns with the objectives and formulation of the research problem intended by the researcher.

3.4 Research subject

This research will use two subjects, namely teachers and students. The first subject was an English teacher at SMP S Panglima Polem Rantauprapat. She is 5 years of teaching experience at the school. She will play an active role in implementing multimodality in her EFL classrooms. The study will focus on exploring her perspectives, experiences, instructional strategies, and challenges related to the utilization of multimodal techniques in the classroom setting. The second subject in this research is students. There are 25 students in class X-A who will be observed by researchers in the classroom during learning activities.

3.5 Research Instrument

In this study there are three instruments that will be used by researchers in this study such as:

1. Observations Sheet

The observation sheet used in this study is in the form of a checklist. It was a guideline to obtain information concerning the implementation of multimodality such as auditory, visual and kinesthetic. It was used to observe teacher's performance and activities during the implementation. Researcher made the observation sheet indicator of the quality teaching and learning process. The observation sheet for teacher performance was applied by the following guideline in appendix 1. The issues to address are representation of multimodality in English teaching materials including visual, auditory and kinesthetic and students' engagement with multimodality.

2. Interviews Guideline

In this study, semi-structured interviews will be used, which are freer than structured interviews. The purpose of this type of interview is to find problems more openly, where the parties invited to the interview are asked for their opinions and ideas (Umar, 2019:64).

Through this interview, the researcher explored data, information and information framework from the research subject. In this interview, 3 aspects of questions will be asked, namely regarding the teacher's view, challenges and also solutions used for multimodality in the learning process. These questions have been prepared by the researcher in the attached interview guideline.

The questions will allow for in-depth exploration of participants' perspectives, challenges, and recommendations. There are 15 questions including,

The first question will be asked about the teacher's knowledge to ensure whether the teacher really understands about multimodality. Furthermore, there are 6 questions regarding the teacher's view, 5 questions regarding the challenges teachers face during the learning process and there are 4 questions regarding solutions and recommendations from the teacher regarding multimodality.

3. Documentation

Documentation in this research can be in the form of pictures or other forms used to find out information related to the research carried out by the author at SMPS PPR. Documents that can be used such as lesson plans (modul ajar), instructional materials, and student work samples, will be collected and analyzed to provide additional insights into the implementation of multimodality.

3.6 Data Collection Procedure

The data collection procedure in this study requires several systematically and structured steps. There are the stages that will be followed by researcher in the data collection procedure:

1. Informed Consent

Before initiating any data collection activities, the researcher will give the informed consent to all the participants including EFL teachers and EFL students. They will be provided with a clear explanation of the study's purpose, procedures,

and their rights as participants. Confidentiality and anonymity will be assured, and participants will have the option to withdraw from the study at any time.

2. Classroom Observations

In this study, observation is conducted to observe the activities in the classroom during teaching and learning sessions. This observation will be carried out during semester 2 and in class X-A SMPS PPR. This observation will be carried. On 4 meetings on descriptive text material which will fall from March to April 2024. In this observation, the researcher employs non-participant observation, where the researcher enters the classroom being studied and observes the classroom environment during the teaching and learning process. The researcher also records videos during the sessions to prevent any inaccuracies during the data analysis.

The observation is conducted by the researcher to understand how the teacher carries out the teaching and the types of media used in the instructional process. This is done to fulfill the objectives of this research. The observation is carried out using observation sheets prepared by the researcher. Additionally, the researcher takes note and field notes during the observation. Detailed notes are taken on the teaching strategies employed, the utilization of multimodal techniques, student engagement, and any significant observations. Field notes are taken immediately after the observation to capture important details, teacher-student interactions, and the overall classroom atmosphere.

3. Interviews

The next step is interview, will be carried out after the observation is complete and carried out at SMPS PPR. This interview was conducted to obtain information about the teacher's perspective when teaching using multimodality. Semi-structured research was conducted. Before starting the interview, the researcher made a meeting schedule with the teacher. The schedule here is tentative and will be adjusted to the subject's time availability. After that, the researcher must prepare the interview guideline that was created previously.

During the interview, the researcher began with an introduction by explaining the purpose of the interview and informing him that the interview process would be recorded or recorded for analysis purposes. After that, the researcher asked several questions to ensure that the subject understood and knew about multimodality.

Then, moving on to more open-ended semi-structured questions, provides an opportunity for subjects to express their opinions and experiences regarding multimodality. During this process, the researcher ensures that the topic the volunteer discusses is still in accordance with the objectives of the interview. After all questions have been answered adequately, the researcher makes sure to conclude the interview well. Thank the subject for his time and participation.

Finally, after the interview is completed, the researcher transcribes the recorded interview data and continues by analyzing the transcribed data, to identify relevant patterns, findings and conclusions according to the research objectives.

By following this data collection procedure, a comprehensive and multi-dimensional understanding of the utilization and impact of multimodality in EFL instruction, incorporating insights from interviews, classroom observations, and document analysis.

3.7 Technique of Data Analysis

In this stage, the researcher conducts data analysis based on the data obtained during the research. According to Umar (2019), data analysis is a crucial aspect of research because proper and appropriate data analysis can lead to good outcomes in scientific research and provide benefits to stakeholders. Therefore, it is important for researchers to analyze the data accurately.

The researcher will follow three stages in the technique of analyzing qualitative research:

1. Data reduction

In data reduction, researchers focus only on the intended goals. The primary objective of this research is to analyze the use of multimodality in the learning process. Therefore, any discussions or elements unrelated to this objective are deemed unnecessary and should be discarded. This process requires high intelligence and depth of knowledge since it is a critical and sensitive process. Through this process, researchers' insights will develop, enabling them to reduce data that holds significant findings and contributes to theory development.

2. Data display

The next step after data reduction is data display. When displaying data, the researcher organizes the reduced data in a sequence and structure that is understandable. This allows for in-depth analysis and examination of the relationships between each category. At the beginning of the data display, the researcher does some steps to analyze the data.

First, on the observation data, the researcher coded the data reduction results by linking them to the theory of multimodality. Coding is carried out to clarify the subject's perceptions more clearly before drawing conclusions. The second is carried out on observation data. Where there will be a deeper analysis of the visual, audio and kinesthetic used by teachers during the learning process. And the final data that will be analyzed are documents that will be seen in relation to the theory of multimodality.

3. Conclusion drawing/ verification

The last steps of the data analysis is conclusion drawing or verifications. After making data display, then the researcher will be able to make conclusion/verifications based on the objectives of the research. It means after researcher gets the data from data display, the next step researcher is drawing conclusion/verification based on the objectives of the research. The data that have been described in general are summarized. The researcher gives the clear information of the result step and then the draws the conclusion or verification of the result and then draws the conclusion or verification the result.

By following these steps, researchers can ensure a rigorous and systematic approach to analyzing qualitative research case study data, leading to meaningful interpretations and valuable insights.

3.8 Validity

In this research, researchers used two validations, such as:

1. Instrument Validity

The researcher will use construct validity that using the opinions experts. In this study, the experts is lecture and professor according to their respective expertise, such as language and content will be checked by lecturers who are experts in that field and have certificates for that matter.

2. Data Validity

In this research, to obtain valid data, the researcher used a triangulation method in the form of source triangulation, which is done by re-checking the data obtained through sources. By comparing data from interviews with data from observations that have been made. It can be done by using more than one data collection technique to obtain the same data, which can be in the form of observation, documentation and interviews. Then, the implementation can also be done by means of checks and balances (Bachri, 2010). Observations in this study aim to find complete and valid data, documentation aims to take pictures related to learning in the use of multimodality and for interviews aims to collect data that you want to examine, by looking at the teacher's perspective in learning using multimodality.

This validity of the data is needed in qualitative research. The use of validity in qualitative research is to define as the degree of confidence in the data from the study conducted by researcher and it can help the researcher to check the data analysis in order to reduce the researcher's biases and prejudices.