

CHAPTER III

RESEARCH METHOD

A. Research Design

This study employs a qualitative research design. According to Sugiyono (2022), qualitative research is often referred to as a naturalistic method because it is conducted in natural settings and aims to understand phenomena based on participants' perspectives (Sugiyono, 2022). The data are collected in the form of words, and the researcher acts as the key instrument in the research process.

In this study, a case study approach is applied. According to John W. Creswell as cited in Sugiyono (2022), a case study is a qualitative strategy in which the researcher explores in depth a program, event, activity, process, or one or more individuals (Sugiyono, 2022). The case is bounded by time and activity, and the researcher collects detailed data using various data collection procedures over a sustained period of time.

In this research, the case refers to an English teacher in the context of classroom teaching. The study focuses on the use of ICT, the problems faced by the teacher, and the strategies used to overcome those problems. Therefore, this approach enables the researcher to obtain detailed and contextual data in a real-life setting.

B. Research Setting

This research was conducted at MTsN 4 Kota Padang, located in Parak Laweh Pulau Air Nan XX, Lubuk Begalung, Kota Padang, Sumatera Barat.

The school was selected because ICT has been integrated into English classroom instruction, making it relevant to the focus of this study. The research was carried out from November to December 2025.

C. Data and Source of Data

The data in this study consisted of descriptive information about the use of Information and Communication Technology (ICT) in English teaching, the problems faced by the teacher, and the strategies used to overcome those problems. The data were obtained from natural classroom situations and from the teacher's explanations based on her teaching experience.

According to Sugiyono (2022), in qualitative research, data sources are referred to as informants, and they are selected purposively based on certain considerations. Purposive sampling is used to select participants who are considered to have the most relevant information related to the research focus.

In this study, the primary data were obtained from one English teacher of seventh grade at MTsN 4 Kota Padang as the main informant. The teacher was selected purposively because she directly implemented ICT in the teaching and learning process and had relevant experience related to the use of ICT in the classroom.

The researcher first conducted classroom observations to directly examine how ICT was used in the teaching process. After that, interviews were conducted with the teacher to obtain deeper information about the problems faced and the strategies used to overcome those problems.

In addition, secondary data were collected from documentation, such as lesson plans and teaching materials related to the use of ICT. These documents were used to support and strengthen the data obtained from observations and interviews.

D. Data Collection Techniques

In qualitative research, data are collected in natural settings where the researcher functions as the key instrument (Sugiyono, 2022). To obtain comprehensive data related to the use of ICT, the problems faced by the teacher, and the strategies used to overcome those problems, this study employed observation, interviews, documentation, and triangulation.

1. Observation

This study applied passive participation in conducting the observation. In passive participation, the researcher is present at the research site but does not become involved in the observed activities (Sugiyono, 2022).

Based on this approach, the researcher attended the seventh-grade English classroom at MTsN 4 Kota Padang and observed the teaching and learning process without interfering with classroom activities. The observation focused on identifying how ICT was implemented, the types of ICT media used, and the problems that arose during the instructional process. Field notes were used to record relevant events related to ICT utilization.

2. Interview

The interviews were conducted using a semi-structured format, which allows flexibility in exploring issues more openly while still being guided by predetermined questions (Sugiyono, 2022).

In this study, the English teacher served as the main informant. The interview aimed to gain deeper insights into the problems encountered in using ICT and the strategies applied to address those problems. During the interview process, the researcher carefully listened to and recorded the informant's responses.

3. Documentation

Documentation was used to support the data obtained from observation and interviews. Documents are records of past events and may take the form of written texts, images, or other relevant materials (Sugiyono, 2022).

The documents collected in this study included lesson plans, teaching materials, and photographs related to ICT implementation in the classroom. These documents helped strengthen the credibility of the research findings.

4. Triangulation

To ensure data credibility, triangulation was applied. Triangulation of techniques involves using different data collection methods for the same source of data, while triangulation of sources involves obtaining data from different sources using the same technique (Sugiyono, 2022).

In this study, the researcher compared the data obtained from observation, interviews, and documentation to ensure consistency and accuracy.

E. Trustworthiness of the Data

To ensure the credibility of the data, this study applied several techniques as proposed by Sugiyono (2022), including triangulation, member check, and increased persistence.

1. Triangulation

This study applied **technique triangulation** to test the credibility of the data. Technique triangulation is conducted by checking data obtained from the same source using different data collection techniques (Sugiyono, 2022).

In this research, data obtained from interviews with the English teacher were compared with the results of classroom observations and documentation. If differences were found, further clarification was conducted to ensure the accuracy of the information. Through this process, the researcher ensured that the findings were consistent and credible.

2. Member Check

Member check is the process of verifying the data obtained by the researcher with the data provider to ensure that the findings accurately reflect the informant's perspectives (Sugiyono, 2022).

In this study, member checking was conducted after the interview process. The researcher confirmed the interview results and interpretations with the teacher to ensure that the information recorded corresponded with what the informant intended to convey. This process strengthened the credibility of the research findings.

3. Increased Persistence

Increased persistence refers to conducting careful and continuous observation to ensure the accuracy and consistency of the data (Sugiyono, 2022).

In this study, the researcher repeatedly reviewed field notes, interview transcripts, and documentation to ensure that the sequence of events and interpretations were accurate and systematically recorded. This careful examination helped minimize errors and enhance the trustworthiness of the data.

F. Data Analysis Methods

According to Miles and Huberman (as cited in Sugiyono, 2022), qualitative data analysis consists of three main streams of activity: Data Reduction, Data Display, and Conclusion Drawing/Verification. These three components occur interactively and continuously throughout the research process.

1. Data Reduction

Data reduction refers to the process of selecting, focusing, simplifying, and transforming raw data obtained from observations and interviews. This process began during data collection and continued throughout the analysis. The purpose of data reduction is to eliminate irrelevant information and retain only data that are directly related to the research questions.

In this study, observation data were first documented in the observation sheets. The researcher then identified relevant ICT media used by the teachers

and coded them systematically. For the interview data, the researcher transcribed the recordings and carefully examined the transcripts to identify significant statements related to ICT media usage, problems encountered, and strategies applied by the teachers. These statements were coded and categorized based on the theoretical framework presented in Chapter II.

The complete raw observation sheets and interview transcripts can be found in Appendix 1 and Appendix 2. The detailed coding process, including verbatim excerpts, codes, reduced meanings, and categories, is presented in Appendixes 3.1, 3.2, and 3.3.

2. Data Display

Data display is the stage where the reduced data are organized and arranged systematically to facilitate interpretation and conclusion drawing. In qualitative research, data display is commonly presented in the form of tables, charts, or structured narratives that allow the researcher to see patterns and relationships clearly.

In this research, the reduced data were organized into structured tables according to each research question. The tables present original excerpts from the data, corresponding codes, reduced meanings, and categories derived from the theoretical framework. This systematic arrangement helps ensure transparency and clarity in the analytical process.

The data displays for each research question can be seen in Appendixes 3.1 (Types of ICT Tools), 3.2 (Problems in Using ICT), and 3.3 (Teachers' Strategies in Overcoming ICT Problems).

3. Conclusion Drawing and Verification

Conclusion drawing and verification is the final stage of qualitative data analysis. At this stage, the researcher interprets the organized data to identify patterns, relationships, and meanings that answer the research questions. The conclusions must reflect the actual context of the research site and represent the perspectives of the informants.

To ensure credibility and accuracy, the researcher continuously verified the findings by re-examining the coded data and comparing them with the original observation sheets and interview transcripts. This verification process ensured that the conclusions were consistent with the participants' statements and aligned with the research context.

The final conclusions presented in Chapter IV are derived from the verified results shown in the appendixes, particularly Appendixes 3.1, 3.2, and 3.3.