

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

This chapter presents the methodology of the research. There are seven sections covered such as research design, research participants and site, data collection techniques, research procedures and timelines, data analysis, establishing trustworthiness, and concluding remarks.

#### **3.1. Research Design**

A qualitative approach with case study design is used in this study. It is in line with the aim of this study to analyze the process of an EFL teacher scaffolds the students in reading activities and the types of micro scaffolding strategies she used in each stage of teaching. It is supported by Creswell's theory (2009, p.175) that qualitative study is conducted in the field where people are involved in the direct interaction, the researcher collects the data themselves.

According to Yin (2003) as cited in Baxter and Jack (2008), there are four reasons why a case study design should be used in a study. First, the focus of the study is to answer "how" and "why" questions. It is in line with this study which answers "how" questions about the process of scaffolding practice by an EFL teacher. Second, the researcher cannot manipulate the behavior of those involved in the study. It means that the setting of the study and the decision that the teacher made in scaffolding the students occurred naturally without intervention of the researcher. In this study, the researcher used non participant observation, hence the researcher did not involve or intervene each action that the teacher and students did in the classroom. The transcription of the classroom observation was also done without making up or being manipulated. Third, the study covers contextual conditions. It is in line with the scaffolding process which is specifically situational and the appearance of scaffolding depends heavily on the context (Van de Pol, et al., 2010). In this study, the analysis of the teacher's scaffolding practice depends on the school context in which the result would be different if the teacher implements scaffolding at

the other schools since they would have different problems, standard and goals, different students and facilities, and the other different conditions that might influence the teacher's acts. Fourth, there is an interplay between the phenomenon and context. In this study, the case was the an EFL teacher's scaffolding practice in a private senior high school with 'A' accreditation, but the case study could not be considered without the context, the school, the teacher, the students, and the classroom settings.

Miles and Huberman (1994) states that case study is a phenomenon of some sort occurring in a bounded context. It means that context is essential to determine what kind of case that would be analyzed in the study. The case of this study is the implementation of macro and micro scaffolding strategies by an EFL teacher in reading activities of eleventh grade students of a private school with 'A' accreditation in Bandung, West Java. Besides, case study is appropriate for this study since the result of the study would not be used to judge whether the teacher performs better than the other teachers and the information obtained from the participants is not subject to truth or falsity (Kenny & Grotuleschen, 1980 as cited in Gusrayani. 2016).

### **3.2. Research Participants and Site**

This study was conducted at a private senior high school in Bandung. According to school data base of Ministry of Education and Culture, this school receives 'A' for its accreditation. The site made the study feasible in terms of participants' condition and skills, time, and mobility. The location of the school could be managed therefore it helped the researcher to make the time and cost efficient in running the study. Malik and Hamid (2016) state that the site should be chosen with care, but also should consider the time and financial management. Malik and Hamid (2016) assert that the subject/informant of the study should be identified with care. The subject should be knowledgeable about the setting and willing to share information. This study involved one English teacher and four classes of eleventh-grade students. Here are the details of information about the participants based on their potential to supply the data needed for this study.

### **a. Teacher**

The English teacher is 29 years old. She has been teaching English for seven years. The teacher was selected based on her knowledge and skill in teaching English. She was also involved in this research since she was interested and had a willingness to participate. The teacher is knowledgeable about her students' needs and she is aware of the support that she gives to the students. The teacher is considerate in making decision for the teaching and learning activities in the classroom.

### **b. Students**

The students were eleventh-grade. One class was taking a science major, while the other three classes were taking social major; i.e. XI IPA 4, XI IPS 1, XI IPS 2, and XI IPS 3. Each class consisted of 25 students. The teacher actually teaches six classes. The researcher should have observed all classes that the teacher teaches (6 classes) in order to gain rich data and build the trustworthiness by using time triangulation for the classroom observation. However, the teacher only allowed the researcher to observe her in four classes. Those are the underlying reasons why the researcher took four classes to be observed.

During the classroom observation, the students' abilities to understand the materials were reflected. It was confirmed by the teacher during the interview. The teacher said that two social major classes and one science major class had an average level, while one social major class had above average level of ability. The names of the classes were coded by the researcher for the reason of simplification; XI IPA 4 (class A). XI IPS 3 (class B), XI IPS 2 (class C), and XI IPS 1 (class D).

## **3.3. Data Collection Techniques**

There are two types of data collection techniques that were used in this study i.e. classroom observation and interview. The data collection was conducted from March 26, 2018, to May 4, 2018. The following parts are the details of data collection techniques in this study.

### 3.3.1. Classroom Observations

Classroom observation was conducted eight times to see how the teacher reflects and implements macro and micro scaffolding in the process of teaching and learning of reading. Through classroom observation, the researcher categorized the teacher's macro scaffolding into five elements (Hammond, 2001) i.e. teacher's goals, teacher's understanding of the linguistic demands of the associated tasks, knowledge of the students and of their current abilities and understanding, sequencing of tasks designed, and shift of responsibility for task completion. Meanwhile, the micro scaffolding strategies are categorized into five types (Roehler & Cantlon, 1997). The researcher used non-participant observation in which the researcher observed and recorded the interaction between the teacher and students without participating in the activities being observed. Besides recording the activities through a video recorder, the researcher also took a note as the complementary information. Before the researcher conducted the classroom observation, the researcher had already asked the teacher's consent through an interview (see appendix 1, page 73). The teacher also spoke on behalf of the students. The example of observation notes and transcription can be seen in Appendix 3, p. s121.

### 3.3.4. Interviews

The interview was conducted three times. It was aimed to find out the meanings underpinning people's action and explain their attitudes, motivation, and rationale (Menter, Elliot, Hulme, Lewin, & Lowden, 2011). In this study, the researcher used a semi-structured interview to ask for verification and clarification towards the teacher's practice in the classroom. The pre-observation interview was conducted to ask consent from the teacher and to discuss the procedures of the research. The first interview was conducted after four times of observation (April 20, 2018). The second interview was conducted at May 4, 2018. The questions of the first and second interview were composed based on the classroom observation data. The interview data which included the questions from the researcher and the answers from the teacher can be seen in Appendix 2, p. 112).

### 3.4. Research Procedures and Timeline

In collecting the data, there were several steps that used by the researcher. First, the researcher determined the data collection of the research i.e. classroom observation and a semi-structured interview. Second, the researcher determined the site and the participants of the research. Third, the researcher contacted the teacher and waited for the confirmation. Fourth, the researcher met the teacher and conducted a pre observation interview. Fifth, the researcher conducted classroom observations that were recorded using a video recorder. Meanwhile, the researcher also took a note of the important points that helped the researcher to analyze the data from the video transcription. Taking note was done to enrich data from the video transcription, in case there was something missed, skipped, or unclear from the video. Sixth, the researcher conducted an interview after four times observing the teacher. Seventh, the researcher conducted the second observation. Eighth, the researcher conducted an interview after four times observing the teacher. Ninth, the researcher transcribed the recordings of classroom observation and interview. Tenth, the researcher analyzed the data by categorizing the data. Eleventh, the researcher analyzed all of the collected data. Twelfth, the researcher made the analysis of the findings and drew the conclusion of the study.

The following table is the timelines of the study in details that consist of stages, date & time, and the activities.

**Table 3.1.**  
*Timelines of the Study*

No.	Stages	2018 Timelines (Date & Time)	Activities
I.	General preparation	2 <sup>nd</sup> - 7 <sup>th</sup> April	Contacting the teacher and waiting for the confirmation.
	Pre-observation interview	17 <sup>th</sup> April 07.00 am	The researcher met the teacher; Explaining the research procedures and several things related to the research that the teacher needed to know. The researcher also asked

			some questions related to the teacher's knowledge on the field that was studied.
II. a.	Observation 1 Class A	18 <sup>th</sup> April 10.40 am – 01.10 pm	The teacher's practice. (Learning & teaching process)
	Observation 2 Class B	19 <sup>th</sup> April 01.10 pm – 02.30 pm	The teacher's practice. (Learning & teaching process)
	Observation 3 Class C	20 <sup>th</sup> April 08.05 am – 09.25 am	The teacher's practice. (Learning & teaching process)
	Observation 4 Class D	20 <sup>th</sup> April 09.50 am – 11.10 am	The teacher's practice. (Learning & teaching process)
III. a.	Interview 1	20 <sup>th</sup> April 11.30 am	The researcher asked several questions related to the teacher's practices that have been done for 4 meetings. The researcher asked for teacher's clarification of what happened in the classroom during the first session of observation 1 – 4.
The teacher was being supervised by school supervisor (23 <sup>th</sup> - 27 <sup>th</sup> April)			
II. b.	Observation 5 Class A	2 <sup>nd</sup> May 10.40 am – 01.10 pm	The teacher's practice. (Learning & teaching process)
	Observation 6 Class B	3 <sup>rd</sup> May 01.10 pm – 02.30 pm	The teacher's practice. (Learning & teaching process)
	Observation 7 Class C	4 <sup>th</sup> May 08.05 am – 09.25 am	The teacher's practice. (Learning & teaching process)
	Observation 8 Class D	4 <sup>th</sup> May 09.50 am – 11.10 am	The teacher's practice. (Learning & teaching process)
III. b.	Interview 2	4 <sup>th</sup> May 12.30 pm	The researcher asked several questions related to the teacher's practices that have been done for 4

			meetings. The researcher asked for teacher's clarification of what happened in the classroom during the second session of observation 5 – 8. The researcher asked some questions related to the teachers' belief and knowledge of scaffolding to sum up the whole activities of the research.
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In stage I (general preparation), the researcher contacted the school and the teacher that participated as the subject of the study. After the teacher confirmed her readiness, the researcher conducted a pre-observation interview. The researcher asked the teacher's knowledge whether she knew about scaffolding or not and whether she implemented it in her teaching practice or not. This interview is aimed to gain and clarify information that is needed for the running of study.

In stage II.a (observation part 1), the researcher conducted a non-participant classroom observation in four classes. Those classes were given the same materials by the teacher. This classroom observation was conducted from April 18 to 21, 2018. In stage III.a (interview I), the researcher conducted an interview to clarify and get more information related to the teacher's practice. The questions of the interview were composed based on the teacher's performance in the classroom observations part 1. In stage II.b (observation part 2), the researcher conducted a non-participant classroom observation in four classes. Those classes were given the same materials by the teacher. But it was a different material from the first observation. This classroom observation was conducted from May 2 to 4, 2018.

In stage III.b (interview II), the researcher conducted an interview to clarify and get more information related to the teacher's practice. The questions of the interview were composed based on the teacher's performance in the classroom observation part 2.

### 3.5. Data Analysis

The collected data were in the form of transcriptions from classroom observation video and voice recording of the interview. In this study, the data were segmented along with the research questions. The data were organized and prepared for the analysis. Miles and Huberman (1994) outline that the process of data analysis for qualitative study includes data reduction, data display and conclusion drawing/verification. In reducing data, the researcher took the excerpts from the classroom observation notes and put it into a table named 'Distribution of Scaffolding Strategy Types' (see Appendix 1, p. 73). In displaying data, the researcher also make the translation of classroom observation and interview excerpts by herself.

For the first research question, the transcription data related to the key elements of the macro scaffolding were used by the teacher were summarized and displayed in form of narration with five themes; teacher's goals, the teacher's understanding of linguistic demands of the associated tasks, knowledge of the students and of their current abilities and understanding, sequencing of tasks designed, shift of responsibility for task completion. These sub-themes are taken from Hammond (2001) about five key elements of macro scaffolding. The analysis and discussion for the first research question was based on this theory. The analysis was also supported by the data from the interview.

For the second research question, the transcription data related to types of micro scaffolding strategies which were used by the teacher were summarized and displayed with the excerpt in form of table. These data were explained in sub-themes in which the analysis and discussion were elaborated. The data from the observation transcription were also supported by the data from the interview. The term of micro scaffolding is derived from Hammond (2001). However, to make the details of the analysis, the researcher used Roehler and Cantlon theory (1997) about scaffolding strategies; offering explanation, inviting students' participation, verifying and clarifying students' understanding, modeling of desired behavior, and inviting students to contribute clues. These categories were used since it is relevant and corresponded to the data.

At last, the summary of the findings and discussion was made to draw the phenomenon which happened in the teacher's scaffolding strategies practice. The summary also covered the relatable facts of the teacher's practice with the recent studies of scaffolding and several things which influenced it.

### **3.6. Establishing Trustworthiness**

Trustworthiness is important to be established in qualitative study. It refers to the correctness or credibility of a description, conclusion, explanation, interpretation, or other sort of account (Maxwell, 1996). The credibility of this study were maintained by the following actions (Dezin, 1970; Lincoln and Guba, 1989, in Cohen, 2007):

#### **a. Member checking**

The researcher conducted the interview for three times to do member checking in this study. The study involved the teacher to review and clarify the interpretation of the researcher hence the data were trusted.

#### **b. Time triangulation**

Time triangulation was done for the classroom observation and interview in which the researcher conducted the classroom observation for eight times and the interview for three times. Time triangulation was used to provide rich data and see the consistency and pattern of the data.

#### **c. Theoretical triangulation**

Theoretical triangulation was done in analyzing and making the discussion of the findings. It was used to provide a comprehensive discussion and to justify the findings of the study.

### **3.7. Concluding Remarks**

This chapter discussed the research method. The research design of this study is case study design with classroom observation and interview as the data collection techniques. The participants of this study are a female teacher and four classes of eleventh grade students in a private senior high school with 'A'

accreditation in Bandung, West Java. Hammond's (2001) & Roehler and Cantlon's are used as the frameworks in analyzing the data.