#### **CHAPTER III**

### RESEARCH METHOD

## A. Research Design

This study employed a qualitative descriptive research design to explore the experiences and perceptions of English language learners using QuillBot as an online application to assist with their thesis writing. Data was collected via a set of questionnaires, and qualitative analysis techniques such as thematic analysis were used to analyze and interpret the data. The aim of the study was to understand the impact of QuillBot on the thesis writing process of English language learners, with a focus on their use of language and academic writing skills. The research design was chosen because it provided an in-depth understanding of the experiences and perspectives of the students and allowed for the exploration of complex and subjective phenomena. The qualitative descriptive design was appropriate for this study to generate a rich description of the experiences of the participants and to gain an understanding of their perspectives. By using a qualitative approach, the study aimed to explore the participants' subjective experiences and opinions, which would help to make informed decisions for future use of QuillBot by English language learners for thesis writing.

## **B.** Research Setting

The study was conducted at the State Islamic University of Antasari with students of the English Language Education Department as research subjects. Firstly, the researcher needed to determine the purpose of the research. This involved identifying the research question and determining the scope of the study. Secondly, the researcher must have decided on the population that would be studied, as well as the research methods that would be used. This could involve deciding on the type of data that would be collected (e.g., survey, interview, observation), and developing instruments or questions (if necessary). The mode of data collection (e.g., in-person, online, phone) must also have been decided upon.

The third step in the research procedure involved data analysis. The researcher needed to develop a plan for how to analyze the data that had been collected. Finally, the last step in the research procedure was reporting the findings.

## C. Participants

Participants play a crucial role in assisting researchers in collecting data based on authentic situations (Christensen, 2020). The research participants in this study would be the students of English Language Education Department of State Islamic University of Antasari. To ensure a well-defined sample that strenghens the data by involving participants related to the field of research (Michael Meyer, 2022). The sample are part of the number and characteristics possessed by the population (Sugiyono, 2019). The sample for this study would be limited to those students who have used QuillBot, an online application that employs artificial intelligence and machine learning technologies to assist with writing tasks, for their thesis writing. The researcher chose 10 students as the participants of the research. To select the participants, the researcher

use simple random sampling method. It is considered a simple random sampling because members of the sample are randomly chosen from the population without considering the layers or groups present in that population (Sugiyono, 2019). It is important to note that the population of English language learners at the English education department of State Islamic University of Antasari may not be fully representative of all English language learners who are currently writing their thesis. Nevertheless, this sample group provides an opportunity to explore the role of technology-assisted learning media, specifically QuillBot, in English students' thesis writing, and identify the benefits and challenges associated with its use.

### **D.** Research Instrument

The research instrument for this study includes a questionnaire as the primary means of data collection. The research instruments are devices used to measure natural and social phenomena observed. Specifically, all of these phenomena are referred to as research variables (Sugiyono, 2019). The questionnaire would be designed to gather information on the students' experiences with QuillBot, their perceptions of its benefits and challenges, and any potential impact that it has had on their thesis writing.

To conduct the questionnaire, the researcher would first obtain ethical clearance from the university's institutional review board and seek permission from the university's English language education department to approach their students. If the department provides permission, the researcher then contact English language learners who meet the inclusion criteria and ask them to participate in the study by completing the questionnaire.

### **E. Data Collection Procedures**

In this study, a range of data collection techniques were employed to gather information about the experiences and perspectives of English language learners who have used QuillBot as an online application to assist with their thesis writing at the State Islamic University of Antasari. The data collection procedure for this study involved the use of a questionnaire to gather information from a sample of English language learners who have used QuillBot to assist with their thesis writing at the State Islamic University of Antasari Banjarmasin. The researcher carefully designed the questionnaire to ensure that it was clear, relevant, and appropriate for the study objectives. Next, the researcher personally delivered the questionnaire to the targeted population of English language learners at the State Islamic University of Antasari Banjarmasin. The researcher provided a clear explanation of the purpose of the study and the importance of the participants' participation. The researcher then collected the completed questionnaires and used a pen and paper to enter the data into a data collection worksheet.

The questionnaire was designed to collect information on the benefits and challenges of using QuillBot, as well as the way in which these impact the students' writing processes, both in terms of their use of language and their academic writing skills. Additionally, the questionnaire was carefully crafted to ensure that the questions were clear, relevant, and appropriate for the research objectives, and was conducted in a way that made it easy to understand by the participants.

The obtained data would analyze using thematic analysis. This provided a thorough understanding of the students' experiences and perspectives, as well as the impact of QuillBot on their writing process. The data collection and analysis were conducted by a team of experienced researchers who are well- versed in qualitative research methods. Overall, the data collection techniques employed in this study provided a well-rounded and comprehensive set of data on the experiences and perspectives of English language learners who have used QuillBot for their thesis writing.

### F. Data Analysis

Once the data is collected, the researcher would analyze the data using thematic analysis, a qualitative research method that allows for the identification of recurring themes and patterns within the data. According to Braun and Clarke in (Heriyanto, 2019) Thematic analysis is one way to analyze data with the aim of identify patterns or to find themes through data that has been collected by researchers. The first step is to immerse oneself in the data by thoroughly familiarizing oneself with it, considering the purpose of the research, and developing an understanding of the

context in which the data was collected. The analysis would focus on identifying the benefits and challenges of using QuillBot for thesis writing, and the way in which these impact the students' writing processes. The key steps in the thematic analysis process include:

#### 1. Data immersion

This step involves thoroughly examining and familiarizing oneself with the collected data. In the context of the thesis writing, this could involve reviewing the survey or interview responses and gaining an understanding of the experiences and perceptions of the English language learners.

## 2. Coding

Once the data has been immersed, it is essential to organize and categorize it. This can be done by developing a coding framework, which involves identifying and naming the patterns or themes that emerge from the data. For example, in the case of the thesis writing, the data code could include identifying the benefits and challenges of using QuillBot, as well as the way inWhich these impact the students' writing processes.

# 3. Searching for patterns

This step involves searching for patterns or themes within the coded data and considering their relationships to each other. In the context of the thesis writing, this could involve assessing the relationships between the identified benefits and challenges of using

QuillBot, as well as the ways in which these impact the students' writing processes.

# 4. Reviewing themes

Once patterns have been identified, the coded data is thoroughly reviewed and examined. The goal of this step is to conduct a thorough analysis of the interrelatedness of the identified patterns, in order to gain a comprehensive and nuanced understanding of the students's experiences and perceptions when using QuillBot in their writing.

# 5. Reporting findings

The final step is to report on the findings. This step involves presenting the benefits, challenges, and impact of QuillBot on thesis writing and the students' writing processes, as well as any recommendations for best practices in English language learning and thesis writing.

Throughout this process, the researcher must consider the credibility and validity of the data, ensuring that the analysis is robust and reflects the reality of the student population. The key benefit of thematic analysis is that it enables a deeper understanding of the underlying meanings and patterns within the data, allowing for a more comprehensive and nuanced understanding of a problem, phenomenon, or issue.