

CHAPTER III

RESEARCH METHOD

A. Research Method

This research uses a qualitative method. This method is used because the researcher wants to describe the types of digital media used by the English teacher in teaching English and the constraints faced when using digital media at MTsN 1 Bukittinggi. According to Sugiyono (2022), qualitative research is conducted to study an object in its natural condition, with the researcher as the main instrument. In this research, the data were collected through observation, interview, and documentation. The data were then organized, interpreted, and described based on the information obtained from the research setting.

This research focuses on two main aspects. The first is the types of digital media used by the English teacher in English teaching. The second is the constraints faced when using digital media for English teaching. The researcher also considered the use and function of the digital media as supporting information to describe how the media were used during teaching activities. The types of digital media were not determined as findings before the data collection. Instead, they were identified from the actual teaching activities observed in the classroom.

The researcher did not change or manipulate the teaching situation. The data were collected from the natural teaching context through classroom observation, a semi-structured interview, and documentation. Observation was used primarily to identify the digital media actually used during English teaching activities. The interview was used primarily to obtain information about the constraints experienced by the teacher when using

digital media. Documentation was used to support and verify information obtained from observation and interview.

This qualitative method is suitable for this research because the researcher aims to provide a clear description of the use of digital media and the constraints experienced by the English teacher in the actual teaching context. The data were collected, organized, and interpreted based on the information obtained from the teacher and the classroom activities observed by the researcher (Sugiyono, 2022).

B. Research Setting

This research was conducted at MTsN 1 Bukittinggi, a public Islamic junior secondary school located in Bukittinggi, West Sumatra, Indonesia. The school was selected as the research setting because it has technological facilities that can support the use of digital media in English teaching. The school has facilities such as computer laboratories, LCD projectors, and internet connectivity.

The research setting was also related to the researcher's previous experience during an internship at MTsN 1 Bukittinggi. During the internship, the researcher observed that digital media were used in English teaching and that the school had technological facilities that could support their use. However, the use of digital media could vary depending on the teaching situation. This condition encouraged the researcher to examine the types of digital media used by the English teacher and the constraints faced when using them in English teaching.

The data collection was conducted during the 2025/2026 academic year. Classroom observations were conducted on December 24 and 25, 2025, during English teaching sessions. The interview with the English teacher was conducted on December 26 and 27, 2025, following the classroom observations. The research was conducted in the natural school and classroom setting without changing or manipulating the teaching activities.

C. Participant of the Research

The participant in this research was a permanent English teacher at MTsN 1 Bukittinggi. The teacher had been teaching at the school for three years and had a Bachelor's degree (S1) as the highest educational qualification. The participant was selected because the teacher was directly involved in English teaching at the research setting and had experience using digital media in English teaching.

The participant provided information about the types of digital media used in English teaching and the constraints faced when using digital media. He also provided information about the use of digital media that might not have been directly observed during the classroom observations. This information was used to complement the data obtained from the classroom observations and documentation., particularly in understanding the teacher's experience and the constraints related to the use of digital media.

D. Instruments of the Research

In qualitative research, the researcher is the main instrument in collecting and interpreting data. Sugiyono (2022) explains that the researcher plays an important role in determining the focus of the research, collecting data, analyzing data, and drawing

conclusions. In this research, the researcher was directly involved in collecting and interpreting data related to the use of digital media in English teaching and the constraints faced by the teacher.

To help the researcher collect the data systematically, three supporting instruments were used: an observation checklist, an interview guide, and documentation.

1. Observation Checklist

The observation checklist was used to record the use of digital media during English teaching activities. The checklist focused on the digital media used by the English teacher and how the media were used during the teaching process. The checklist also included indicators based on Laurillard's (2002) classification, namely narrative, interactive, adaptive, communicative, and productive media. The observation also recorded the teacher's procedures when using the digital media during the lesson.

The observation checklist was used to help the researcher record the actual use of digital media in the classroom. The researcher did not use the checklist to determine the findings before the observation. Instead, the checklist was used to systematically record the digital media that appeared during the observed teaching activities.

2. Interview Guide

The interview guide was used to conduct a semi-structured interview with the English teacher. The interview questions focused on the constraints faced by the teacher when using digital media in English teaching. The questions explored the teacher's experience related to teacher-level and school-level constraints based on Bingimlas (2009), including teacher

confidence, teacher competence, attitudes toward technology, time, training, accessibility, and technical support. Additional questions were asked when further information or clarification was needed.

The questions also explored the teacher's experience in using digital media, including facilities and infrastructure, school regulations and support, students' access to digital devices, and other conditions that could affect the use of digital media. The semi-structured format allowed the researcher to ask additional questions when clarification or further information was needed.

3. Documentation

Documentation was used as supporting evidence for the data obtained from observation and interview. The documentation included relevant teaching materials, photographs or screenshots related to the use of digital media, and other documents related to the research activities.

The documentation was used to complement the information obtained from observation and interview and to help the researcher verify relevant information about the teaching activities and the use of digital media.

E. Techniques of Data Collection

Data collection is an important part of qualitative research because the researcher needs to obtain information that is relevant to the research focus. Sugiyono (2022) explains that data in qualitative research can be collected through various techniques and sources, with the researcher directly involved in the process of obtaining and understanding the data.

In this research, the data were collected through classroom observation, a semi-structured interview, and documentation. These techniques were used to obtain information about the digital media used by the English teacher and the constraints faced when using digital media in English teaching.

1. Observation

The researcher conducted non-participant classroom observations to examine the actual use of digital media during English teaching activities. The observations focused on the digital media used by the English teacher and how the media were used during the teaching process. The researcher also observed the teacher's procedures when using the digital media during the lesson.

The classroom observations were conducted on December 24 and 25, 2025, during English teaching sessions. During the observations, the researcher did not participate in or change the teaching activities. Instead, the researcher observed the teaching process and recorded relevant information using the observation checklist and field notes. The observation data were used primarily to answer the first research question concerning the digital media used by the English teacher.

During the observation, the researcher focused on the actual activities that occurred in the classroom. The researcher paid attention to the digital media used by the English teacher, the activities supported by the media, and the way the media were used during the lesson. The researcher also recorded the information that was relevant to the first research question. The observation was carried out without giving direction to the teacher or students, so the teaching activities could continue naturally.

The observations were conducted in two different English teaching sessions. The first observation was conducted in Grade VII.1, while the second observation was conducted in Grade VII.5. The different classes and teaching activities gave the researcher an opportunity to observe the use of digital media in more than one teaching situation. The information from both observations was then compared to see whether the same digital media appeared in the observed lessons or whether different media were used.

2. Interview

The researcher conducted a semi-structured interview with the English teacher after the classroom observations. The interview was conducted on December 26 and 27, 2025, following the classroom observations. The interview was used to obtain information about the constraints faced by the teacher when using digital media in English teaching.

The interview questions focused on the teacher's experience in using digital media and the constraints faced during its use. The questions covered teacher-level and school-level constraints based on Bingimlas (2009), including teacher confidence, teacher competence, attitudes toward technology, time, training, accessibility, and technical support. The semi-structured format allowed the researcher to ask additional questions when clarification or further information was needed. The interview data were used primarily to answer the second research question.

The interview was conducted after the classroom observations so that the researcher already had information about the digital media observed during the teaching process. The interview was then used to obtain information that could not be obtained only from classroom observation, especially information about the constraints experienced by the

teacher. The researcher asked the questions based on the interview guide and also asked additional questions when an answer needed further explanation.

The interview information was examined according to the research focus. Information that was related to the teacher's experience and the conditions affecting the use of digital media was considered in the analysis. The information was then reduced and coded to identify the constraints that were supported by the teacher's statements. In this process, the researcher did not assume that all categories from the theory were experienced by the teacher. Only information that was supported by the interview data was included as a finding.

3. Documentation

Documentation was used to support and complement the data obtained through observation and interview. The documentation included photographs, screenshots, teaching materials, and other relevant documents related to the use of digital media during the research. These documents provided additional evidence of the teaching activities and the use of digital media.

The researcher examined the available documentation and compared relevant information with the data obtained from observations and interviews. The documentation was therefore used as supporting evidence rather than as a separate source for determining the research findings.

The documentation was collected during the research activities and was used to support the main data. The photographs and other available documents helped the

researcher check the information obtained from the classroom observations. The researcher compared the documentation with the observation records to make sure that the information about the use of digital media was consistent with the observed activities.

For the interview data, the documentation was also considered when it was related to the information provided by the teacher. However, documentation was not used as the main basis for identifying the constraints. The main data for the second research question remained the teacher's interview statements, while documentation was used to support the interpretation when relevant evidence was available.

F. Techniques of Data Validity

Data validity was used to ensure that the data obtained in this research were trustworthy and supported the research focus. Sugiyono (2022) explains that the validity of qualitative research data can be examined through several techniques, including credibility, transferability, dependability, and confirmability. In this research, credibility was emphasized through triangulation and member check.

The researcher used triangulation by comparing relevant information obtained from classroom observation, interview, and documentation. The observation data were used to identify the digital media used by the English teacher, while the interview data were used to identify the constraints faced by the teacher. Documentation was used to support the information obtained from the observation and interview. The researcher compared the available information to see whether the data supported the research findings.

Triangulation did not mean that every finding had to appear in all data sources. Some information was obtained only from the classroom observation, while some information about the teacher's constraints was obtained through the interview. Such information was interpreted based on the source from which it was obtained. The documentation was used as supporting evidence when it was available.

The researcher also used member check by confirming the information obtained from the interview with the English teacher. This was done to check whether the information had been recorded and understood correctly. Through triangulation and member check, the researcher tried to make sure that the findings were supported by the available data and reflected the information provided by the participant.

G. Techniques of Data Analysis

Data analysis in this research was conducted qualitatively to organize, understand, and draw conclusions from the data obtained during the research. Sugiyono (2022), by referring to Miles and Huberman, explains that qualitative data analysis is carried out through three main stages: data reduction, data display, and conclusion drawing and verification. In this research, these stages were used to analyze the data related to the use of digital media and the constraints faced by the English teacher.

1. Data Reduction

Data reduction was conducted by selecting, focusing, simplifying, and organizing the data that were related to the research questions. The researcher reviewed the data obtained

from classroom observation, interview, and documentation and excluded information that was not related to the research focus.

For the first research question, the researcher selected data about the digital media used by the English teacher during the observed teaching activities. The digital media were then classified based on Laurillard's (2002) classification, namely narrative, interactive, adaptive, communicative, and productive media. The classification was based on how the digital media were used in the teaching activities.

For the second research question, the researcher selected information from the interview about the constraints faced by the English teacher when using digital media. The information was grouped based on the relevant categories from Bingimlas (2009), namely teacher-level constraints and school-level constraints. The researcher also checked whether the information was clearly supported by the teacher's statements.

During data reduction, the researcher reviewed the collected data several times to identify information that was relevant to the two research questions. For the first research question, the researcher focused on the digital media that were directly observed during English teaching activities. Information that did not show the use of digital media was not included in the main analysis.

The relevant observation data were then simplified and organized into codes. Each observed digital medium was given a code to make the data easier to organize. After that, the researcher related the observed use of the media to Laurillard's (2002) classification. The classification was based on the activity that occurred during the lesson. Therefore, a

digital medium was not classified only because of its name, but according to how it was used in the observed activity.

For the second research question, the researcher reviewed the interview data and selected statements that were related to the constraints faced by the teacher. The selected information was then organized according to the relevant categories in Bingimlas (2009). The researcher compared the statements to determine which information represented an actual constraint and which information only provided general information about the teacher's use of digital media.

2. Data Display

After the data were reduced, the researcher displayed the data in an organized form to make them easier to understand and interpret. The data were presented in tables and descriptive explanations based on the research questions.

For the first research question, the data were displayed by presenting the digital media identified during classroom observation, their classification, and the teacher's procedures when using the media. For the second research question, the data were displayed by presenting the constraints found from the interview and the related categories based on Bingimlas (2009).

The data display was prepared after the relevant information had been selected and organized during data reduction. For the first research question, the observation data were displayed in a table showing the codes, observations, classifications, and descriptions of

use. This display helped the researcher see the digital media that appeared in each observation and the classification related to their use.

For the second research question, the interview data were displayed through codes and categories that represented the constraints found in the teacher's statements. The data display helped the researcher compare the main codes and their supporting information. It also helped the researcher identify which information was retained and which information was not considered a verified constraint.

The data display was then used as the basis for drawing conclusions. The tables presented in the appendices contain the more detailed reduction and coding process, while Chapter IV presents the main findings in descriptive form.

3. Conclusion Drawing and Verification

The final stage involved drawing conclusions and verifying the findings. The researcher examined the patterns found in the displayed data and related them to the research questions and the theoretical discussion.

For the first research question, the conclusion was drawn from the digital media identified through classroom observation and their classification based on Laurillard (2002). For the second research question, the conclusion was drawn from the constraints identified through the interview and related to the categories discussed by Bingimlas (2009).

The researcher then verified the conclusions by reviewing the original data and checking the supporting evidence from observation, interview, and documentation. The

conclusions were based on the data collected in the research setting and were not decided before the data analysis process.

