CHAPTER III

RESEARCH METHOD

A. Research Design

This study employed a qualitative research design with a phenomenological approach to explore EFL students' experiences and perspectives in using Mapify, an AI-based mind mapping tool, for journal article summarizing activities.

Research design refers to a strategy used to organize and conduct a study in order to obtain valid and relevant data that align with the objectives of the research. In qualitative research, the design focuses on understanding participants' experiences, meanings, perspectives, and interpretations rather than measuring variables numerically.

According to Creswell (2013), phenomenological research aims to describe and interpret the essence of individuals' lived experiences regarding a particular phenomenon. This approach was considered appropriate for this study because it sought to understand how EFL students experienced the use of Mapify during journal article summarizing activities, including how they used the tool and the weaknesses of the tool during the process.

By employing a phenomenological approach, this study aimed to obtain rich and detailed descriptions of participants' actual experiences and perspectives regarding the use of Mapify in academic summarizing tasks. The qualitative methods used in this study, namely observation and semi-structured interviews,

provided comprehensive insights into participants' behaviors, strategies, experiences, and perceptions during journal article summarizing activities.

B. Research Setting

This study was conducted at the English Language Education Department of Antasari State Islamic University, located at A. Yani Street 4.5 Km, Banjarmasin, South Kalimantan, Indonesia. The data were collected in June 2026. The English Language Education Department is one of the departments under the Faculty of Tarbiyah and Teacher Training that aims to prepare prospective English teachers through academic and professional education in English language teaching.

The department offers various courses related to English language learning, including reading, writing, speaking, listening, linguistics, language teaching methodology, and research methodology. These courses require students to engage with academic texts and scholarly journal articles in various learning activities and assignments. The department consists of lecturers with expertise in English language education, linguistics, literature, and educational research who facilitate students' academic and professional development.

The academic environment encourages students to develop academic literacy skills, such as critical reading, academic writing, analyzing information, and summarizing scholarly texts. In addition, the department supports the integration of technology in teaching and learning activities. Both lecturers and

students frequently utilize digital platforms and educational technologies to support classroom instruction, independent learning, and academic tasks.

This research setting was selected because it is relevant to the objectives of the study. Students in the English Language Education Department regularly interact with journal articles and are required to produce summaries and other academic writing assignments as part of their coursework. Moreover, the technology-supported learning environment provides a suitable context for investigating the use of an AI-based mind mapping tool, namely Mapify, in supporting journal article summarizing activities. Therefore, the English Language Education Department of Antasari State Islamic University was considered an appropriate setting for exploring EFL students' experiences and perspectives regarding the use of AI-assisted tools in academic writing practices.

C. Research Participants

The participants of this study were undergraduate EFL students in the eighth semester of the English Language Education Department at Antasari State Islamic University. A total of approximately six students were selected to participate in this study.

The participants were chosen based on several criteria. First, they were in the final stage of their undergraduate study, which meant that they had developed sufficient academic experience, particularly in summarizing journal articles for academic purposes especially research projects. Second, they were familiar with or

had experience using digital learning tools, including AI-assisted tools such as Mapify. These criteria ensured that the participants were able to provide relevant insights into the use of Mapify in journal article summarizing activities.

A purposive sampling technique was employed to select participants who meet these criteria. This sampling method allowed the researcher to intentionally choose individuals who had direct experience with the phenomenon under investigation, which is essential in phenomenological research. The selection of these participants was considered appropriate because it enabled the researcher to explore in-depth experiences and perspectives regarding the use of Mapify in supporting journal article summarizing activities.

D. Data

The data of this study consisted of qualitative data in the form of participants' experiences, perspectives, behaviors, and responses regarding the use of Mapify in journal article summarizing activities. These data were collected to answer the research questions related to how EFL students used Mapify to support journal article summarizing and the weaknesses of the tool as perceived by the students.

The data were obtained from two main instruments: observation and semi-structured interviews. Each source of data was guided by relevant theoretical frameworks to ensure a more focused and systematic analysis.

First, observational data were collected during activities in which participants used Mapify to summarize journal articles. The observation was guided by the theory of the summary writing process. The researcher focused on participants' actual use of Mapify at different stages of the summarizing process, including reading and understanding the article, identifying main ideas, selecting important information, organizing ideas, paraphrasing information, and constructing summaries. The observation also focused on the limitations and weaknesses of Mapify as reflected in participants' behaviors during the summarizing activities. The observational data were recorded in the form of field notes.

Second, interview data were collected through semi-structured interviews with selected participants. The interviews were guided by the concept of the role of mind mapping in summary writing. The interviews aimed to explore participants' experiences and perspectives regarding how Mapify supported their summarizing activities, particularly in identifying main ideas, organizing information, understanding relationships among ideas, and reducing confusion during the summarizing process. In addition, the interviews explored the weaknesses of Mapify as experienced by the participants in journal article summarizing activities. The interviews were audio-recorded and transcribed into written form for further analysis.

Overall, the combination of observation and interview data provided comprehensive and in-depth insights into both participants' actual use of Mapify and the weaknesses associated with its use in journal article summarizing activities.

E. Technique of Data Collection

Two primary techniques were used in this study to collect data, namely observation and semi-structured interviews. These techniques were selected to provide comprehensive and in-depth insights into students' actual use, experiences, and perspectives regarding the use of Mapify in journal article summarizing activities. The combination of these techniques was expected to help strengthen the validity of the findings.

1. Observation

Observation was conducted to examine how participants used Mapify during journal article summarizing activities. The observation was carried out in a task-based context in which participants were asked to summarize a journal article using Mapify.

During the observation, the researcher focused on participants' actual behaviors, strategies, and interactions with Mapify throughout the summarizing process. This included how participants read and understood journal articles, interpreted AI-generated mind maps, identified main ideas, selected important information, organized ideas, paraphrased information, and constructed summaries. The observation also focused on the difficulties and challenges

encountered by the participants during the summarizing process while using Mapify. A structured observation guideline was used to ensure consistency throughout the observation process, and the data were recorded in the form of field notes.

2. Semi-Structured Interviews

Semi-structured interviews were conducted to explore participants' experiences and perspectives regarding the use of Mapify in journal article summarizing activities in greater depth. A total of six participants were selected through purposive sampling to participate in the interviews

The interviews focused on participants' experiences in using Mapify and their perspectives regarding the weaknesses of Mapify in supporting journal article summarizing activities. In particular, the interviews explored weaknesses related to the role of mind mapping, such as difficulties in identifying main ideas, organizing information, understanding relationships among ideas, and processing complex journal articles using AI-generated mind maps.

Open-ended questions were used to encourage participants to provide detailed and reflective responses based on their experiences. Each interview lasted approximately 10–20 minutes and was audio-recorded with the participants' consent. The recordings were then transcribed verbatim for further analysis.

Table 3.1 Timeline of Data Collection

Stage	Activity	Timeline
Stage 1	Observation of journal article summarizing activities using Mapify	June 5–12, 2026
Stage 2	Conducting semi-structured interviews with participants	June 13–17, 2026
Stage 3	Transcription and initial organization of the data	June 18 2026

This procedure ensured that the data collection process was conducted systematically and consistently. It also allowed the researcher to capture both participants' actual use of Mapify during the summarizing process and their perspectives regarding the weaknesses of using Mapify in journal article summarizing activities.

F. Research Instrument

The data for this study were collected using two main research instruments: an observation guideline and a semi-structured interview guideline. These instruments were designed to gather in-depth qualitative data regarding undergraduate EFL students' experiences and perspectives in using Mapify, an AI-based mind mapping tool, in journal article summarizing activities.

The development of the research instruments was based on the research questions and relevant theoretical frameworks related to artificial intelligence in education, mind mapping, summary writing, and students' perspectives in EFL learning. In addition, the principles of qualitative research and phenomenological inquiry proposed by Creswell (2013) were applied to ensure that the instruments were able to capture participants' lived experiences effectively.

The process of developing the instruments involved several steps. First, the researcher reviewed relevant literature related to observation and interview techniques in qualitative research. Second, the initial drafts of the observation and interview guidelines were developed based on the research questions and objectives of the study. Third, the instruments were refined to ensure that the indicators and guiding questions were clear, relevant, and aligned with the focus of the study. This process helped ensure the content validity of the instruments.

1. Observation Guideline

Observation is one of the key tools for collecting data in qualitative research. It is defined as the act of observing and recording phenomena in a natural setting using the researcher's senses for scientific purposes (Angrosino, 2007). According to Creswell & Poth (2016), observation enables researchers to record participants' actions, interactions, and processes within the context of the study.

The observation guideline was designed to systematically document how participants used Mapify during journal article summarizing activities. The observation mainly focused on participants' actual behaviors, strategies, and interactions with the tool during each stage of the summarizing process.

The observation was guided by the theory of the summary writing process. It examined participants' activities based on the following stages: (1) reading and understanding the source text, (2) identifying main ideas and

important information, (3) eliminating unnecessary details, (4) paraphrasing and reorganizing ideas, and (5) writing the summary coherently.

During the observation, the researcher paid attention to how participants performed each stage when using Mapify, including how they interacted with AI-generated mind maps while completing the task. The researcher also observed notable behaviors such as hesitation, repetition, confusion, or reliance on the mind map during the summarizing process.

The observation data were recorded in the form of field notes and were later analyzed to identify patterns related to participants' use of Mapify during journal article summarizing activities.

2. Semi-Structured Interview Guideline

An interview is a conversation with structure and purpose that goes beyond everyday exchanges; it is a professional interaction aimed at obtaining descriptions of specific aspects of participants' lived world (Kvale & Brinkmann, 2009).

According to Creswell (2014), qualitative data collection consists of observations, interviews, documents, and audiovisual materials. Interviews can be structured, semi-structured, or unstructured, depending on the level of flexibility needed in data collection.

The semi-structured interview guideline was designed to explore participants' experiences and perspectives regarding the use of Mapify in journal article summarizing activities in greater depth. The semi-structured

format allowed flexibility for participants to express their views while maintaining alignment with the research questions.

The interview guideline was based on the concept of the role of mind mapping in summary writing. It focused on how Mapify supported different aspects of the summarizing process, including identifying main ideas, organizing information, understanding relationships among ideas, reducing cognitive load, enhancing comprehension, and supporting engagement during writing activities.

In addition, the interviews specifically explored the weaknesses of Mapify in each of these roles, such as difficulties in identifying key information, limitations in organizing ideas, unclear relationships between concepts, cognitive overload despite visual support, and challenges in transforming mind maps into coherent written summaries.

The interviews were conducted with six selected participants using open-ended guiding questions to encourage detailed and reflective responses. Each interview was audio-recorded with the participants' consent and transcribed verbatim for analysis.

Overall, these research instruments, namely observation and semi-structured interviews, were designed to provide comprehensive qualitative insights into undergraduate EFL students' experiences and perspectives regarding the use of Mapify in journal article summarizing activities. By combining observational field notes and interview data, the researcher was able to triangulate the findings and

develop a deeper understanding of how participants used Mapify as well as the weaknesses associated with its use.

G. Data Analysis

The data for this study, including observation field notes and interview transcripts, were analyzed using a phenomenological approach proposed by (Creswell, 2013). This approach is considered appropriate because it focuses on understanding individuals' lived experiences regarding a particular phenomenon. In this study, the phenomenon refers to EFL students' experiences and perspectives in using Mapify, an AI-based mind mapping tool, for journal article summarizing activities.

Through this phenomenological analysis, the researcher aimed to capture the essence of participants' experiences by examining both their actual use of Mapify during summarizing activities and their perceptions regarding its challenges.

The data analysis in this study followed several phenomenological procedures proposed by Creswell (2013), as follows:

1. Description of Participants' Experiences

The researcher described the overall experiences of EFL students in using Mapify during journal article summarizing activities based on observation notes and interview data.

2. Identifying Significant Statements

The data obtained from observation and interviews were read repeatedly to identify significant statements related to how students used Mapify, how they interacted with AI-generated mind maps, and the challenges they encountered while using Mapify during the summarizing process.

3. Clustering into Themes

The significant statements were grouped into themes representing the key aspects of participants' experiences. The themes were related to participants' use of Mapify, including the process of summary writing, the role of mind mapping during summary writing, and the challenges encountered during the summarizing process.

4. Textural Description (What)

The researcher developed a textural description to explain what the participants experienced while using Mapify for journal article summarizing. This description was supported by direct quotations from interview data and evidence from observation notes.

5. Structural Description (How)

A structural description was then developed to explain how the experience occurred, including the context, conditions, and processes that influenced students' use of Mapify during journal article summarizing.

6. Essence of the Experience

Finally, the researcher synthesized the textural and structural descriptions to identify the essence of the phenomenon, representing the overall meaning of EFL students' experiences in using Mapify and the challenges they encountered in journal article summarizing activities.