CHAPTER III
METHODOLOGY

This chapter explains the methodology used in this research and focuses on the procedure and steps in conducting the study. These include research design, research site and participants, research instrument, research procedure, data collection, and data analysis.

3.1 Research Design

The main objective of this research was to investigate the implementation of digital storytelling in a speaking class at an elementary school. This study aims were to analyze the elements of digital storytelling in students' work and to examine the extent to which multimedia can affect students' speaking skills. To consider these two aims, a case study has been conducted. A case study approach provides a detailed, contextual analysis of a specific situation or phenomenon within its real-life setting (Yin, 2018). This method provides a detailed exploration of how DST is implemented in classroom setting.

Furthermore, in the field of language and education, the case study approach often use note-taking, audio-recording, and video recording to capture the interactions as well as other important details (Faltis, 1997). Case studies allow researchers to capture real-life settings based on classroom observations and students' work. Observations involve systematically watching and recording behaviors, events, and interactions in a natural setting (Creswell & Poth, 2018). Document analysis in students' work of digital storytelling provides valuable insights into participants' thought processes and language use, as it captures their ideas in a structured and reflective manner (Creswell & Guetterman, 2019).

This study also investigates students' experiences and challenges through the interviews in using DST for oral communication. As Denzin & Lincoln (2018) stated that qualitative research methods provide rich, detailed data revealing the nuances of participants' experiences and perceptions. Hence, this study also interviewed some students and teacher as a source of information to obtain a detailed description of their experiences in learing with multimedia tool using digital storytelling approach.

3.2 Research Site and Participants

The research will be conducted at an elementary school in Bandung, West Java. The school will be selected due to its adequate technological infrastructure, which is necessary for implementing digital storytelling methods, and the willingness of the administration and teachers to participate in the study. The study will involve 21 fifth-grade students and one their English teacher. The selection of fifth-grade students is supported by developmental theories, such as Piaget's (1971) stages of cognitive development, which indicate that children aged 10-11 are at the end of the concrete operational stage and transitioning to the formal operational stage. At this age, they are capable of logical reasoning and integrating abstract ideas into practical activities, such as storytelling using digital tools. This makes digital storytelling an appropriate method because students have a foundational knowledge of English and can engage with digital tools and storytelling activities.

Additionally, Robin (2008) highlights the versatility of digital storytelling in enhancing student engagement and creativity in educational settings. Although Robin does not specify grade levels, his analysis emphasizes the effectiveness of DST in fostering essential skills like communication and critical thinking in elementary education. The English teacher involved will provide insights into how DST can be integrated into existing teaching practices and to evaluate its effectiveness in improving students' speaking skills. As a key facilitator of classroom activities, the teacher's perspective on the challenges and strategies of implementing DST adds depth to the research, ensuring a comprehensive understanding of its impact within the classroom setting.

3.3 Data Collection Techniques

The data will be collected using classroom observation, document analysis in students' work, and interview. These three data were collected from November 11th to November 20th, 2024. It required limited time because there were school activities, exams, and holidays. A detailed activities of the lesson plan is provided in the table below.

Table 3. 1 Lesson Plan

	Activities
Lesson I	1. Teacher recalls the previous materials about technology. 2. Students complete tasks from the "Rise & Shine" book, answering questions about technology. 3. Students participate in an online quiz related to the material.
Lesson II	1. Teacher recalls the previous materials about technology. 2. Teacher introduces "describing activities happening now" and "how often an action happens" related to technology. 3. Students practice creating sentences.
Lesson III	1. Teacher recalls the previous materials. 2. Teacher explains writing tasks using descriptive text about technology. 3. Students writing their descriptive text. 4. Teacher explains the speaking task to record their voice about their descriptive text. 5. Students record their voice as practice and continue recording at home.
Lesson IV	1. Students use their written work and their recording to create their digital storytelling using Canva. 2. Teacher gives a link to Canva for every 5 students to create their digital storytelling. 3. Digital storytelling creation includes adding visuals, text, and audio using Canva.

3.3.1 Classroom Observation

Classroom observation is essential for gathering data within a natural setting, allowing the researcher to record real-time events and behaviors as they occur. According to Creswell & Guetterman (2019), observation involves gathering direct, open-ended information by observing people and environments at the research location. In this study, the writer used field notes to capture students' behavior and participation during the DST activities. These field notes focused on the students' speaking skills, how their speaking ability before using multimedia tool like digital storytelling, how was the process of making digital storytelling by the students, and were they making it with the helped from the teacher or by themselves. Observations were carried out across several DST sessions to gather comprehensive data.

By using field notes, the writer was able to gather qualitative data that reflects the dynamic and real-time experiences of students during the DST process. This method allowed the writer to record not only the students' verbal responses but also non-verbal cues, such as their level of enthusiasm, engagement, and cooperation with peers. In summary, the steps for collecting the data in this study can be seen in the following table.

Table 3. 2 Timeline of Observing the Learning Activity

Period	Activities
Meeting 1	1. Recalls the previous material about technology. 2. Doing exercises from the book "Rise & Shine" and an online quiz.
Meeting 2	1. Recalls the previous material. 2. Introducing the new material about "Describing activity that is happening now" and "Describing how often an action happens". 3. Practice making sentences.
Meeting 3	1. Writing descriptive text about "My Favorite Technology"

	2. Record students' voices as exercises for creating digital storytelling.
Meeting 4	1. Creating digital storytelling using multimedia tool.
	2. Interview session with students and teacher.

Also, the writer created an example of digital storytelling to the students as an illustration of what digital storytelling looks like. The writer used elements that are in accordance with what will be discussed and adds audio as one form of digital storytelling.
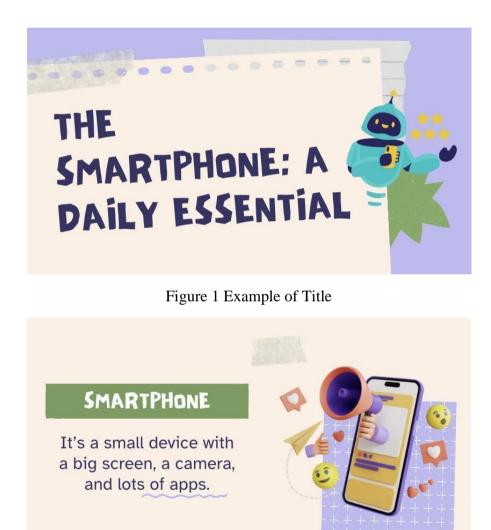

Figure 1 Example of Title

Figure 2 Example of Introduction

Figure 3 Example of Content

3.3.2 The Students' Work

This study used document analysis of students' work to support the data from classroom observation and interviews. According to Creswell & Guetterman (2019), documents are a good source of data in qualitative research because they contain the direct words of the participants, which they have carefully composed. This document's advantage lies in using the participant's original language, which is usually well-thought-out in the document's content. With this approach, the research was able to identify how students constructed their digital stories and how those elements contributed to the improvement of their speaking skills in English.

The document analysis process focused on several key aspects, such as the completeness of the descriptive text, the integration of the content with the visual elements, and the students' involvement in conveying their ideas through the voice recording. Evaluation of the DST results was conducted by referring to the seven aspects of digital storytelling proposed by Lambert (2013) (see on Table 2.1). Through this analysis, this research can understand how students develop their digital stories and how these elements support the learning of speaking skills in English.

3.3.3 Interview

Interviews are another essential instrument used in qualitative methods. According to Taherdoost (2022), interviews are used to gain a deep insight into the

experiences of the participants by interpreting. The interviews used in this research to gather in-depth insights from both students and teachers about their experiences with Digital Storytelling (DST). In this method, the interviewer listens carefully to the stories of the participants and records its meaning to capture the perceptions, thoughts, and ideas of individuals (Taherdoost, 2022). In this study, semi-structured interviews were conducted to allow flexibility in exploring topics while ensuring that the core research questions were addressed.

The interviews were conducted at the end of the digital storytelling activities to gain a comprehensive understanding of how the multimedia like digital storytelling affect students' speaking skills. The students' interviews aimed to capture their thoughts on how DST helped improve their confidence, creativity, and speaking abilities. Questions were designed to encourage students to reflect on their experiences, both positive and challenging, in using DST as a learning tool.

Teacher interviews were also conducted to understand the pedagogical perspective on the implementation of DST in the classroom. The interviews with teachers aimed to gather insights into the overall impact of DST on student learning and classroom dynamics. Data from the interview results will later be collected to answer the research questions. For this reason, the writer created several questions for interviews with students and teachers.

These are the questions used in interviews students and teachers:

Table 3. 3 Questions for Students' Interview

Number	Questions
1.	Can you tell me about your experience with digital storytelling in the classroom?
2.	What did you enjoy the most about digital storytelling activities?
3.	How do you think digital storytelling has affected your speaking skills?
4.	Do you feel more confident speaking English after participating in

	digital storytelling activities?
5.	Did you face any challenges while working on digital storytelling projects?
6.	How did your teacher help you with these challenges?
7.	What do you think about using digital storytelling to learn English?
8.	Would you like to do more digital storytelling activities in the future? Why or why not?

Table 3. 4 Questions for Teachers' Interview

Number	Questions
1.	Can you describe your experience when implementing digital storytelling in your classroom?
2.	What were the main goals you hoped to achieve with digital storytelling?
3.	How do you think digital storytelling has impacted your students' speaking skills?
4.	Can you share any specific examples of improvement in students' speaking abilities?
5.	What challenges did you face in implementing digital storytelling activities?
6.	What kind of support did you receive (or wish to receive) to effectively integrate digital storytelling?
7.	How effective do you think digital storytelling is as a teaching method for improving speaking skills?

8.	Would you recommend digital storytelling to other teachers? Why or why not?

3.4 Data Analysis

The data collected from observations, document analysis of students' work, and interviews will be analyzed using thematic analysis. Thematic analysis is a method for identifying, analysing, and reporting patterns (themes) within data (Braun & Clarke, 2006). The process involves iterative coding, theme development, and interpretation, ensuring rigor and transparency in the analysis process (Nowell et al., 2017).

The researcher will immerse themselves in the data by reviewing observation notes and interview transcripts multiple times to thoroughly understand the content. Initial codes will be generated using both deductive (based on pre-existing concepts or theories) and inductive (emerging from the data) approaches (Braun & Clarke, 2006). Codes will be collated and organized into potential themes representing meaningful patterns across the data. The final themes were clearly defined and labeled to provide meaningful insights into the use of digital storytelling in a speaking class at an elementary school student.

3.5 Concluding Remark

This chapter explains the research methodology used in this study. The research focuses on addressing two research questions and adopts a qualitative approach with a case study design to gather the necessary data. It covers details about the research site and participants, the instruments used, the data collection process, and the steps taken for data analysis.