

CHAPTER III

RESEARCH METHODOLOGY

3.1 Overview of the Chapter

This chapter provides the strategy used in conducting the study along with the methodological principles and argumentation upon which it was based. Thus, it includes the research design, participants and selection procedure, role of the researcher, methods of data collection, and methods of data analysis.

3.2 Research Design

The purposes of this research are to find out the kinds of scaffolding strategy used by the experienced and novice English teachers and also to know how the scaffolding strategies used by experienced and novice English teachers influence the students' improvement in learning one particular unit of the lesson. Relevant to the purpose of the research, this study employs qualitative research design because it investigates the quality of activities, situations, or materials (Creswell, 2014). The research problems and methods in this study tends to evolve as understanding of the research context and participants deepens (Gay, Mills, & Airasian, 2009). Gay, Mills and Airasian (2009) stated that qualitative research is the collection, analysis, and interpretation of comprehensive narrative and visual data to gain insight into a particular phenomenon of interest. Malik and Hamied (2016) stated that qualitative research focuses on gaining a rich and complex understanding of a specific social context of phenomenon rather than generalization to other geographical areas or populations. In this research, the researcher will not manipulate or interfere the classroom activity or the respondents. Hennink, M, and Bailey (2013) in (Malik & Hamied, 2016) stated that qualitative design means to study people in their natural settings to identify how their experiences and behavior are shaped by their context. The researcher in this study spent a great deal of time with participants and are immersed in the research setting to get the detailed recording (of the setting, participants, and their interactions) occurring in the setting (Gay, Mills, & Airasian, 2009).

There are five considerations in selecting qualitative research as the design of a research (Malik & Hamied, 2016). First, the focus of the research is on the process, implementation or development of a program or its participants. This research focus mainly on the process of scaffolding implementation and to see its influence on the students' improvement.

Second, the emphasis of the program is on the individual outcome. Two English teachers were involved in this study. The result of the analysis of these two teachers will not be the same in other places even though with similar topics. It means that the results are so individualized.

Third, detailed in-depth information is needed about certain clients or programs. In this study, the detailed in-depth information about the scaffolding strategies used by experienced and novice teacher were needed to answer all the research questions.

Fourth, the focus is on diversity among idiosyncrasies of unique qualities exhibited by the individuals. What types of scaffolding strategies used by experienced and novice teacher, and the influence of their strategies toward the students' improvement will be the focus of the study. The diversity and the uniqueness will become worthy finding to be elaborated.

Fifth, the intent is to understand people's beliefs as to the nature of the problem they are addressing and how their action will lead to detailed outcomes. As mentioned above, how the experienced and novice teacher implement the scaffolding strategy will be the outcomes of this study.

To get the detailed information about scaffolding, classroom observation (noted and recorded), document (teachers' documents and students' documents) and interview (teacher and students) are needed in this study. Those considerations lead the researcher to draw a conclusion that this study met the characteristics of qualitative research.

The judgment of selecting a case study design is based on several considerations since it is to understand a case or cases in full and in depth, to study the phenomenon with its real world context, and to evaluate the scaffolding strategies employed by the experienced and novice teachers. Malik and Hamied (2016). Gay, Mills, and Airasian (2009) stated that case studies are particularly

valuable in program evaluation when the program is to capture individual differences among experienced and novice teacher, diverse experiences of the program, or unique variations from one program setting to another. It also investigates a single case in a bounded system in a small scale (Creswell, 2014). This study is also concerned with understanding and describing the process of teaching in using scaffolding concept, not the behavior of the teachers (Merriam, 2009). The end product of this study is a rich and thick description of the phenomenon under study that is one of the special features of case studies (Merriam, 2009). Moreover, the data in this study were collected from multiple sources included observation, curricular material (lesson plan, textbook), students' documents (students' worksheet) and media (teaching aids). Malik and Hamied, (2016) also stated that one of the characteristics of case study approach is multiple data collection or it is not limited to a single source of data. In conclusions, after describing the features and characteristics of qualitative and case study, it is claimed that qualitative and case study are suitable as the design of this research since it is relevant to the purpose of this research.

3.3 Research Sites

This study was conducted in a public Junior High School in Lembang, West Java from March to May 2017. The school is located about 17 KM from Bandung, the capital city of West Java province. This school is one of the best public Junior High School in Lembang. The school implements the 2013 Curriculum. This study was conducted at the first grade. The first grade consists of 11 classes (7A until 7K). Each classes consists of 39 until 40 students. These students learn English twice a week (2 x 40 minutes/ meeting).

There are a number of reasons for choosing this school in this research. First, this school is the best school in this region. The school was formerly an RSBI (Rintisan Sekolah Bertaraf International). This was one of the programs of the government to increase the quality of Indonesian schools. RSBI's school was categorized as one of the best school in its region. The facility of an RSBI school was better than other public schools. The school has the mosque, canteen, library, sport tools, computers, multimedia laboratory, etc. The classrooms are facilitated

with the Projector. Second, the students in this school always won some competitions outside of the school. Third, most of the teachers are civil servant, and of course most of them are certified as professional teachers (*guru bersertifikasi sebagai pendidik*). Fourth, there are some English teachers in this school which can be categorized as novice teacher and experienced teacher. Fifth, this school has good improvement in English subject since the teachers are always actively encourage the students in learning English. Last, this school are easy to reach by the researcher to conduct this research.

3.4 Participants and the selection procedure

The participants in this research were two English teachers and 79 students in year 7. The process of recruitment begins by visiting the school and meet the principal. After explaining the purpose, design and schedule of the study, the principal allowed me to conduct the research at this school. There are three English teachers at the first grade in this school. Two teachers can be categorized as experienced teacher and one novice teacher. One of the English teachers was objected to be the participant in this study. She was one of the national instructors for 2013 curriculum. She was very busy at that time. It means that there were two English teachers involved in this study, an experienced and a novice English teacher. They are chosen purposefully based on the category of the experienced and the novice teacher. Creswell (2014) stated that in purposeful sampling, researchers intentionally select individuals and sites to learn or understand the central phenomenon. This type of sampling enables the researcher to establish the criteria, bases, or standards necessary for units to be included in the investigation (Gusrayani, 2017). Both of the teachers are the key informants in this study. The experienced teacher should have more than five years teaching experiences and she should have some experiences regarding English language teaching. He/ She must be a certified teacher (*guru yang telah disertifikasi*) through PLPG or PPG (The Education and Training for Teacher Profession). It means that she should be certified/ credentialed/ licensed as a professional educator. The novice teacher is a teacher who typically has zero to five years of teaching experience and is a new

comer to the teaching profession. Generally, he is a fresh graduated English teacher.

The informants and participants in this study are:

1. Experienced teacher

Mr. Oc (pseudonym) is a civil servant and a professional English teacher (guru bersertifikasi). He has been teaching more than 10 years. He graduated his master degree from one of the best universities in Bandung. He teaches the first grade students in this school (7K).

2. Novice teacher

Mr. Dd (pseudonym) is a fresh graduate English teacher. He graduated from a private university in Bandung for his undergraduate degree. He is a volunteer teacher. His teaching experience is less than 5 years. He teaches the first grade students (7C).

3. Students

There are two classes of the first year students involved in this study. Experienced teacher's class and novice teacher's class. Each classes consists of 39 until 40 students. The students involved in this study were aged between 13-14 years old. Most of them are *Sundanese*. Since the time to collect information is limited and there are big number of students in a class, the researcher focuses the study to some students (Creswell, 2014). The focussed participants includes several students who can contribute to this research problems (Low, Middle and high achiever students) (Gay, Mills, & Airasian, 2009). Cohen, Manion and Morrison (2007) stated that focus group in a research might be useful to triangulate with more traditional forms of interviewing, questionnaire, observation, etc. The researcher determines the starting point of the focus groups students, which students gain more attention from the teacher, the improvement made by the low, middle and high achiever students and also the interaction of the focus group with the class.

4. Documents

Beside people, this research also collects the data from documents of the teachers (teachers' lesson plans) and students (students' worksheets).

3.5 Methods of data collection

The data in this study were collected through observation (noted and recorded), documents analysis (students' textbook, students' worksheets, teachers' lesson plan, syllabus and media/ teaching aids) and interview (teachers and focused students). Travers (2001) in Mulyana (2012) stated that there are some methods employed by qualitative researchers in collecting the data: observation, interview, documents analysis. Moreover Malik and Hamied (2016) stated that one of the characteristics of case study approach is multiple data collection or it is not limited to a single source of data. The observation was conducted to find out the kinds of scaffolding strategy employed by the teachers in teaching one particular unit of the lesson and to find out the influence of this strategies toward the students' improvement. There were several categories listed in the table of observation and the researcher needs to record it. There were many categories found in one meeting that have to be recorded, that's why this observation is conducted by using video recorder. It can function both for videotaping and audio-taping. The researcher took a part as a non-participant observer in this study. In nonparticipant observation, the researcher only observes and records behavior but does not interact or participate in the life of setting under study (Gay, Mills, & Airasian, 2009). The researcher only observed the class activity by taking notes (description, direct quotation and observer comments) and sat behind the class without manipulating the teaching and learning process (Merriam, 2009). The observations were conducted in four until five meetings (one unit of the lesson). During the classroom observation, the researcher also filled the observation sheet which have been prepared before. This observation sheet was developed by the researcher to support the objective of this study. The data from the observation sheet was used to support the data gained from the video recording. Classroom observation was a major means of collecting data in this study. Patton (1990) in Cohen, Manion, and Morrison (2007) suggested that observational data should enable the researcher to enter and understand the situation that is being described. Observation in this research allowed the researcher to gather live data from naturally occurring social situation (Cohen, Manion, & Morrison, 2007). To support the result of the study, teachers' document such as curriculum, syllabus

and lesson plan were needed in this study to support the result of this study. The teachers created their lesson plans based on their curriculum and syllabus provided by the government. This lesson plans shows the steps how the teachers teach their students in the classroom. Merriam (2009) stated that a qualitative study of classroom instruction would lead to documents in the form of teachers' lesson plan, students' assignments, and teachers' evaluation. Students' document are also needed in this study to confirm the students' improvement in learning one particular unit of the lesson. The students' assignments (students' worksheet) gave the information of what the students learned, what improvement they made when the teacher scaffold them in their learning. Last, interviewing the teachers and the focus students in this study were also conducted to collect the data about the implementation of scaffolding strategies in the classroom. The interview was recorded by using audio recorder. This unstructured interview allowed the researcher to inquire into something that has presented and as an opportunity to learn about something at the research setting (Gay, Mills, & Airasian, 2009).

3.6 Methods of data analysis

This section covers a range topic on how to manage the data and analyze them. After getting the data from observation, teachers/ students' documents, and interview, this chapter discusses how the data will be analyzed. Qualitative data analysis involves organizing and explaining the data; in short, making sense of data in terms of the participants' theme and categories (Cohen, Manion, & Morrison, 2007). There are several steps in managing and analyzing the data in this study.

Transcribing the data from observation. Before transcribing the data from observations, the video tapes were listened and watched several times while reading the field notes. Then the data from the observation (audio/ video recording) were transcribed. It consisted of the data from several meetings (one unit of the lesson) from the novice and the experienced teachers' classes. The transcription is the process of converting audiotape/ videotape recordings or field notes into text data (Creswell, 2014). *Coding* the data from observation. Both teacher and students statements were coded in order to characterize the dialogue

between the two. The teacher-students interactions were coded at the level of the conversational turn in order to establish the function of statement in the interaction. In other words, after transcribing the data, the researcher will select specific data to use (relevant to the research questions) and disregard other data that do not specifically provide evidence in this study. The selection of the data in this study was based on the characteristic of scaffolding strategies elaborated in chapter two. Coding is the process of segmenting and labeling text to form descriptions and broad themes (categories) in the data (Creswell, 2014).

Finally, the episodes or scaffolding dialogues were analyzed as a whole because coding at the level of the statement or the interaction might, in fact, miss the essence of the scaffolding (Vol, Volman, & Beishuizen, 2010). Measuring all key characteristics of scaffolding (contingency, fading and transfer of responsibility) requires an analysis that make a systematic distinction between these features. The data were then categorised as scaffolded or nonscaffolded discourse. Then the data taken were displayed in a table based on the types of scaffolding strategies used by the teachers (see appendix 1 and 2). After all the steps were done, the first research question was answered.

In order to answer the second research question “How do the scaffolding strategies influence the students’ improvement in learning English?”, the researcher recorded the types of scaffolding strategies used by the teachers in every meetings and described the improvement made by the students when the teacher using those kinds of strategies. The improvement can be seen from the students’ behavior toward the lesson given by the teachers and students’ assignments. To confirm the students’ progress, the researcher also interviewed the students to know the progress or improvement they made.

3.7 Research procedures and timelines

Timelines are important in evaluating the feasibility of this project. The amount of time that various stages of this research taken will be outlined in the table 3.7. The researcher mapped out what to do and when to do it in the table below.

Table 1. Research procedures and timelines

Stages	Project activity in 2017	Timeline
Preparation	- Visit the school. - Talk to the Principal of the school. - Meet the experienced and novice teacher and explaining the overview of the research to them. - Sample selection - Observe the classroom, teaching activity and analyze the teachers' documents (lesson plan, syllabus, etc.)	24 th March
	- Introducing the project to the students - Observe the class (video/ audio) to know the best angle to get the best picture and sounds.	30 th March
Collecting the data (Exp Tc)	- Observation in experienced teacher's class - Interviewing the teacher and focus students after observation	3 rd April
	- Observation in experienced teacher's class	6 th April
	- Observation in experienced teacher's class - Interviewing the teacher after observation	10 th April
	- Observation in experienced teacher's class	13 rd April
	- Observation in experienced teacher's class	15 th April
	- Observation in experienced teacher's class - Interviewing the teacher and focus students	18 th May
Collecting the data (Nov Tc)	- Observation in novice teacher's class - Interviewing the teacher and focus students	13 rd April
	- Observation in novice teacher's class	15 th April
	- Observation in novice teacher's class - Interviewing the teacher after observation	10 th May
	- Observation in novice teacher's class	11 th May
	- Observation in novice teacher's class - Interviewing the teacher and focus students	18 th May
Reviewing the data	- Reviewing the data	19 th June

1. Preparation

In this stage, the researcher went to the school to meet the principal. After getting the permission to conduct the research in this school, the researcher met the English teachers in this school. There were three English teachers in this school. Two of them are categorized as experienced teachers and one as novice teacher. One of the experienced teachers was objected to be the participant in this study. She did not want to be the participant in this study because she was very busy as a trainer outside of the school. Moreover, she said that she did not graduate from English Education department. That's why the researcher decided Mr. Oc as an experienced teacher and Mr. Dd as novice teacher in this study. Both of them are very welcome to be the participants in this study.

2. Collecting the data in experienced teacher's class and novice teacher's class.

The data were collected by observing the teaching activity of the experienced and novice teachers' class, interviewing the teachers and the students, and documenting some teachers' and students' documents. Observation in experienced and novice teachers' class were conducted during one unit of the lesson. It is about 5 until 6 meetings in each class.

3. Reviewing the data

After getting the data from the observation in both classes, the researcher reviewed it to check the whole data.

3.8 Conclusion

This chapter outlined the research design, participants and selection procedure, methods of data collection, and methods of data analysis of the study. In this qualitative research, the research questions aimed to know the types of scaffolding strategies used by the experienced and the novice English teacher and to know the influence of the scaffolding strategies used to the students' improvement in learning English. Since this study aimed to get the detailed information about scaffolding, then it is claimed that qualitative and case study were chosen as the design of this study.