

## **CHAPTER III**

### **RESEARCH METHOD**

This chapter describes the procedure of the research in order to find out the answers to the two research questions previously stated. It presents the research methodology employed in the study, including the research design, research setting, participant, data collection, and data analysis.

#### **3.1. The Purpose of the Study and Research Question**

As explained in the previous chapter, this study aimed to find out how a secondary school English teacher integrated digital multimodal composing into his EFL classroom. The research explored the methods and activities used by the teacher to leverage multimodal composing in his classroom. This study also sought to identify the benefits and challenges faced by the teacher in implementing digital multimodal composing projects and activities.

#### **3.2. Research Design**

This study employed a qualitative approach to understand the issue being examined (Creswell, 2009; Hamied, 2017). Qualitative methods allowed the researcher to gather rich, descriptive data through observations, document analysis, and interviews to capture participants' experiences and perspectives from multiple angles (Creswell, 2009; Taylor et al., 2016).

A qualitative approach was chosen for this study as it was best suited to achieve the research objectives of developing a deep characterization and interpretation of the phenomenon being studied (Creswell, 2012; Creswell, 2009). A qualitative case study design was selected to optimally achieve the research objectives of constructing a multilayered interpretation of this phenomenon (Creswell, 2012; Yin, 2018). The study utilized triangulation of data sources including classroom observations, document analysis, and semi-structured

interviews with the teacher. Gathering observational, documentary, and interview evidence facilitated reinforcement across data sources to validate findings.

The case study design enabled extensive, context-specific analysis of how the teacher used digital multimodal composing in his classroom. Observations and documents provided direct evidence of instructional practices and activities, while interview data revealed the teacher's methods, motivations, and experiences.

According to Creswell (2013), key characteristics of qualitative research are naturalistic data collection, multiple data forms, and inductive analysis. Aligning with this, the data were gathered in the classroom setting. The researcher then analyzed and interpreted the diverse qualitative data through coding procedures to identify themes capturing participants' attributed meanings regarding the integration of multimodal composing instructions.

### **3.3. Research Site and Participant**

The research site selected for this qualitative case study was a secondary school located in Malang, Indonesia. This school was selected as the research site by emphasizing convenience for qualitative research (Hamied, 2017). This school was purposefully chosen due to having implemented the latest Indonesian national curriculum, *Kurikulum Merdeka*, which prioritizes developing student competencies in digital literacy and multimodal communication--*pembelajaran difokuskan pada teks, dalam berbagai moda, baik lisan, tulisan, visual, audio, maupun multimodal* (BSKAP, 2022 p.5). As teachers at schools under this new curriculum would likely be integrating technology and multimodality, this site was well-aligned with the study's focus on multimodal instructional practices.

The participant was an English teacher at the chosen school, selected based on meeting key criteria relevant to the research aims. As Creswell (2014) notes, researchers have no authority to compel participation in qualitative studies. Therefore, initial criteria were used to identify a participant who was familiar with

multimodal teaching and could provide insightful perspectives. The teacher was the vice principal of curriculum, who was responsible for the implementation of the curriculum. As an adopter of *Kurikulum Merdeka*, this teacher had experience transitioning instruction to align with the emphasis on digital literacy and multimodal resources. Moreover, his official certification as a professional teacher, training in *Guru Penggerak* program, his certification in ICT showing his technology proficiency, and multimodal teaching experience provided a case likely to give insights into the integration of digital multimodal composing.

For those reasons, the teacher was thought to be well-suited to provide perspectives on the integration of digital multimodal composing in EFL classroom. These selection criteria aimed to identify a teacher whose experiences and expertise aligned with the research goals, ensuring the case study would yield valuable insights into the phenomenon under investigation.

### **3.4. Data Collection Techniques**

This study utilized three primary techniques for collecting data - classroom observations, document analysis, and interviews with the teacher. Multiple qualitative data sources allowed for triangulation and a rich description of the case (Creswell, 2009). By combining the techniques, the risk of obtaining limited data was minimized, and the validity of the result was increased (Alwasilah, 2000; Cohen, Manion & Morrison, 2007).

#### **3.4.1. Observation**

To directly observe how the teacher incorporated digital multimodal composing (DMC) into his EFL classroom, a series of classroom observations were conducted. A detailed observation schedule (see Table 1) was developed, encompassing pre-observation, observation, and post-observation stages to capture a holistic view of the teacher's pedagogical approach. During observations, extensive field notes documented the

classroom environment, instructional activities, multimodal student projects, and teacher-student interactions.

| No. | Date         | Time          | Focus Area                         | Tools          |
|-----|--------------|---------------|------------------------------------|----------------|
| 1   | 26 Oct. 2023 | 08.20 - 09.00 | Pre-observation: classroom setting | Research notes |
| 2   | 31 Oct. 2023 | 08.20 - 09.00 | Pre-observation: DMC tasks         | Research notes |
| 3   | 01 Nov. 2023 | 09.00 - 10.20 | Observation 1: Meeting 1           | Field notes    |
| 4   | 08 Nov. 2023 | 09.00 - 10.20 | Observation 2: Meeting 2           | Field notes    |
| 5   | 09 Nov. 2023 | 11.40 - 12.20 | Post-observation: Discussion       | Research notes |
| 6   | 10 Nov. 2023 | 11.40 - 12.20 | Post observation: Students' works  | Documentation  |

Table 3.1 Observation schedule

Pre-observation notes focused on lesson plans, instructional materials, and classroom setup. The observation periods prioritized recording how the teacher integrated multimodal composing, facilitated relevant projects, utilized technology, and supported student learning. Post-observation notes captured additional insights and reflections on DMC implementation.

The observations centered on lessons and activities where students actively composed various multimodal texts such as posters. Field notes, aligned with the observation schedule, would undergo analysis to classify and categorize specific elements related to the research questions. This analysis would specifically explore the implementation of multimodality.

### 3.4.2. Document analysis

Document analysis played a crucial role in this study, providing a rich source of data and insights into the teacher's instructional practices. Documents offer the advantages of covering extended periods, multiple events, and diverse settings (Bogdan & Biklen, 1992; Fraenkel et al., 2012).

There were three main reasons why document analysis was utilized in this research. First, documents helped verify unclear data. Second, they could provide other specific details to verify information from other sources. Third, those were the guidance to the researcher in drawing an inference.

In this study, documents of lesson plans and modules related to the materials being taught were selected. To ensure consistency in analysis, the documents were examined to identify DMC integration into classroom instructions. The contents were categorized and classified into the types of multimodal activities, such as “write a caption that matches the [picture], and add hashtag: #saveournature #mindyourrubbish” into the planning for multimodal integrations.

### **3.4.3. Interviews**

Semi-structured interviews with the teacher formed a vital component of this study, aiming to delve into his perspectives, experiences, and reflections on using digital multimodal composing (DMC) into his EFL classroom. The interview protocol was designed to address both research questions, exploring the teacher's implementation of multimodality and his associated experiences.

An initial background interview established a foundation for understanding the teacher's professional training, overall teaching philosophy, and familiar instructional practices. This context was essential for interpreting subsequent responses related to DMC. Follow-up interviews, conducted in two rounds, utilized a combination of prepared questions and probing inquiries to clarify specific points. These interviews explored the teacher's motivations for integrating DMC, the methods he employed, the benefits and challenges he encountered, and the overall recommendations for effective multimodal teaching.

The semi-structured format allowed for flexibility while ensuring core topics were addressed, yielding rich qualitative insights into the teacher's approaches, beliefs, and lived experiences as they navigated digital multimodal composing within their classroom environment.

### **3.5. Data Analysis**

This study examined the collected data and categorized them to answer the research questions regarding the teacher's utilization of digital multimodal composing (DMC). To gain a comprehensive understanding of how the teacher integrated digital multimodal composing into his EFL classroom, this single case study utilized two frameworks: firstly, Dilgart and Si's (2020) multimodal composing framework which offered a detailed perspective, revealing the various phases and dimensions present within the teacher's integration practices; and secondly, the Technological Integration Matrix (TIM) model which provided a lens to categorize and analyze the levels and specific attributes of technology integration observed throughout the teacher's multimodal lessons.

The analysis began with descriptive analysis of what happened in the classrooms, and then those were categorized into the DMC framework. Next, the activities happened in the classroom were categorized into the TIM matrix, illustrating the extent to which the teacher achieved entry, adoption, adaptation, and other levels of technology integration. This data shed light on key patterns and trends that characterize the teacher's multimodal integration. Afterwards, an analysis was conducted to uncover how the teacher specifically integrated multimodal composing activities in the classroom. The analysis highlighted the benefits and challenges identified in this Indonesian secondary EFL context, supported by evidence from the data sources.

Finally, the discussion section delved deeper in interpreting and connecting these diverse findings to address the research questions. The focus was on identifying the practices, activities, benefits, and challenges associated with using

digital multimodal composing in EFL classroom. The researcher engaged in continuous reflection and memo-writing to capture analytical insights. The identified categories were reviewed and classified in relation to the research questions, ensuring the analysis captured the core aspects of the teacher's DMC implementation and experiences.

### **3.5.1. Analysis of Data from Observations**

Detailed field notes from classroom observations were first explored through initial open coding to pinpoint categories (Creswell, 2014). Focused coding was then used to synthesize the open codes into notable themes (Saldaña, 2016). For example, open codes like "think critically about the [projects]," "involve pictures, audio, design," and "ask some digital tools that they can use" were merged into the focused code "planning for multimodal integrations". Also, some other codes such as "looking for some inspirations," "designing and sketching their compositions," and "consulting with the teacher" were merged into "designing and redesigning."

To further refine the analysis and ensure the categories directly addressed how the teacher integrated multimodal composing instruction, the Technology Integration Matrix (TIM) was integrated into the process along with the qualitative data analysis tool *Taguette*. TIM provided a framework to visualize relationships between activities, and maintain a clear focus on the research questions. Then, *Taguette* enabled the visualization of relationships between codes and ensured the themes directly addressed how the teacher incorporated multimodal composing instruction. These categories provided insights into the teacher's instructional approaches.

### **3.5.2. Analysis of Data from Document**

The teacher's lesson plans provided a complementary lens for understanding how multimodal composing was structured into the teaching activities. Documents offered supporting data that both verified and enriched observational findings (Bowen, 2009). Lesson plans were studied for their sequence of multimodal activities, the types of projects assigned (e.g., digital posters), and the level of scaffolding provided for each step of the digital composing process.

### **3.5.3. Analysis of Data from Interview**

Interviews were conducted in the Indonesian language to cater to the participant's native language, as Mackey and Gass (2017) suggested. The analysis illuminated the teacher's experiences, perceptions, and recommendations for teaching with digital multimodal composing. Interview transcripts were analyzed through two rounds of coding. Initial line-by-line coding was followed by focused coding to blend the open codes into key categories. For instance, while open codes like "children are growing up in a digital age," "learning in the process while doing fun activities," formed the "benefits", the others such as "it requires stable internet connection," and the school needs to provide facilities and infrastructure," formed the "challenges".

## **3.6. Concluding Remarks**

This chapter has discussed the rationale for selecting a qualitative approach and case study design to address the aims of constructing an in-depth, multilayered account of how the teacher integrated digital multimodal composing in his EFL classroom. It also described the methods of data collection through classroom observations, relevant documents, and semi-structured interviews with the teacher.



Findings across observations, document analysis, and interviews were cross-referenced. Informed consent was also obtained from the teacher, and steps were taken to ensure data confidentiality. Finally, the chapter outlined the techniques of analysis employed to classify the varied qualitative data into categories. Altogether, this chapter provided a detailed overview of the systematic qualitative methodology designed to investigate the use of digital multimodal composing in EFL classroom of a secondary school in Indonesia.