

CHAPTER 3

RESEARCH PROCEDURES

3.1 Method of the Research

With the objective to explore the students' experience of the benefits and challenges of project-based learning implementation, a qualitative case study was carried out. A case study was carried out with the aim of description because Merriam (1998) stated that a case study was an in-depth, comprehensive description and analysis of a bounded phenomenon, such as a program, an institution, an individual, a procedure, or a social unit. Specifically, this study used a descriptive case study because researcher wanted to focus on describing a phenomenon and the real-life context in which it occurred (Yin, 2018). In this case, researcher discussed in-depth information about project-based learning implementation from students' experiences.

3.2 Focus of the Research

This study focused on exploring the students' experience of the benefits and challenges of project-based learning implementation. Therefore, this study deeply investigated how students experienced the implementation of project-based learning. This includes revealing the benefits of project-based learning in the domain of English language learning and 21st century skills as well as the challenges they experienced.

3.3 Setting and Participants

This study took place at one of the universities in Tasikmalaya, West Java, Indonesia because the researcher and the participants are students in this university. The participants of this study were selected based on the criteria determined according to research aims. The criteria of this study are divided into three parts, but there is one main criterion that must be met, namely students who have enrolled

in Grammar in Multimodal Discourse class because Grammar in Multimodal Discourse class is the setting of this study.

- a. The first criterion is the first participant who has the best project result and the best engagement during discussion and consultation process.
- b. The second criterion is the second participant who has the medium project result and the best engagement during discussion and consultation process.
- c. The third criterion is the third participant who has low project result and the best engagement during discussion and consultation process.

Therefore, the participants in this study consisted of 3 students from different levels of engagement and project results (high, medium, low). In more detail, the participants of this study consisted of two women and one man and all of them are the students of 7th semesters in the English Education Department because they are the latest students who have enrolled in Grammar in Multimodal Discourse class that implements project-based learning method.

The researcher conducted a preliminary study before choosing research participants by interviewing the lecturer of Grammar in Multimodal Discourse about the implementation of project-based learning in that class and asking the lecturer's recommendations of students who matched the criteria of this study. After receiving the recommendation from the lecturer, the researcher asked about the participant's willingness to participate and their availability for the interview related to students' perceptions on project-based learning implementation. All the identities of the participants who agree to participate in this study use pseudonyms (P1, P2, P3) to maintain their confidentiality.

3.4 Technique of Collecting the Data

This study used semi-structured interview to collect the data because researcher needed deeper information about the implementation of project-based learning from the students' experiences. According to Longhurst (2003) a semi-structured interview is an unstructured method of gathering information from someone else by asking verbal questions. The data collection procedure began with arranging a list of interview questions as the protocol. As recommended by Yin (2018), a

protocol was developed to guide data collection for the case study. There were several questions related project-based learning which were made based on predetermined question indicators according to research needs. Those indicators were adapted from Ngadiso et al. (2021); a way of teaching, the learning process, students' participation, and students' achievement. In addition, there were also several questions related 21st-century skills which were made based on the question indicators adapted from Trilling and Fadel (2009) including critical thinking and problem solving, creativity and innovation, collaboration, teamwork, and leadership, cross-cultural understanding, communications, information, and media literacy, computing and ICT literacy, career and learning self-reliance.

Interviews were conducted face-to-face (P1 and P2) and online via WhatsApp Voice Note for participants who could not attend the face-to-face interview (P3). The researcher also confirmed participants' unclear answers during the face-to-face interviews and asked additional questions to all participants via WhatsApp Voice Note. During the interviews, the researcher used Indonesian (L1) to avoid miscommunication and confusion among participants.

3.5 Technique of Analyzing the Data

After finishing the data collection, researcher transcribed the data recording into the written text and analyzed it. The data analysis technique in this study was thematic analysis. According to Ibrahim (2012), thematic analysis is one kind of qualitative analysis which is employed to analyze classifications and display themes, or patterns, that are connected to the information. It uses interpretation to address a variety of topics while providing a detailed illustration of the facts. It means that through thematic analysis, the themes could be obtained. Before obtaining the themes, the researcher classified, identified, and determined which themes to focus after transcribing the data. Furthermore, it is a useful method for examining the research participants' perspectives, highlighting similarities and differences, and generating abrupt insights. According to Braun and Clarke (2006), the data analysis included the following activities:

1. Familiarizing the data

In this step, the researcher transcribed the data and familiarized the data by reading several times.

2. Generating initial codes

In this step, the researcher generated and arranged the initial codes using color to highlight the important information about project-based learning implementation from students' experiences.

Table 3.1 Generating Initial Codes

Utterances	Initial Codes
<p>P1: Okay, from myself, it's exciting and challenging but in the positive way. So, it's fun because we are trying to solve problems in the form of projects with friends. We exchange a lot of ideas and then really go to the field, we try to take data and complete the project, just learn a lot. And it's challenging because we have to, what is that, work with many people with different minds but we have to solve the project together.</p>	<p>Developing a students' positive feeling</p>
<p>P1: Yes, it's changed, it's quite drastic. The first term may be from the initial meeting and half more, it is a presentation so that they are still leaning towards teacher-centered as well because after that it is presented again by the lecturer for the materials. However, for the final part, it is more student-centered because after we are given a project, we are more emphasized to discuss with a group of friends and the lecturer is usually just for consulting. So, for the impact itself is very positive for me because I am more driven to, uhh, what is that, be independent than when the teaching approach is teacher-centered.</p>	<p>The shift of teaching approach</p>
<p>P1: For independence, it encourages us to be independent, because for the project it was quite complicated, so we were also divided into each person and although we</p>	<p>Encouraging independent learning</p>

can do it in cooperation, for the division of tasks we try to complete independently so as not to burden each other. So, it really helps to encourage being independent. And maybe it has also been explained, **it has also been mentioned that without being told we look for our own sources, then read a lot to understand when doing the analysis.** It is indirectly conveyed that "oh independent learning is encouraged" is there because **without being told we try to find credible sources, not those from the website that are not clear where the origin is.**

P1: Yes, it is very contributing to improving communication skills because we are like **learning negotiation** actually, negotiating with friends, how to make our ideas acceptable. Then, learning to be more open also with other people's opinions and to the lecturer is also the same, we **learn effective communication methods** because consultation time is limited so we must be able to convey many things in a short time.

Encouraging negotiating skills

Encouraging effective communication

P1: **First, of course, we must see the background of the person first, then what kind of background he lives in. So, from there we can understand his character,** "oh he, how come it's like this, huh? Oh yes, he came from here, the person there has a character like this," he said. **So, it is indeed looked at again personally what the background looks like, then it can be understood what kind of differences of opinion and how.**

Improving problem-solving skills

Note. As shown in Table 3.1, the researcher highlights the utterances that are interpreted as important data using various colors and gives initial codes. After generating initial codes, the researcher counts the initial codes with the total and presents them in a table, as shown in Table 3.2 below.

Table 3.2 Initial Codes and Its Frequency

Initial Codes	Total
Developing a students' positive feeling	4
The shift of teaching approach	3
Encouraging independent learning	6
Encouraging negotiation skills	2
Encouraging persuasion skills	1
Encouraging effective communication	3
Providing many effects on communication skills	1
Improving the students' understanding	4
Improving the students' participation	5
Providing good learning achievements and outcomes	2
Enriching vocabulary	3
Improving grammar	3
Improving speaking skills	3
Improving listening skills	3
Improving reading skills	3
Improving writing skills	3
Improving critical-thinking skills	3
Improving problem-solving skills	9
Raising students' responsibility	3
Improving creativity skills	1
Encouraging a more interactive class	2
Improving collaboration skills	3
Improving team work skills	7
Developing leadership skills	4
Improving students' friendships	3
Improving information and media literacy skills	4
Improving computing and ICT literacy skills	4
The project is relevant to the real-life context	3
Applying the project to real life context	3
Preparing the skills for future career opportunities	4
Challenge in time management	1
Challenge in implementing theory to practice	2
Missing the reflection process	3
Challenge in adapting in team work	1
Challenge in controlling laziness	1

3. Searching the themes

The third step is to search for themes in data and group the data based on the themes to make it easy to analyze.

Table 3.3 Process of Searching for Themes

Initial Codes	Potential Themes	Themes
Improving the students' understanding	Improved Students' Learning Achievement and Outcomes	
Providing good learning achievements and outcomes		
Enriching vocabulary		
Improving grammar		
Improving speaking skills		
Improving listening skills		
Improving reading skills		
Improving writing skills	Improved Students' Participation	The Benefits of Project-based Learning in English Language Learning
Improving the students' participation		
Developing a students' positive feeling		
Improving students' friendships	Positive Student Personal Experience	
The shift of teaching approach	Effective Teaching and Learning Process	
Encouraging independent learning		
Raising students' responsibility		
Encouraging a more interactive class	Communication Skills	The Benefits of Project-based Learning in 21st-century Skills
Encouraging negotiation skills		
Encouraging persuasion skills		
Encouraging effective communication		
Providing many effects on communication skills		

Improving critical-thinking skills	Critical Thinking and Problem-Solving Skills	
Improving problem-solving skills		
Improving Collaboration skills	Collaboration, Teamwork, and Leadership skills	
Improving Teamwork skills		
Developing leadership skills		
Improving information and media literacy skills	Information and Media Literacy Skills	
Improving computing and ICT literacy skills	Computing and ICT Literacy Skills	
The project is relevant to the real-life context	Career Preparation	
Applying the project to real life context		
Preparing the skills for future career opportunities		
Challenge in time management		
Challenge in implementing theory to practice	Students' Self-management	Challenges in Project-based Learning Implementation
Challenge in adapting in team work		
Challenge in controlling laziness		
Missing the reflection process	Executing All the Learning Stages in Project-based Learning	

Note. Table 3.3 presents how the researcher groups each code into a relevant group of codes as a potential theme and categorizes each potential theme into a suitable theme.

4. Reviewing the data

The fourth step is to review the data for each theme in order to determine whether it is coherent or not.

5. Defining and labeling the themes

The fifth step is to define and name themes by conducting and writing a detailed analysis, recognizing the story that each theme tells, and considering how each theme links the overall story of the entire data to the research questions.

Table 3.4 Defining and Naming Sub-Themes and Themes

Themes	Sub-themes	Definition
The Benefits of Project-based Learning in English Language Learning	Positive Student Personal Experience	Students' experience related to the implementation of project-based learning can provide a positive personal learning experience for them
	Effective Teaching and Learning Process	Students' experiences related to the way of teaching and learning process in the implementation of project-based learning. It related to teaching approach and its impact on students' learning
	Improved Students' Participation	Students' experience related to their level of participation during the implementation of project-based learning
	Improved Students' Learning Achievement and Outcomes	Students' experience related to the implementation of

		project-based learning in improving their learning achievement and outcomes.
The Benefits of Project-based Learning in 21st-century Skills	Critical Thinking and Problem-Solving Skills	Students' perceptions related to the implementation of project-based learning in improving their critical thinking and problem-solving skills or their mindset and action in dealing with problems, differences between group members, and the rapid flow of information
	Collaboration, Teamwork, and Leadership skills	Students' experience related to the implementation of project-based learning in improving their ability to collaborate, conduct teamwork, and lead a group
	Communication Skills	Students' experience related to the implementation of project-based learning in improving their communication skills
	Computing and ICT Literacy Skills	Students' experience related to the implementation of project-based learning in improving their ability to address information issues and contribute to an increasingly digital society by effectively utilizing networks,

		communication tools, and digital technologies
	Information and Media Literacy Skills	Students' experience related to the implementation of project-based learning in improving their ability to select, evaluate and use information or media
	Career Preparation	Students' experience related to the implementation of project-based learning helping them in preparing future career opportunities
Challenges of Project-based Learning Implementation	Students' Self-management	Student challenges related to their self-management during the implementation of project-based learning
	Following All the Learning Stages in Project-based Learning	Student challenges related to incomplete learning steps in the implementation of project-based learning

6. Report writing

The final step is to write up the report after completing the final analysis.

3.6 Steps of the Research

The researcher did several steps of this study as follows:

Table 3.5 Steps of the Research

Number	Steps	Description
1.	Identifying and defining issue/problem/phenomenon	Initially, the researcher looked at the phenomenon occurring in the English Education Department specifically regarding the process of learning foreign language and related it to the research objectives.
2.	Exploring relevant study, find the gap of research, formulating the research question	After identifying the phenomenon, the researcher looked into pertinent studies to fill in any gaps left by earlier study, developed research questions, and established the focus of the research.
3.	Determining research design	Based on the research issue, research questions, and research objectives, the researcher considered the best method to be used in this study.
4.	Reviewing relevant literature	In this phase, the researcher chose, read, and reviewed references such as journals or books to support the research.
5.	Selecting research subject	In this phase, the researcher chose the subjects of the research which are relevant to the research.
6.	Choosing and formulating appropriate research techniques	After selecting the research subject, the researcher used appropriate instruments to collect the needed data and data

		analysis techniques to answer the research question. Online semi-structured interviews were chosen as research instruments to collect the data.
7.	Choosing the data analysis technique	In this phase, the researcher chose the data analysis which is appropriate for the data gathered to analyze the data.
8.	Choosing participants conducting interview	The researcher selected the participants which is appropriate for the research. The researcher chose 4 volunteers from seventh semesters to begin the research.
9.	Conducting interview	In conducting the interview, the researcher will use Zoom or Google Meet. If this is not possible, the researcher will conduct the interview in a flexible manner using WhatsApp Voice Note.
10.	Analyzing the data	In this phase, the researcher will analyze the data gathered from the interview using the data analysis technique that has been chosen.
11.	Presenting findings and conclusion	In the last step, researcher will present the result or findings and makes a conclusion of the research and discussion.

