

CHAPTER III

RESEARCH METHOD

A. Research design

This study employed a qualitative approach using a case study design. The qualitative approach was selected because the primary objective of the research was to gain an in-depth understanding of EFL students' experiences and perspectives regarding the use of technology in writing activities, as well as the technological obstacles they encountered. A case study design was considered appropriate because it allowed the researcher to investigate the phenomenon within its real-life context at UIN Antasari Banjarmasin.

According to Creswell (2018), a case study is a qualitative research design used to explore a bounded system or a specific case through detailed data collection involving multiple sources of information. Therefore, this design was suitable for examining how university students utilized technology in EFL writing activities and how they perceived its benefits and challenges.

B. Research Setting

The study was conducted at UIN Antasari Banjarmasin, particularly in the English Education Department. The setting was selected because technology had been integrated into the teaching and learning process, especially in English writing courses. Students regularly used digital tools such as Microsoft Word, Grammarly, Google Docs, and internet-based resources to complete academic writing tasks.

This setting provided a relevant context for investigating students' experiences in using technology for EFL writing and identifying the challenges they faced during the writing process.

By using this setting, the research will be able to describe how students utilize technology in the context of academic writing and how technical obstacles arise in an environment that already supports the use of technology.

The data collection for this study was conducted over a period of one month, specifically from March 2 to April 3, 2023, during the Even Semester of the 2023/2024 academic year. This period was selected because it coincided with the active teaching of the Academic Writing course, which provided a natural setting for observing students' use of technology in their writing activities. The one-month duration allowed the researcher to conduct ten classroom observation sessions and ten individual semi-structured interviews without disrupting the regular academic schedule. During this period, the researcher was able to observe the participants across different writing tasks, including individual assignments, group projects, and peer review activities, thereby ensuring a comprehensive understanding of how technology was integrated into various aspects of the EFL writing process.

The classroom observations were specifically conducted in the Essay Writing course, taught in class 24-B of the English Education Department. This course was selected because it provided a natural setting in which students were actively engaged in academic writing tasks and regularly utilized digital tools to support their writing activities. The course was taught by a male lecturer, a senior lecturer in the English Education Department who integrated technology into his teaching practice. The class consisted of 4 male students and 6 female students, providing a balanced gender distribution for the study. It is worth noting that the researcher had previously conducted preliminary observations of the same course and class in 2023, which provided initial insights into students' technology use patterns and informed the design of the present study. The preliminary observation in 2023 served as a foundation for identifying the key themes explored in the formal data collection conducted in 2026.

C. Participants

The participants of this study were 10 undergraduate students from the English Education Department of UIN Antasari Banjarmasin. They were selected using purposive sampling because they met specific criteria relevant to the objectives of the study.

The criteria for participant selection were as follows:

1. The students were enrolled in writing courses, particularly the Paragraph Writing, Essay Writing, and Academic Writing courses (class 24-B), during the Even Semester of the 2025/2026 academic year.
2. The students had experience using technology for academic writing, such as Microsoft Word, Grammarly, Google Docs, or similar digital tools.
3. The students were willing to participate in interviews and share their experiences.

The participants consisted of 4 male students and 6 female students, ranging from the fourth to the sixth semester of their undergraduate studies. The gender distribution reflected the natural demographic composition of the English Education Department at UIN Antasari Banjarmasin, where female students outnumber male students. All participants were enrolled in the Academic Writing course during the Even Semester of the 2025/2026 academic year. Their diverse backgrounds, academic levels, and experiences with technology provided comprehensive information regarding the role of technology in EFL writing and the obstacles encountered during its use.

The decision to involve ten participants was based on several methodological considerations. First, ten participants were considered sufficient to provide rich and varied data while remaining manageable within the scope of a qualitative case study. According to Creswell (2018), qualitative case studies typically involve a small number of participants who can provide in-depth information relevant to the research questions. Second, the number ten allowed the researcher to include

students with diverse experiences in using technology for academic writing, particularly those who had completed the Paragraph Writing course and were enrolled in the Essay Writing and Academic Writing courses. The Paragraph Writing course served as the foundational stage in which students were first introduced to the basics of academic writing, including paragraph structure, topic sentences, and supporting details, often with the assistance of digital tools such as Microsoft Word and Grammarly. Third, the selection of ten participants also facilitated data triangulation, as the researcher was able to cross-check information obtained from interviews with that gathered through classroom observations involving the same group of students. Furthermore, the gender distribution of four male and six female students reflected the natural demographic composition of the class, ensuring that the findings represented the actual classroom context.

According to Palinkas et al. (2015), purposive sampling is appropriate in qualitative research because it enables researchers to select participants who possess relevant knowledge and experiences related to the phenomenon under investigation.

D. Data Sources

The data for this study were obtained from two primary sources: classroom observations and semi-structured interviews. These sources were selected to provide comprehensive information regarding students' experiences in using technology for EFL writing activities.

1. Classroom Observation

Classroom observations were conducted to identify how students used technology during writing activities and to examine the obstacles they encountered. The observations focused on students' interactions with digital tools, technical difficulties, classroom behavior, and the overall implementation of technology in the writing process.

According to Cohen et al. (2018), observation is an effective method for collecting data about actual behaviors and situations that may not be fully expressed during interviews.

2. Semi-Structured Interviews

Semi-structured interviews were conducted to explore students' perceptions, experiences, and challenges related to the use of technology in EFL writing. This interview format allowed participants to provide detailed explanations while enabling the researcher to ask follow-up questions when necessary.

The interviews focused on three main aspects: students' views of technology in writing activities, the benefits they experienced, and the technological obstacles they encountered during the writing process.

The interviews were conducted individually and lasted approximately 15–25 minutes. To ensure participants could express their opinions comfortably and clearly, the interviews were conducted in Bahasa Indonesia.

E. Techniques of Data Collection

The data were collected through classroom observations and semi-structured interviews.

1. Classroom Observation

The researcher conducted classroom observations during writing classes to identify how technology was used and to examine the challenges students experienced. During the observations, the researcher recorded students' interactions with technological tools, classroom activities, and any technical or non-technical issues that emerged.

Field notes were used to document important events and observations throughout the data collection process.

2. Semi-Structured Interviews

After the observations were completed, semi-structured interviews were conducted with selected participants. The interviews allowed the researcher to gain deeper insights into students' experiences and perceptions regarding technology use in EFL writing.

Several guiding questions were prepared before the interviews. However, participants were given the freedom to elaborate on their responses and discuss additional issues related to their experiences. This flexibility enabled the researcher to obtain rich and detailed qualitative data.

F. Data Analysis

The collected data were analyzed using thematic analysis. This method was chosen because it allowed the researcher to identify, analyze, and interpret patterns within the qualitative data.

The analysis was conducted through the following steps:

1. Data Transcription

All interview recordings were transcribed verbatim. The observation notes were also organized and prepared for analysis.

2. Data Coding

The researcher carefully reviewed the data and assigned codes to meaningful statements related to the research objectives. Similar codes were grouped together to facilitate further analysis.

3. Theme Development

After coding the data, broader themes were identified based on recurring patterns. The themes included students' views on technology, perceived benefits of technology, and technological obstacles encountered during writing activities.

4. Interpretation of Findings

The identified themes were interpreted and discussed in relation to the theoretical framework and previous studies. This process helped the researcher understand how technology influenced students' writing experiences.

5. Data Triangulation

To enhance the credibility and trustworthiness of the findings, data triangulation was applied by comparing information obtained from classroom observations and interviews. According to Cohen et al. (2018), triangulation increases the validity of qualitative research findings by using multiple sources of evidence.

G. Ethical Considerations

Several ethical principles were observed throughout the research process to ensure the protection of participants' rights and well-being.

1. Informed Consent

Before the data collection process began, participants received clear information regarding the purpose of the study, research procedures, and their rights as participants. They voluntarily agreed to participate and provided informed consent before the interviews and observations were conducted.

2. Confidentiality

The identities of all participants were kept confidential. Participants' names were replaced with codes or pseudonyms in the research report to protect their privacy. All collected data were stored securely and used solely for academic purposes.

3. Voluntary Participation

Participation in this study was entirely voluntary. Participants had the right to withdraw from the study at any stage without any negative consequences.

4. Data Protection

All interview recordings, transcripts, and observation notes were stored securely by the researcher. The data were used exclusively for research purposes and were not shared with unauthorized individuals.

By applying these ethical principles, the researcher ensured that the study was conducted responsibly and in accordance with accepted standards of educational research.

H. Limitations of the Study

Despite the efforts to conduct a rigorous and comprehensive study, several limitations should be acknowledged. First, the study was conducted with a relatively small sample size of ten participants from a single institution, UIN Antasari Banjarmasin. While this sample size is consistent with qualitative case study research, the findings may not be generalizable to all EFL students in Indonesia or other educational contexts. Second, the gender distribution of the participants was uneven, with 4 male and 6 female students, which may have influenced the perspectives represented in the findings. Third, the data collection was limited to a one-month period, which may not capture the full range of students' experiences with technology across an entire semester or academic year. Fourth, the study relied on self-reported data from semi-structured interviews, which may be subject to social desirability bias, as participants might have provided responses they believed the researcher expected rather than their true experiences. Fifth, the classroom observations were conducted in a controlled academic environment, and the findings may not fully reflect students' technology use in informal or self-directed writing contexts outside the classroom. Finally, the study focused primarily on three digital tools (Microsoft Word, Grammarly, and Google Docs) and did not extensively explore the role of emerging technologies such as artificial intelligence-based writing assistants (e.g., ChatGPT) which have become increasingly prevalent in academic settings. These limitations should be considered when interpreting the findings and should be addressed in future research.