CHAPTER III
RESEARCH METHODOLOGY

This chapter clarifies the research methodology applied to conduct this research. It consists of elaborating research design, the justification of the research site and participants, and some procedures to collect and analyse data.

3.1 Research Design

This research applied a descriptive qualitative research design to acquire information on the designed-in scaffolding implemented by the teacher to assist young learners in creating multimodal texts. Creswell (2012) explains that one of characteristics qualitative research is exploring the problem and developing a detailed understanding of a central phenomenon. In line with that, the research chose descriptive qualitative as it was appropriate in providing information on the central phenomenon, which was the features of designed-in scaffolding according to Hammond and Gibbons (2005).

Descriptive qualitative research design was a method of collecting, interpreting, and reporting data in a way that accurately and thoroughly described a phenomenon and explained the existing phenomena as accurately as possible. The word 'existing phenomena' also referred to the impact after and its characteristics of the research. It was often used to explore and understand a specific issue or topic in-depth, generate new insights and knowledge (Atmowardoyo, 2018; Merriam, 2009, Nassaji, 2015). In this research context, it strived to focus on the designed-in scaffolding features proposed by Hammond and Gibbons (2005). This research focused on the designed-in scaffolding because it agreed to explain the designed-in scaffolding served as the pivotal element for teaching and learning process. Even though Hammond and Gibbons (2005) build upon two scaffoldings: designed-in and interactional (see section 2.2.1 and section 2.2.2), Gibbons (2009) noted that it was possible to discuss the two scaffolding distinctly. Because it believed that without the well-planned lesson or designed-in scaffolding, the interactional scaffolding would not be much impact toward the teaching and learning process or it resulted to "a hit-or-miss affair" (p.154). Additionally, to see the interactional scaffolding, it needed the meticulous analysis that

this research could not attain due to the time constrain and limitation. Therefore, the research only focused on the designed-in scaffolding as macro level for providing the supports for young learners creating multimodal texts.

In descriptive qualitative research, researchers typically collected data through observation, focus group discussion, document analysis or interviews. Then it is analyzed and interpreted to precisely reflect the experiences, views, and meanings of the people involved (Merriam & Tisdell, 2016). In this research, the data were collected through classroom observation and document analysis that strived to understand the meaning attached to the experiences in implementing designed-in scaffolding by the teacher being studied. The elaboration on how the process of collecting the data and analyzing the data were presented in the section 3.4 research procedure.

3.2 Research Site and Participants

The research was conducted in one of the elementary schools in Bandung. In this research, I played my role as researcher and also teacher. This role was known as 'participant observer' as the researcher was part of a group and aware of the role of a participant in the research (Creswell, 2012; Gold, 1958; Merriam & Tisdel, 2016). I taught fourth grade as an English teacher for a habituation class – a program that was designed by the school as an additional English class for the students to have sufficient exposure to English. As I had this role, in chapter 4, I used the word 'the teacher' to represent myself when describing classroom activities. It aimed to give the distance with the data that I observed and analyzed from what I planned and the real classroom activities to see the scaffolding features. And to balance the insights from classroom observation, this research also involved a non-participant observer who had the expertise in teaching English to young learners. She was a colleague who has been teaching EYL for about more than 10 years.

Following the emancipated curriculum learning outcomes, the students in fourth grade were chosen as they were categorized in phase B. The students focused to learn on the spoken language and started to be introduced to written language. They were also expected to attain learning outcomes, as stated:

> *"*By the end of Phase B, students communicate their ideas and experience through drawings and copy writing. With teachers' support, they produce simple descriptions and procedures using simple words/phrases and pictures. They use invented spelling in writing simple vocabulary related to their class and home environments" (Badan Standar, Kurikulum, dan Asesmen Pendidikan, 2022).

Therefore, involving multimodal texts with constructive scaffolding was expected to help them to accomplish this learning outcome.

3.3 Ethical Consideration

This research granted permission from Universitas Pendidikan Indonesia (1371/UN40.F3.D1/TD.06/2023) and the institution where the school was managed.

For this research, all students were allowed to participate in this research. All the participating elements, such as names and pictures of institutions and individuals, were kept confidential to protect the research participants' privacy. As the research was conducted in the context of young learners and in Indonesia young learners are categorized as a high-risk research participants, parent's consent was important (*Badan Riset dan Inovasi Nasional, n.d.)*. The consent form was sent to the parents before conducting the lesson and it consisted of permission to allow their children to be participants and to bring handphone or tablet as the device to make multimodal texts.

3.4 Research Procedure

This section elaborates on procedures for conducting the research. It started with designing and conducting the lesson, collecting the data, and analysing the data. All the procedures are clarified below.

3.4.1 Designing and implementing a lesson.

The research was started by designing a lesson. It was conducted in six meetings, including one meeting for the students to become familiar with the application, which was Canva that would be used to make multimodal texts. For each meeting, the teacher divided the lesson into three stages: pre-activities, whilst-activities, and post-activities, and it lasted for 50 minutes.

Following learning outcomes for phase B, this research focused on descriptive text. The topic matched the syllabus used for the class entitled 'In the Zoo'. The text was

taken from Twinkl.co.id – a learning website that provided teaching and learning resources. The text was adapted by adding some points and pictures using Canva (graphic design platform) to suit the students' context and give more multimodal exposure to the students. The text then was used as the model text for the whole learning processes. In table 3.1, it was the summary of the lesson plan planned by the teacher to support young learners in creating digital storytelling:

Table 3.1 Summary of Lesson Plan

Meeting 1	Classroom activities
Pre-activity	Discussing a picture. Introducing keywords appeared in the text. Doing what's missing game.
Whilst-activity	Reading aloud. Discussing the text. Matching picture and the activities to learn can and cannot.
Post-activity	Answering questions about the text. Recapping the lesson.
Meeting 2	Classroom Activities
Pre-activity	Reviewing previous lesson Displaying the pictures and acting out the words. Doing 'run, stop, and say' activities
Whilst-activity	Modelling texts Arranging the paragraphs into texts in the 'Fast and Furious' games.
Post-activity	True or False game Recapping the lesson
Meeting 3	Classroom Activities
Pre-activity	Reviewing previous lesson Finding the synonym of the words/ phrases in the model text.
Whilst-activity	Physical line up activities
Post-activity	Guessing pictures Recapping the lesson
Meeting 4	Classroom Activities
Pre-activity	Reviewing previous lesson Preparing the students to use handphone. Activities in wordwall
Whilst-activity	Collecting information about the zoo as many as possible. Writing down the information. Writing the information on the board.
Post-activity	Giving feedback to students' writing Recapping the lesson
Meeting 5	Classroom Activities
Pre-activity	Reviewing the previous lesson
Whilst-activity	Introducing Canva as the media to make multimodal texts.

	Guiding the students to make the texts based on the information that has been gathered
Post-activity	Recapping the lesson
Meeting 6	Classroom Activities
Pre-activity	Reviewing previous lesson
Whilst-activity	Preparing the students to independent writing. Checking students' writing on the paper. Allowing the students' to work on Canva.
Post-activity	Sending the texts to the teacher. Wrapping up the lesson.

From the summary, the teacher conducted the lesson in six meetings. It were conducted starting from 28 February, 1 March, and 2 March 2023. Then, it continued from 14 to 16 March 2023. During the implementation of the lesson, the data were gained using classroom observation, and how the data were collected for this research, it would be explained in the next section.

3.4.2 Collecting the data

The data collection were conducted in six meetings. It was gathered through the classroom observation and document analysis. First, classroom observation served as the primary data of this research. There were six meetings that lasted 50 minutes for each meeting. The classroom activities were recorded using camera recorder to monitor teacher's activities and talks in supporting young learners in the classroom mainly for creating multimodal texts. After that, the videos were watched and transcribed only on the potential aspects of scaffolding as the research focus. It focused on how the teacher implemented the selected tasks and activated students' prior knowledge, connected the tasks to make the learning sequence, organized the students to complete the tasks, applied the semiotic system and planned for message abundancy, used the similar mediational texts, and determined the metacognitive and metalinguistics awareness. The data from non-participants observer were collected through filling out the observations sheets that included guided questions, as could be seen in the table 3.1.

Table 3. 1 Non-participant observer observation sheet to describe classroom situation

Part I	
Guided Questions	Observer's Note

What is the teacher doing? How do the students react to her? What are the students doing?				
How does the teacher integrate the learning media and technology into the lesson's tasks and activities during the class?				
To what extent does the learning media support the students and the teacher using English?				
Is there any specific focus on the multimodal text? If yes, how does the teacher do it?				
Part II				
Criteria	**Not meet**	**Partially Meet**	**Meets**	**Exceeds**
Question and answer sequence	There is no question-and-answer sequence to guide the development of understanding.	The teacher rarely used question and answer sequence to guide the development of understanding, such as using why to encourage students to reason and reflect.	The teacher often used question and answer sequence to guide the development of understanding, such as using why to encourage students to reason and reflect.	The teacher properly used question and answer sequence to guide the development of understanding, such as using why to encourage students to reason and reflect.
Giving the students time to think	No time for students to think.	Little chance for the students to think before respond to the teacher's questions.	The students are allowed to think before respond to the teacher's questions.	The teacher intentionally provide time for the students to think before respond to the teacher's questions.
Monitoring of activities/tasks	No monitoring during the tasks/activities	A little monitoring during activities/ tasks, but not effective and/or sufficient.	Monitoring during activities/ tasks is mostly effective in supporting some Ss	Monitoring during activities/ tasks is always appropriate, fully supporting Ss.
Technology is integrated into activities and tasks	The technology isn't	There is some effort to integrate	Technology is integrated into the	Technology is effectively integrated into

	meaningful or appropriately integrated into the activities/tasks to support the understanding of students.	technology into the activities/tasks, but it isn't always meaningful or appropriate.	activities/tasks, most of which are meaningful and appropriate.	the activities/tasks, all of which are meaningful and appropriate, and support student understanding.

Table 3.1 showed the classroom observation sheet that was filled out by the non-participant observer during the classroom observation. Moreover, table 3.2 showed the example of the data collection from classroom observation video. As the teacher, I should switch my role to the research to collect the data from classroom observation. The data from observation sheet helped the teacher to avoid the subjectivity that happened during this process.

Table 3. 2 Example of collecting the data from classroom observation

Classroom Observation	Teacher's Activities	Example of excerpt
	- Displaying the picture of the zoo. - Discussing the picture. (Activating students' prior knowledge) (Specific focus on the multimodal texts)	T :[displaying the picture on the screen] What do you see in the picture? Ss : Zoo. T : Yes, Zoo. Animals? Ss : [nodding] Eva : Camel. T :[checking at the picture] Yes, we have camel. Dipa : Gorilla T : Gorilla Eva : Giraffe T : Yes, giraffe
	- Reviewing the lessons using. - Displaying the wheels - Gesturing the words (Task sequence) (Activating students' prior knowledge)	T: We will spin the wheels and when you see the sentence, we act. … T: Stop, please read Ss: … [silent] T: We cannot feed the animals.

	(Specific focus on the multimodal texts)	

To collect the data from the documents: teacher's lesson plans and teacher's reflection, it were compared with the video recording as the evidence of real classroom activities. It was to find out the features of scaffolding that were planned and reflected on teacher's classroom practice. Table 3.2 is the example of the comparison of lesson plan and the classroom activities.

Table 3. 3 Example of comparing lesson plan and teacher's activities

Lesson Plan (Meeting 1)	Teacher's Activities	Features of designed-in scaffolding (Hammond & Gibbons, 2005)
Teacher shows the picture of the zoo.	Displaying and discussing the picture	PPT and screen Pictures Prior knowledge
Teacher shows the classroom agenda.	Asking student to read classroom agenda.	Meet the selection tasks Metacognitive
Teacher uses flashcard to introduce keywords teacher uses What's missing game to introduce keywords	Introducing keywords through flashcard and what's missing game	Meet the selection of tasks Sequence
Teacher prepares texts Teacher gives overview of the text	Giving overview of the text	Sequence
Teacher gives printed-based text model of In the Zoo to the students Teacher reads aloud.	Displaying the text on the screen. Giving printed-based text to the students. Discussing each paragraph.	Sequence Visual support (screen and printed).
Teacher asks one student to read a paragraph.	Inviting one student to read (one by one).	Sequence Organizing participation.

Teacher introduces language focus can/cannot using matching activities	Introducing language focus can and cannot Displaying the task on the screen Inviting the students to come forward to draw a line on teacher's laptop.	Activate prior knowledge Sequence
Teacher reviews the text by showing some questions. Students answer the questions together.	Recapping the learning.	Activate prior Sequence Metacognitive

The table 3.3 presents how the data from lesson plan were collected. It was compared to the classroom activities that were done by watching the videos of observation. Each activity was summarized to see for example the selected tasks, the sequence of the tasks, or the media involved that could provide multimodal supports for the students.

3.4.3 Analyzing the data

The data employed in this research are classroom observation videos and teachers' lesson plans. The data focused on the designed-in scaffolding features (Hammond & Gibbons, 2005). It only focused on the designed-in scaffolding since it wanted to see the supports given by the teacher to assist young learners creating multimodal texts. The designed-in scaffolding held the pivotal position within teaching and learning process as the macro scaffolding. The data were analyzed using thematic analysis following the steps from Braun and Clarke (2006): (1) Familiarizing yourself with the data, (2) Generating initial codes, (3) Searching for themes, (4) Reviewing themes, (5) defining and naming themes, (6) producing the report.

The analysis started with organizing and categorizing the observation videos and teachers lessons, then the data from non-participants observer was seen from the observation sheet, and the teacher's reflection was employed for confirming the data from the classroom observation. After that, the videos from classroom observation were watched to get familiar with the data and specifically saw the sequence of learning. After that, the initial code was generated, and the data were analysed and

mapped into the theme that the features of designed-in scaffolding could be found (Gibbons, 2009; Hammond & Gibbons, 2005).

Table 3. 4 Example of generating themes from the codes

Open Codes	Axial Codes	Selective codes	Themes
Discuss the pictures Provides keywords and picture Lesson review Recycle the keywords to be used in the tasks	Discussing the pictures and the keywords.	Selecting the tasks to stimulate students' existing knowledge and shared knowledge.	Determining the selection of tasks for activating students' prior knowledge.
Picture discussion Key words and pictures and its various tasks Reading aloud Lesson review using different modes	Focusing on multimodal texts	Managing connection of one meeting to another meeting and one task to another task.	Developing the sequence of tasks.
	Rearranging paragraph to text Matching pictures to text		
	Rearranging words to sentences.		
	Working on the digital devices Sentences to paragraph		
	Creating multimodal texts		
Pictures in PPT presentation Gestures to explain specific word Teacher voice in reading aloud Pictures to describe the texts	Providing the pictures in the text.	Providing multimodal supports.	Considering learning media as the semiotics system to plan message abundancy
	Displaying the text on the screen.		
	Combining visual, aural, and gestural supports.		
The whole classroom participation, individual tasks, group works, pair work.	Structuring the classroom participation into whole classroom participation in preparing and reviewing the lesson. Structuring the classroom in individual group to create multimodal texts.	Providing and reducing the supports	Organizing students' participation

The table presented the example of generating codes to the themes for analyzing the data. From the process of generating themes, there are six themes based on the key features of designed-scaffolding applied by the teacher in the classroom: The themes were:

(1) Determining the selection of tasks for activating students' prior knowledge.
(2) Developing the sequence of tasks.
(3) Considering learning media as the semiotics system to plan message abundancy.
(4) Using consistent the mediational texts and artefacts for the learning process.
(5) Organizing students' participation.
(6) Determining metacognitive and metalinguistics awareness.

These themes became the key points to elaborate the findings that were discovered in the learning process and would be elaborated in chapter four.

3.4.4 Concluding Remark

This research was employed descriptive qualitative research design. It aimed to explore the designed-in scaffolding as the central topic of the research. The research was conducted in one of elementary schools in Bandung. The researcher had two roles in this research: teacher and researcher. Therefore, it involved on non-participant observer and represented the data using the word ‘the teacher’. The data were collected through classroom observation and data analysis. Then, it was analyzed using thematic analysis, then there were six themes generated from the analysis.