

CHAPTER III

RESEARCH METHOD

A. Research Design

In order to comprehend the process of organizing the materials, media, actions, activities, and scenarios during the teaching and learning process, the researcher intends to describe the artificial intelligence-powered tools to help reading process. To this end, the research employed a qualitative design. The researcher collected, examined, and disseminate the data using Descriptive Qualitative methodology in order to shed light on the significance of the artificial intelligence-powered applications and websites on reading process.

The research method used in this study is content analysis. It is a research method that is used in order to get a natural, walkthrough-like description of the content found in the object of the research. In other words, content analysis is a tool to determine the words, themes or concepts within, in this case, artificial intelligence-powered tools such as application and websites.

B. Object

The research's objects are online applications and websites that are powered by artificial intelligence. They are mixed of purpose, some are focused on improving reading skill e.g AI-powered Chatbots, storywiz.io,

and Myreader AI and others are websites to support English language learning in general e.g Quillbot, paraphraser.io, and ChatGPT.

The researcher chose the mentioned applications and websites as the research objects because of the availability, most of them are free and easily accessible for students and the application and websites are made specifically for quality of life in terms of reading process such as being able to help readers find a topic, create a summary, paraphrase a text or assist them in skimming or scanning the text.

C. Data

The data for this study is gathered from the aforementioned objects, AI-powered Chatbots, Storywiz.io, Myreader AI, Quillbot, Paraphraser.io and ChatGPT. The goal is to describe the data in descriptive terms after evaluating the contents found in the mentioned applications and websites.

There are other artificial intelligence-powered tools on the internet, but the researcher found that the chosen ones are best-suited to be the object and thus the data of this research.

D. Technique of Data Collection

Documentation is the research technique employed in this study. A data collection methodology called documentation technique entails gathering and examining written or recorded data. This method of data collection uses written items such as records, documents, and other written resources. In qualitative research, where data is gathered through observation, interviews, and other techniques, documentation methodology

is frequently utilized. Following data collection, data reduction, data presentation, and conclusion drafting are used in the analysis process.

The researcher in this study examined the contents of the chosen applications and websites in order to analyze the data. Following their observation of the data, the researchers gathered or made notes to document or clarify the data's content before going on to discuss it.

E. Data Analysis

The process that follows data collecting and organizing is data analysis. The first step in the data analysis process is gathering data from documentation. The descriptive form is then updated with the data analysis findings. Observing the research objects is the first phase in the data collection process for this study. after which the data's contents were categorized and examined.

When collecting data, pick things that will help the researcher handle the topic of the study, according to Creswell & Creswell (2018). Consequently, a description of the information included in the particular study is required. And lastly, it's imperative to define the kind of data and collect information that goes beyond mere observations.

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

1. Data Reduction

Data reduction is an analytical technique that groups, classifies, eliminates, and organizes the reduced data into themes to create a more

cohesive picture of the observations. This process entails picking, condensing, and narrowing the content to the central research issue.

After gathering material, the researcher visits a variety of websites to make sure the content is relevant to English writing. In this case, the researcher picked the applications and websites to assist reading process based on their functionality or capabilities such as translation, paraphrasing, summarizing and search engine.

2. Data Display

In qualitative research, tables, charts, brief explanations, and linkages between categories are used to illustrate data. By combining and structuring the data, this presentation makes the information easier to interpret. The data presentation procedure comes after the data reduction step. Following analysis, the data from the documentation is provided as a description.

In this research, the researcher grouped and displayed the data narratively. Artificial Intelligence-powered tools to use in pre, during and after reading are chosen and organized based on their capabilities to assist each of the reading processes. Through data display, the researcher also showed the step-by-step guide and benefits that can be found by using the tools.

3. Conclusion/Verification

A conclusion requires both the provision of evidence and the drawing of conclusions. If further data gathering is deemed necessary

due to insufficient information, the preliminary results reached may still need to be revised. The answers in qualitative research can answer the original query. The data that have been and are provided allow the researcher to draw conclusions, and these conclusions are supported by substantial evidence that was acquired throughout the data gathering phase. The conclusion contains the response to the research question that the researcher initially posed.

In this research, after the data is chosen, the data is grouped and then described based on their functions and capabilities to support reading processes such as pre, during and after reading. Drawing conclusion for the research was done after verifying the data's functionality and capabilities for reading process in order to make sure the data is credible for drawing conclusion to determine the artificial intelligence-powered tools for reading process.

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

- a. The researcher selected the data of the artificial intelligence-powered applications and websites that can be used for reading process.
- b. The researcher described the data found for the applications and websites that can be used for reading process narratively.

- c. The researcher identifies the selected application and websites that can be used for reading processes and draw conclusion based on the narrative description of each of the application and websites.