

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

#### **A. Research Design**

The research design was formulated based on the analysis of the gaps in knowledge concerning the topic, as explored in the literature review. This is an essential part of designing a successful and pertinent research project, as it allows for the investigation of the relevant aspects of the topic and the generation of new knowledge. Consequently, any researcher needs to ensure that the literature review is completed in-depth before drafting the research design to ensure that the most relevant and accurate questions are being asked (Delost & Nadder, 2014). Qualitative research is an approach that relies on the researcher as a fundamental tool. Qualitative research is a continuous synthesis and process. Simultaneously, research is conducted by gathering, analyzing, and interpreting data and facts, which is then concluded using inductive methods. Depending on the depth of analysis, this research was descriptive, utilizing procedures to depict and illustrate the condition of the research object. Specifically, this research focuses on demonstrating and describing the students' ability to write explanation texts at Grade XI of SMA Negeri 2 Metro.

#### **B. Research Setting, Subject, and Object**

##### **1. Research Setting**

The setting for this research is SMA Negeri 2 Metro, located at JLN.Sriwijaya 16A, Metro Barat District, Metro City, Lampung.

##### **2. Research Subject**

The subject of this research was the writing class of second-year students at a senior high school. It consists of 33 eleven social one classes in high school. The reason the writer conducted the study in writing in an old high school. They have two types of vocational, namely social and scientific. Researchers chose social class as the research subject.

##### **3. Research Object**

The object of this research is to analyze students' abilities and difficulties in writing explanatory texts.

### **C. Research Data Resources**

This research utilized primary sources to gather data. The investigator analyzed one introductory class from SMA Negeri 2 Metro within the Social Sciences department in Class Eleven, the Plus Class, to generate suggestive findings. The researcher selected one prime type from the three available and took a cluster sample of the representatives of Class Eleven Social One, which was deemed enough to represent the other classes.

### **D. Research Instruments**

The researcher applied a methodological approach to collect data using an instrument. This Paragraph assignment was designed to gauge the writing aptitude of students. It required them to compose an explanatory text based on their experiences and measure their abilities to articulate ideas and write well. The instrument used by the students was a worksheet or test paper, the material of which was a writing test comprising content, organization, vocabulary, grammar, and mechanics.

#### **1. Written Test**

According to Rachel (2017), a written test is a method of assessment that involves a questioner and answerer exchanging written words or sentences. This type of test is often used in the educational environment when teachers and students create and answer tasks. Through written tests, teachers can gauge the level of understanding of their students and assess their progress. In this writing test, the researcher offers questions for students about an explanation text as best as possible. Afterward, the researcher can review the student's work so the researcher can gain an understanding of the student's writing capacity (Rachel, 2017). Additionally, written tests can provide teachers with a better understanding of how students think and approach problem-solving. They also help students to develop their written communication skills and organization of thought. Therefore, this research will use the Google form to test students so that this research can be more efficient for class XI social one students at SMA Negeri 2 Metro.

#### **2. Review on Sheets**

According to Yi-hui and Han-Ying (2020), for decades, The candidate's responses to the items on a written examination must be recorded on a form paper or machine-scored form or similar material, which they must submit to

the proctor upon completion. This answer sheet will be the official record of the candidate's response to each item (Yi-hui & Han-ying, 2020).

### **3. The Gform Online Interview**

The Gform online interview is a qualitative research technique that uses Google Forms to elicit data by asking questions.

According to Sari (2020), Utilising a Google form, pupils can provide details of any impediments they may have in producing explanatory compositions. This approach ensures that individual difficulties can be addressed promptly and efficiently. Additionally, it allows educators to ascertain an overall understanding of their students' varying needs (Sari, 2020).

### **E. Data Collecting Technique**

Based on the instrument the researcher wrote above, the researcher will use some steps to do this research:

1. Writing Test: Develop and administer a writing test to assess students' writing ability in paragraph explanation text.
2. Review on sheet: Gather student answer sheets and assess them to understand better their writing approach and any problems they may encounter.
3. The Gform Online Interview: Construct an interview questionnaire using the Google form template to explore the potential causes of the problems experienced by students when writing explanatory texts

### **F. Data Analyzing Technique**

The researcher gathered data from 33 eleventh-grade students of SMAN 2 Metro, who had completed a writing explanation test. The data analysis technique employed in the qualitative research comprised the following processes:

1. Qualitative analysis: Analyze non-numerical data, like interview transcripts, to identify patterns, themes, and categories.
2. Quantitative analysis: Analyze numerical data, like test scores and data processing approach, through statistical or mathematical methods collected.
3. Mixed-methods analysis: Combine qualitative and quantitative data analysis techniques to gain a more comprehensive understanding of the research topic.

4. Data visualization: Present the data visually, such as graphs or tables, to quickly identify patterns and relationships.
5. Documentation: Gathering information concerning pupils from teachers and exemplifying pupils' explanation texts is a regular procedure in educational establishments. This sentence concerns collecting data from teachers and students writing samples of explanation texts.
6. Tabulation: Create a table or spreadsheet to record and summarize the data collected from the writing test, Review on Sheets, and documentation.

The researcher employed a technique analysis of the data for this research, which included classifying the data according to the research topic, describing the data systematically, combining sentences, and ultimately drawing a conclusion by summarising the discussion into a few points.