# CHAPTER III RESEARCH METHOD

This chapter deals with important aspects related to the research method of the study covering research design as a plan of what data to collect, research site and participant of this study. Data instruments of this study namely document analysis (on lesson plans), observations, and interview were conducted to collect the data and information to answer the research questions. Data collection procedure and data analysis procedure are explained as a process for supporting decision making in this study. Testing validity in this study (member checking and triangulation) is used to confirm the decision making. Finally, concluding remarks are written at the end of the chapter.

# 3.1 Research Design

This study employed a descriptive qualitative study. According to Burns and Grove (2003:201), descriptive qualitative study "is designed to provide a picture of a situation as it naturally happens". Again, a descriptive qualitative study focuses on collecting, organizing and summarizing information on the problem under investigation (Hamied & Maliek, 2014).

Furthermore, this study was theoretically qualitative because it was relevant to some characteristics: first, main focus of this study is on describing what happened, what the situation or event is like and how the things are related to each other (Hamied & Malik, 2014). Second, the data collection in this study was directed toward discovering the teaching process. According to Sandelowski (2000) the data collection in qualitative descriptive studies is typically directed toward discovering who, what, and where of events or experiences, or their basic nature and shape. Third, this study used multiple data collection techniques (observations, document analysis, and interview) and analyzed by analytic procedure. According to Bogdan & Biklen (1992) to obtain and analyze the data

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in the descriptive qualitative data, the data should be analyzed qualitatively from various instruments.

# 3.2 Research Site and Participants

The participant of the research was a teacher of English at one of junior high schools in Bangka Tengah, Bangka Belitung. The teacher of English in the school has better experiences in teaching English at junior high school. She has been teaching for 15 years at junior high level. She was a teacher trainer in MGMP. Moreover, she was chosen as model teacher in the implementation of new programs such as lesson study and scientific approach. This school was chosen as the site of the study for four reasons. First, the school is a favorite junior high school in Bangka Tengah due to the school's achievement both academic and non-academic. Second, the teaching and learning facilities are better than other junior high school. This school is supported by a number of teaching facilities such as projectors and speakers in each classroom. Third, this school is using 2013 curriculum due to the district government policy to implement 2013 curriculum independently.

# **3.3 Data Instruments**

In this study, various data instruments were used to gain the information related to the research questions. They are documents analysis (on lesson plans), observations, and interviews. Further, this section concerned the kinds of instruments used to collect the data, the functions of each data, and the source of instruments.

## **3.3.1 Document Analysis**

Document analysis of this study was the teacher's lesson plans. The data in the form of lesson plans were collected from the teacher in accordance with the existing curriculum. There were two teacher's lesson plans used as the instruments of this study, namely lesson Plan 1 & Lesson Plan 2. Lesson Plan 1 was about Recount Text theme, which consisted of KD 3.12, KD 4.14, and KD 4.15. Meanwhile, the Lesson Plan 2 was about Narrative Text, which consisted of KD 3.14 & 4.18. (RPP 1 and RPP 2 can be seen in appendix 2 & 3).

The document analysis was used to take many objects of explicit data collection. The documents were also useful to cover a long time span, many events, and many settings. In addition, according to Yin (2014) there are three major functions of the document analysis. First, documents are helpful in verifying unclear data. Second, documents can provide other specific details corroborating information from other sources. Third, documents are the guidance to the researcher in drawing an inference.

In this study, the lesson plans were utilized to get additional information on how the teacher modified the teaching scenarios and assessments. In line with the lesson plans function, Richards (2002) mentions that a lesson plan is used to know the process of setting of the objectives, selecting and organizing the learning experiences, and stating the evaluation.

# 3.3.2 Observation

An observation is used to look at what is going on around the participant (Heigham & Crocker, 2009). In addition, the benefit of conducting observation is to obtain a more accurate indication of the subject's (teacher) activities (Fraenkel et al., 2012). The observations were focused on the teacher's and students' activities in eight meetings in the classroom and in several meetings outside the classroom. The observations were conducted to obtain the data of the teacher's performance both in the classroom and outside the classroom related to Project Based Learning (PjBL) method, particularly to describe the teacher's process of teaching and learning English by implementing Project Based Learning (PjBL). The form of observation notes and checklists were modified from Keser & Karahoca (2010) (see Appendix 7).

# 3.3.3 Interview

Interview is a technique that is used by a researcher in collecting data by having dialogue with the participant. The interviews were used to support the data collected from the document analysis (teacher's lesson plans and observation). Interviewing provided the researcher a means of gaining a deeper understanding on how the participants see and interpret a phenomenon that cannot be gained through observation (Gay et al., 2009). Moreover, Yin (2014) states the interview can provide the explanations of someone's attitudes, perception, interests, feelings, concerns, and values of something or a case. Therefore, the interview was conducted to get more information related to the research questions as clearly as possible.

In this study, all interview questions were in semi-structured form as semistructured interviews are most useful for obtaining information to test a specific hypothesis that the researcher has in mind (Fraenkel et al., 2012). There were two stages of interview questions. The first stage interview questions were utilized to get the teacher's confirmation from her lesson plans and her teaching and learning processes. In other words, the first stage interviews were utilized to strengthen the information taken from the document analysis (lesson plans) and observations. These interviews were also used to answer the first research questions.

Meanwhile, the second stage interviews were utilized to identify the difficulties faced by the teacher in implementing Project Based Learning (PjBL). The interview questions of the study were adapted from Herlina (2014). The frameworks of interview stage 1 and interview stage 2 can be seen in the following tables.

 Table 3. 1. The Frameworks of Interview Stage 1

	CATEGORIES	QUESTIONS			
Α	Interview guidelines of the teacher's teaching	A1, A2, A3, A4, A5, A6,			
	activities	A7, A8, A9, A10, A11,			
		A12, A13, A14, A15			

# Table 3.2. The Frameworks of Interview Stage 2

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В	Teacher's difficulties in implementing (project-								
	based	learning)	and	teacher's	solutions	to	B 1 & B2		
	overco	me the diff							

Modified from Herlina (2014)

# 3.4 Data Collection Procedure

This section elaborates the procedures of collecting the three types of data. They are documents analysis (lesson plans), observations, and interviews.

#### 3.4.1 Data Collection Procedure of Document Analysis

The document analysis (teacher's lesson plans) were submitted before the teacher conducted the teaching and learning processes. A total of eight lesson plans were prepared by teacher in the beginning of semester. After discussing for about 20 minutes, two lesson plans were chosen as the samples for this study. They are the lesson plan of Recount Text theme (KD 3.12, KD 4.14, and KD 4.15) and the lesson plan of Narrative Text (KD 3.14 & 4.18). These lesson plans were chosen because of two reasons. Firstly, those lesson plans were prepared by the teacher for Project-Based learning model. Secondly, the teaching scenarios and assessment of the lesson plans were modified into project-based learning model characteristics.

#### 3.4.2 Data Collection Procedure of Observation

The observation data were collected by entering the classroom. This observation method is well known as a non-participant observer. The non-participant observation means the researcher do not interact with people while they are carrying out their normal tasks such as teaching and studying (Heigham & Crocker, 2009: 167). The data from the classroom observations were collected by using field notes (observation notes and observation checklists) and video camera. Field notes are the written account of what the researcher hears, sees, experiences, and thinks in the course of collecting and reflecting the data. The

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THE IMPLEMENTATION OF PROJECT BASED LEARNING (PjBL) IN TEACHING AND LEARNING ENGLISH AS A FOREIGN LANGUAGE Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu observation and checklists notes were written in the observation while the activities were running. These observations were written because the memory of the observations was still fresh as suggested by Van Lier as (cited in Sumbayak, 2014).

In conducting the observations, the video camera was used to record the teaching and learning process. As Fraenkel et al. (2012: 450) suggested, by using a video in the observations, the researcher will gain three benefits. First, the video file may be replayed several times for continued study and analysis. Second, experts or interested others can also hear and/or see what the researcher observed and offer their insights accordingly. Third, a permanent record is obtained for comparison with later or different samples. Moreover, the video camera was also utilized to capture the pictures of the physical environment of the classroom. The pictures then would be used in the appendix of this study. The observations for the recount text theme were carried out from 29 February -14 March 2016. Meanwhile, the observations for the narrative text theme were carried out from 16 March -28 March 2016. In addition, the observations were also conducted outside the classroom since some activities were conducted outside the classroom.

#### **3.4.3 Data Collection Procedure of Interview**

The interview was held in the staff room. This room was chosen because it was quiet. So, the teacher could think calmly. During the interview, all the questions and answers were recorded. As suggested by Yin (2014), the use of audio tapes or recorder will provide a more accurate rendition of any interview than taking our own notes. Then, the interview protocols were also used to obtain the information during the interview. These protocols included a heading, an instruction to the interviewer, the questions related to the teacher's understanding, experiences, and solutions. The semi-structured interviews were considered to be applied in these interviews because they are most useful for obtaining information to test a specific hypothesis that the researcher has in mind (Fraenkel et al., 2012).

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Besides, Cohen (cited in Herlina, 2014) reveals that the semi-structured interviews allow informants the freedom to express their views in their own terms.

#### 3.5 Data Analysis Procedure

This section elaborates the procedure in analyzing all data from document analysis, observations, and interviews. It also explains the instruments which were used to analyze the data. The last point is about the testing validity of this study. The Detail of each data analysis is enumerated below:

# 3.5.1 Analysis Data of Document Analysis

In this study, document analysis enabled the researcher to scour for an understanding of the planning of the implementation of project-based learning in accordance with existing curriculum by reviewing the teacher's lesson plans of project-based learning. The lesson plans were analyzed to see the relevance between the planning and the implementation process.

## 3.5.2 Analysis of Data of Observation

In analyzing the observation data, reading and reviewing the observation field notes and checklists were conducted after the classes. Then, the video of observations were replayed to confirm the data in the field notes. After that, the data were analyzed and classified into some categories related to the teaching and learning activities using Project-Based Learning method as the main focus of the observation. The data from observations were classified into six steps of projectbased learning activities: (1) determining the project, (2) deciding the regulations, (3) arranging the schedules, (4) finishing the project, (5) composing and presenting the project, and (6) evaluating the projects. These steps were modified from Keser & Karahoca (2010).

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Next, all of the finding data of the observations were reduced, displayed and concluded as Miles and Huberman's suggestion (cited in Silverman, 2005). Finally, the interpretations of the data were conducted by drawing the conclusions. The data was interpreted to address the research question on how the teacher implements Project Based Learning (PjBL) in teaching and learning English. Creswell (2012) suggested that the conclusions of interpretation data from observations can be drawn and explained in words to provide the answers of the research questions. The field notes (observation notes and checklist framework) can be seen in table 3.4 below:

No	PjBL Steps	Activities				
1	Determining the projects	1. Choosing the projects				
		2. Choosing the materials				
2	Arranging the rules	1. Discussing the rules				
3	Arranging the schedules	1. Arranging the schedules				
4	Finishing the project	1. Explaining materials				
		2. Explaining the projects				
		3. Collecting the data				
		4. Monitoring the process				
		5. Checking the progress				
		6. Producing final projects				
5	Presenting the projects	1. Presenting the projects				
6	Evaluating the projects	1. Assessing the projects				
		2. Reflecting on the activities				
		Modified from Veser & Vershoes (2010)				

Ta	ble	3.	3.	Pro	ject-	Based	Lea	rning	F	ramewo	orks
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Modified from Keser & Karahoca (2010)

### **3.5.3** Analysis of Data of Interview

In analyzing the data of an interview with a teacher, transcribing, categorizing (coding) and interpreting processes (Creswell, 2012) were carried out to answer all the research questions. Coding helped the researcher to make sense out of text data and collapse it into themes (Creswell, 2012). As aforementioned in section (3.3.3) about Interview, there were two kinds of interviews. So, the recorded interviews were transcribed and categorized immediately after the data was collected based on each interview stage. The coding was classified by making codes (Alwasilah, 2011) on each interview answers.

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THE IMPLEMENTATION OF PROJECT BASED LEARNING (PjBL) IN TEACHING AND LEARNING ENGLISH AS A FOREIGN LANGUAGE Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu In this study, the teacher's responses in first stage interview then were used to crosscheck the finding data from lesson plans and observations. Then, one category was compared to another to gain a similar conclusion which would then be selected as the final conclusions. Thus, the first and second research questions could be answered clearly and approved by the teacher. Meanwhile, the teacher's responses on the second stage interview were used to identify the teacher's difficulties in the teaching processes by implementing Project Based Learning (PjBL).

## **1.6 Testing Validity**

Testing validity is important to test out the trustworthiness of the data. According to Gay et al. (2009:375), in qualitative research, validity is the degree to which qualitative data accurately gauge what we are trying to measure. In line with this, Fraenkel et al. (2012) also stated that validity in a qualitative research is used to check the researcher's perceptions and to ensure that they are not being misinformed. In this study, there are two kinds of strategies that were applied to test the validity namely, triangulation and member checks.

# **1.6.1 Triangulation**

Data obtained from document analysis (lesson plans), observation and interview were triangulated to see if the data show consistency. According to Gay et al. (2009: 208) triangulation is a primary way that qualitative researchers ensure the trustworthiness (i.e., validity) of their data. In addition, Creswell (2012) stated that by triangulating different data sources of information, the researchers could examine the evidence from the sources and use it to build a coherent justification. In other words, the findings of the study were trustworthy.

#### 1.6.2 Member Checks

Finally, in the effort to maintain the research validity, the member checks were conducted after interpreting all data. A member checking is used to ensure that the results were appropriate with the subject responses (Creswell, 2012). The final conclusions were given back to the teacher as a member check. The member check can be conducted by having the participant reviewing what the researcher has written as a check for accuracy and completeness (Fraenkel et al., 2012). So, the final findings obtained from the participant were the real finding data. As stated by Ali (2011) a member checking will obtain the real data and divide unrelated data.

# 1.7 Concluding Remarks

This chapter focuses on the research methodology that was employed in this study. The method was a descriptive qualitative study. This method was employed to describe the teacher's process of teaching and learning English by implementing project based learning (PjBL) and to identify the teacher's difficulties in implementing project based learning (PjBL) in teaching and learning English. This study was conducted in one of the junior high schools in Bangka Tengah. It involved one English teacher as the participant. The instruments of the study were document analysis (lesson plans), observations, and interview. Triangulation of the findings was done to ensure the trustworthiness.