

CHAPTER III

RESEARCH METHOD

This chapter describes the methodological framework used in conducting the research. It explains the research design, research setting, participants of the study, data collection technique, and data analysis procedure. The methods employed in this chapter were carefully selected to obtain an in-depth understanding of students' experiences and perceptions regarding the use of AI-assisted learning media in developing English language skills.

A. Research Design

This study uses a qualitative research approach to explore students' experiences and understanding in using artificial intelligence (AI)-supported learning media to improve their English skills. Usman et al. (2024) argue that qualitative research provides researchers with the opportunity to understand social phenomena in real-life contexts by integrating social, cultural, and educational dimensions. In line with this, Creswell & Creswell (2018) emphasize that qualitative research aims to gain a comprehensive understanding of the experiences, attitudes, and behaviors of research participants.

Based on this perspective, this study focuses on examining the use of artificial intelligence (AI)-based learning media by students of the English Education Study Program at UIN Syekh Wasil Kediri in English learning activities. The choice of a qualitative approach is based on the need to analyze the types of AI tools that are widely used, the contribution of these tools in improving students' English language competence, the problems faced by students, and the strategies applied to use AI tools optimally and ethically. The types of research questions require a descriptive and interpretive understanding of the students' real experiences, not just quantitative measurements.

This is a qualitative descriptive study. This approach allows researchers to present comprehensive and detailed descriptions of the phenomena studied based on the participants' perspectives. As stated by Sandelowski (2000), qualitative descriptive studies are very useful when the

research objective is to obtain direct descriptions of specific experiences or events. Therefore, this study aims to describe the actual practices, benefits, and challenges faced by students in using learning media supported by artificial intelligence (AI) in the English language learning process.

Through this research design, the researchers aim to provide a comprehensive overview of how students interact with artificial intelligence (AI) technologies, such as ChatGPT, Grammarly, Google Translate, ELSA Speak, Duolingo, and other AI platforms, to improve their English language skills, which include four aspects of language: listening, speaking, reading, and writing. It is hoped that the findings of this study will provide valuable insights into how AI-supported learning media can be effectively integrated into the context of English as a Foreign Language (EFL) learning, thereby encouraging the responsible and meaningful use of AI technology in English language education.

B. Research Setting

This research was conducted at UIN Syekh Wasil Kediri, East Java, Indonesia, specifically in the English Education Study Program. This location was chosen because this university is one of the Islamic higher education institutions with unique characteristics, namely where students are actively involved in learning English while being shaped by institutional, cultural, and ethical values based on Islamic teachings. In line with the objectives of this study, which is oriented towards exploring the use of artificial intelligence-supported learning media in the context of Islamic universities, UIN Syekh Wasil Kediri offers a relevant context for researching how technological practices are integrated with academic and moral considerations.

According to Creswell & Creswell (2018), qualitative research requires implementation in a natural environment where participants directly experience the phenomena being studied. The English Education Department at UIN Syekh Wasil Kediri provides a conducive context for this, given that students consistently participate in learning activities that

involve listening, speaking, reading, and writing skills. In addition, a large number of students independently use artificial intelligence-based learning media to facilitate their academic processes.

C. Participants of the Research

Research participants play a very important role in qualitative research, as they provide deep and authentic insights into the phenomenon being studied (Lim, 2025). In this study, participants were selected using purposive sampling, which allowed researchers to deliberately select individuals who had relevant experience and knowledge related to the use of artificial intelligence-supported learning media in English language learning (Creswell & Poth, 2016).

The participants in this study were eighth-semester students actively enrolled in the English Education Department at UIN Syekh Wasil Kediri. These subjects were selected based on the consideration that they had completed most of the core English language skills courses, covering listening, speaking, reading, and writing, as well as pedagogy courses. By the end of their studies, students had gained sufficient academic experience through academic writing, class presentations, teaching practice, and independent learning activities. This academic maturity enabled them to provide a more in-depth and reflective perspective on their experiences of using artificial intelligence AI-assisted learning media in various English language skills.

The participants were selected based on the following criteria: (1) active students in their eighth semester, (2) experience in using artificial intelligence (AI)-supported learning media in the English language learning process, and (3) willingness to participate voluntarily in this study. An initial screening process was conducted to ensure that participants met the established criteria.

This study involved ten female students. The participants were selected based on voluntariness and availability during the data collection process. The reason why all participants were female is because the students

who met the research criteria and were willing to participate during the data collection period were female students. Although the participants were not gender-diverse, their experiences were considered sufficient to provide rich, meaningful, and in-depth data relevant to the objectives of this study

Before data collection was conducted, each participant received an informed consent form explaining the purpose of the study, the procedures to be carried out, confidentiality guarantees, and their right to withdraw at any time without any consequences. Only participants who agreed and signed the informed consent form were included in the study.

D. Research Instrument

In qualitative research, the researcher is the principal tool for gathering information. As noted in Creswell and Creswell (2018), qualitative researchers obtain data directly from research participants to achieve a deeper comprehension of their lived experiences, and their views and understandings. Thus, the researcher is central to the collection, interpretation, and analysis of the data.

The researcher mainly used semi-structured interviews as a research tool. The researcher used interviews to understand students' experiences when using AI-assisted learning media to improve their English skills. The researcher obtained substantial information through interviews pertaining to what AI-assisted learning media were used, what roles AI-assisted learning media played in assisting English skills, what difficulties students encountered, and in what ways students employed AI-assisted learning media in their learning activities.

The researcher also employed an interview guide as a supplementary media to capture all pertinent issues associated with the research questions. However, the guide was used in a flexible manner, permitting the researcher to pose additional questions to elicit richer and more detailed responses from the interviewees.

1. Interview

The study's primary method relied on semi-structured interviews. This method was selected because it enables participants to share their experiences, perceptions, and opinions elaborately while being steered toward certain questions to meet the research's aims. The interview structure was formatted according to the research questions. The questions addressed: Kinds of AI-Assisted learning media, Functions of AI-Assisted learning media for writing, reading, speaking, and listening support, The problems encountered when using AI-Assisted learning media, The methods used to implement AI in a purposeful and responsible manner.

The interview involved open-ended questions so that respondents could build on their answers and elaborate from their perspectives on their learning experiences. The full interview template can be found in *Appendix A*.

The Data Collection Technique section describes the interview procedure, including interview length and how interviews will be done.

E. Data Collection Technique

In qualitative studies, the data collection stage is a fundamental aspect for achieving a comprehensive understanding of participants' experiences and perceptions of the phenomenon being studied. Flick (2013) states that qualitative data collection should be carried out flexibly, be responsive to context, and be able to accommodate participants' original expressions. As stated by Denzin & Lincoln (2017), qualitative researchers play a primary role in the data collection process, where they interact directly with participants to explore insights from real-life contexts.

The primary data collection method used in this study is semi-structured interviews. This method is most appropriate for them, as it enables the researcher to delve into the participants' experiences, perceptions, and opinions more comprehensively. In addition, semi-

structured interviews provide the researcher the flexibility to ask additional questions or do further probing to elicit more granular and more salient information. This method will enable the researcher to amass data expansively and richly as it relates to student experiences and the use of AI-assisted learning media.

1. Semi-Structured Interviews

Semi-structured interviews were used as the main method of data collection due to their ability to generate rich and descriptive data through open-ended questions that allowed participants to elaborate on their thoughts and experiences in depth (Creswell & Creswell, 2018). The interviews were conducted using a flexible structure, in which the researchers prepared guiding questions but remained open to follow-up or probing questions to explore emerging themes in greater depth.

Eighth semester students majoring in English Education at UIN Syekh Wasil Kediri took part in this research interview. Participants were selected using purposive sampling to ensure that each participant had sufficient experience in utilizing AI-assisted learning media in their English learning process. All participants had actively used AI-assisted learning media to support the development of their listening, speaking, reading, and writing skills.

Data collection through in-depth interviews was conducted directly on campus, creating a comfortable and natural atmosphere that allowed participants to freely share their experiences. Each interview lasted between 15 and 20 minutes and was conducted in Indonesian so that participants could express their views optimally. All interviews were recorded after obtaining consent from the participants and then transcribed verbatim for data analysis purposes.

Prior to the interview, all participants first received an informed consent form containing information about the purpose of the study, research procedures, confidentiality guarantees, and the

right to withdraw at any time without coercion. Participation was entirely voluntary. To protect the privacy of participants, all personal information was anonymized using symbolic codes (such as P1, P2, P3).

This study refers to the problem formulation and theoretical framework described in Chapter II. The interview instrument was designed to comprehensively examine participants' experiences, including the AI-assisted learning media they used, how these media supported their English language skills, the obstacles they faced, and the strategies they applied for effective and responsible use.

In an effort to ensure structured alignment with the research questions, the researchers developed a series of indicators to guide the interview item construction process. Each indicator is represented by three open-ended questions, for a total of twelve interview questions. The distribution of indicators and question item numbers is presented in Table 3.1 below.

Table 3.1 Indicators of Semi Structured Interviews

No	Indicators	Item Numbers
1.	Identifying the types of AI-assisted learning tools used by students in developing English language skills	3
2.	Exploring how AI-assisted learning tools support the improvement of students' English skills	3
3.	Discovering challenges faced by students in using AI-assisted learning tools	3
4.	Investigating strategies employed by students to use AI-assisted learning tools effectively and responsibly	3
Total		12

F. Data Analysis Technique

Data analysis in this study was conducted qualitatively by implementing the interactive model (Miles et al., 2014). This analytical

model consists of three main components that are dynamically interconnected: data condensation, data display, and conclusion drawing and verification. These three components operate simultaneously and repeatedly throughout the research process, thereby ensuring the depth of analysis, consistency of findings, and credibility of qualitative research results.

This study uses semi-structured interview data and analyses it with the Miles et al. (2014) interactive model which consists of three avenues of data analysis: data condensation, data display, and conclusion drawing plus verification. With this model, the researcher is able to gain a systematic understanding of qualitative data, and allow for deep interpretation of the participants' experiences.

1. Data Condensation

Data condensation is a procedure that involves selecting, focusing, simplifying, and transferring raw data into meaningful analytical units (Miles et al., 2014). At this stage, all recorded interview results were transcribed in full and accurately. Since the interviews were conducted in Indonesian, the transcripts were translated into English for reporting purposes, while retaining their original meaning.

The researcher systematically examined the interview transcripts several times to acquire a thorough understanding of the data. For the first round of coding, meaningful units were captured, and relevant codes according to the research questions were assigned to portions of the data. These codes captured the essence of the participants' experiences regarding the kinds of AI-assisted learning media, the functions they served in relation to the English language skills, the difficulties students encountered, and the ways students integrated AI-assisted learning media in their learning process.

Similar codes are grouped into broader categories and themes. This thematic grouping makes it easier for researchers to systematically manage volumes of qualitative data and align that data with the four research questions posed

2. Data Display

Data display is the activity of organizing and displaying compressed data systematically to facilitate the interpretation process (Miles et al., 2014). In this study, data are presented using a descriptive narrative format grouped based on incidental themes and research questions asked.

To illustrate findings, selected quotes were included to describe participants' experiences and viewpoints. Each participant was confidentiality coded (e.g., P1, P2, P3). These quotes demonstrated the findings and supplied testimony from the participants.

The analysis was organized around four main thematic areas: (1) kinds of AI-assisted learning media utilized, (2) the media's role in supporting the development of English language skills, (3) difficulties faced by students, and (4) means used for the effective and responsible use of the media. Each of the themes was discussed analytically by linking the participants' responses to appropriate theories and past research.

3. Conclusion Drawing and Verification

The last stage consisted of conclusion-drawing and the validation of findings (Miles et al., 2014). The researcher analyzed the data to determine the major trends, correlations, and meaningful observations that answer the research questions.

The researcher also implemented member checking by reconfirming the interview outcomes with the participants to verify that the representations of their responses were valid.

Through this process, the researcher reached informed conclusions about the students' experiences regarding AI-assisted learning media to improve their English skills. This includes the merits, obstacles, and the ways students incorporated AI media into their learning.

G. Trustworthiness

For readers to have confidence in the study's findings, they should be able to ascertain the findings come from authentic sources. In qualitative research, trustworthiness is an approach used to measure the quality and strength of the research. The components of trustworthiness include credibility, transferability, dependability, and confirmability (Anney, 2015).

Credibility is the term used for the confidence researchers have in the findings. The researchers gained credibility through detailed semi-structured interviews and member checking. The interviews were conducted with open-ended questions to elicit detailed responses. Once the interviews were transcribed, member checking was done by soliciting the participants' reviews to determine whether their responses and the researchers' interpretations captured their experiences with AI-assisted learning media.

Transferability is the ability of the findings to be applied in other situations. In the interest of transferability, the author offered a description of the context, participants, and methods of the study. The participants of this study were EFL students who incorporated AI-assisted learning media into their English language learning. This level of detail enables an audience to make their own judgments regarding the potential use of the findings in other situations.

Dependability is the aspect that looks at the reliability and consistency of the research process. For this aspect the researcher took the time to articulate the research design, selection of participants, the procedure for the collection of data, and the process of analyzing the data. To foster transparency and to allow other to replicate the study, the researcher documented all the research procedures in a step-by-step manner.

Confirmability is the extent to which the results are a reflection of the participants responses and not influenced by the researchers biases. In this study, confirmability was demonstrated by the use of interview transcripts as part of the evidence for the findings. The transcripts of the interviews were made with the utmost care and attention to detail and were reflective of the participants responses. Furthermore, direct quotes from

participants were present in the findings to guarantee that the interpretations were based in actual data and truly represented the participants experiences.