### **CHAPTER III**

### **RESEARCH METHOD**

### A. Research Design

The research design that the researcher used to achieve the result in this study is qualitative research. Qualitative research is an approach to inquiry that is used in many academic fields; it is most commonly used in the social sciences but is also used in market research and other contexts. It seeks to comprehend human behavior and the underlying causes of it in great detail. The qualitative method examines not only the what, where, and when of decision-making, but also its why and how. Therefore, large samples are rarely needed; smaller, more focused samples are. This method is applied to understand concepts, emotions, or experiences. Developing concepts or theories for prospective quantitative research is beneficial.

According to Yulianty et al. (2020), stated that data analysis is necessary for qualitative research in order to effectively narrate the collected data and produce a legitimate research result.

The research method employed in this study is content analysis. Barelson (Zuchdi, 1993, p.3) defines content analysis as a research method that yields an unbiased and methodical description of the content found in communication media. Another definition of content analysis is a methodical approach to deciphering the meaning and style of communication.

### **B.** Object

The object of this study are online websites that have Artificial Intelligence technology. Those websites are artificial intelligencepowered websites for writing sources (Perplexity, and Connected Papers), artificial intelligence-powered websites for journals review (Humata AI and TLDR. This) and artificial intelligence-powered websites for paraphrase (Quillbot, smodin.io and Paraphrase.io).

researcher chose these sources as research object because the researcher feels the need to observe these websites to inform the benefit from these websites that could help in English writing especially for students to help their writing assignment.

For this reason, in choosing the right websites for research object, the researcher has several criteria, follows:

- a. Websites that has Artificial intelligence technology
- b. Easily or free to access
- c. Provide technology for writing improvement such as resoom, review, paraphrase, and writing sources.

## C. Data

The data in this study are the contents in 7 artificial intelligencepowered websites (Quillbot, Paraphrase.io, Humata AI, TLDR. This, Resoomer.com, Perplexity, Connected Papers.). Then, the researcher described the data in descriptive terms after evaluating the content.

There are many sources that have interesting content. But after the researcher compared it, it turned out that the content on these objects were the most complete and fulfill the criteria as the data.

### **D.** Technique of Data Collection

The technique used in this research is documentation. Documentation technique is a data collection method that involves the collection and analysis of written or recorded information. This technique involves the use of documents, records, and other written materials to gather data. Documentation technique is commonly used in qualitative research, where data is collected through observation, interviews, and other methods. The collected data is then analyzed through data reduction, data presentation, and conclusion drawing.

In this study, the researcher analyzed the data by observing the contents of the selected websites. After the researcher has observed the data, the researcher obtained or take notes to record or explain the content of the data, and then the researcher described the content.

### E. Data Analysis

Data analysis is the step that comes after data collection and organization. The collection of data from documentation is the initial stage of the data analysis process. The results of the data analysis are then included in the descriptive form. The first step in gathering data for this study is to observe the research objects. then classified and the contents of the data analyzed.

Creswell & Creswell (2018) state that in order to collect information, select items that will help the researcher respond to the study topic. After that, a description of the data included in the particular study is required. Lastly, it is important to define the data type and collect information that goes beyond basic observations.

According to Miles & Huberman (2014), analytic methods used in qualitative research include:

1. Data Reduction

Data reduction is an analytical method that produces a more coherent image of the observations into themes by classifying, organizing, removing unnecessary information, and directing the reduced data. This procedure involves selecting, shortening, and focusing the material on the main study question. Following the collection of data, the researcher peruses the many websites to ensure that the information is applicable to English writing.

2. Data Display

Data are displayed in qualitative research using tables, charts, brief descriptions, and links between categories. These data are presented in a way that makes them easier to understand by grouping and organizing them. The data reduction process is followed by the data display. Once the information from the documentation has been examined, it is given as a description.

# 3. Conclusion/Verification

Drawing conclusions and offering evidence are necessary for a conclusion. The preliminary conclusions drawn are still subject to change if enough information is not found to support the need for more data collection. In qualitative research, the initial question can be addressed in the conclusions. The researcher makes inferences from the data that have been and are given, and these findings are backed up by strong evidence that was gathered during the data gathering phase. The answer to the study question that the investigator posed at the outset is found in the conclusion.

The steps involved in gathering data, processing it, visualizing it, and deriving conclusions can be summarized as follows:

- 1. The researcher selected the data of the artificial intelligencepowered websites that can be used for writing process.
- 2. The researcher observing the websites that had choosen to analyzed.
- 3. The researcher identifying the selected websites that can help to writing process.