CHAPTER III
RESEARCH METHODOLOGY

This chapter highlight some significant components of the research methodology employed in this study. It includes the research design, the data collection method, and the data analysis necessary to address the research question in this study.

3.1. Research Design

The goal of this study is to explore how the lecturers of English recontextualize PjBL in the teaching of writing. The role of the researcher was a full observer. To achieve this goal, this study referred to qualitative case study including observation, interview, focus group discussion, and document analysis. A case study, according to Yin (2018), is able to contextualize a phenomenon that maybe different from one participant to others. Further, Yin (2018) argued that the relationship between boundaries and phenomenon were not evident. The recontextualization is a chance to optimize the implementation of PjBL in EFL context. This study applied multiple-case study for the reasons that this study can capture broader perspectives and contexts of the recontextualization of PjBL. Three cases comprised this research, defined as lecturers' recontextualization of PjBL in the teaching of writing in higher education in Indonesia. Furthermore, this study can compare the three best practices of PjBL in teaching writing.

This study involved three cases with experienced lecturers that actively applied PjBL as the participants with the criteria that they have applied PjBL in the teaching of writing. Because the focus of the study was on PjBL recontextualization with writing as the project. This study involved three lecturers having experiences in the implementation of PjBL in the teaching of writing. This study also selected the lecturers based on the consideration that the candidates of participants were cooperative and willing to participate actively in the study. Therefore, the research design applied Yin's multiple case study. The research design is illustrated in Figure 3.1.
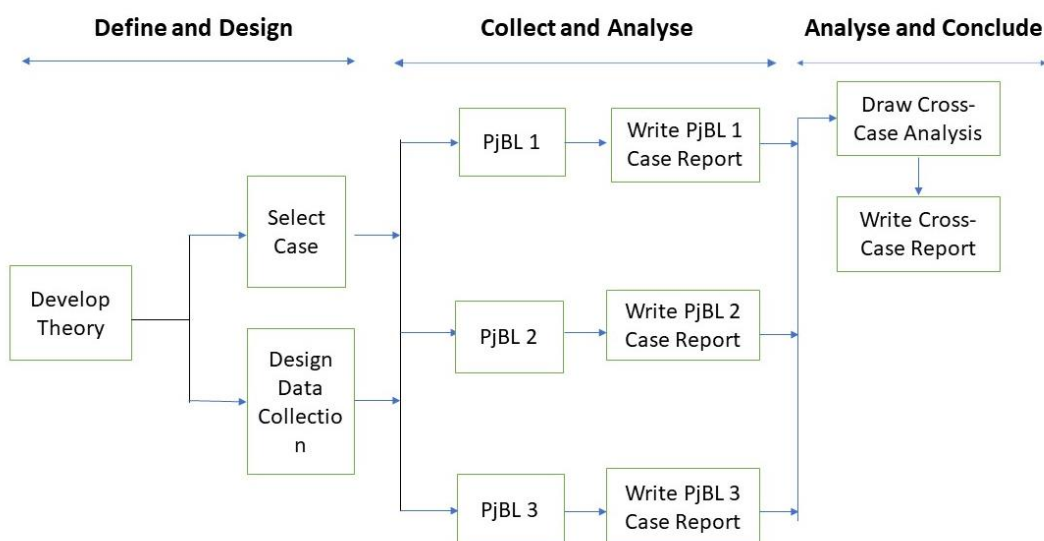
Figure 3.1. Research Design

Figure 3.1 is the illustration of the research design. The research was divided into three procedural phases: the define and design, data collect and analyze, and analyze and conclude. In the first phase, the study defined the case and the literature review as well as designed the data collection. The second phase was the data collection and single case analysis. in this phase, the data were gathered from each case and the analysis were done toward the gathered data. The last stage was to analyze the three case in the cross-case analysis and conclude.

3.2. Site Selection

This study determined site for research by considering that the participating higher education participating higher education has facilitated the lecturers in applying PjBL concept. The selected institutions offered administrative support for the research. The three institutions had implemented the PjBL for at least one semester. This study selected the site prior to the field observation that was conducted in middle 2021.

3.3. Participants of the Research

The recruitment of participants is crucial in this study because it determines the quality of research in the case of representation for this research. Participants

should have appropriate prior knowledge and justifiable interpretation about the PjBL implementation. To meet the criteria of participants, this research applied purposive sampling with certain criteria. The criteria were that the participants of this research were lecturers who had experienced in teaching PjBL focusing on the teaching of writing as and showed willingness to institutionally to with researcher. The selected participants were three lecturers who have implemented PjBL and chose writing as the project. The pseudonyms selected for the three lecturers were Bulan for Case 1, Bintang for Case 2 and Mentari for Case 3. The selection of only three lecturers allowed a deeper descriptive analysis of the two within the boundaries described. The lecturers that participated in this study were recruited from the Forum Dosen Bahasa Inggris (Indonesian English Lecturers Forum) and an online tracing of journal authors with topic related to this study interest. The registration for recruitment was done through Google form and email correspondence. For further investigation, the students participating in the cases were involved in Forum Group Discussion (FGD) to hear their voice about collaborative writing. This multi-case study produced a comparison between the lecturers' way to recontextualize PjBL in their classrooms. As the result this study inform the best practice.

3.3.1. Bulan

Bulan is a lecturer at a private university in the province of Lampung, Indonesia. She earned a bachelor degree in English Education from a private university in Jakarta in 2004. In 2011, she finished a master degree of English education from a state university in Surakarta. She has been teaching English for 10 years when the data was collected. She has been teaching writing since 2011. During the data collection, she was the head of English Education Study Program in the university.

She was 41 years old when the data collection was conducted. She is married and has two kids. She is Javanese who was born in Sumatera Island. Getting her degree from university in Java island, in Jakarta and Surakarta, opened her eyes on the diversity in the world of teaching English in a big city and the small one.

Bulan began to be interested in PjBL since the launching of 2013 curriculum. Bulan learned PjBL through joining workshops, reading related articles, and visiting relevant websites. She joined two workshops about PjBL, namely workshop on Merdeka Belajar Kampus Merdeka and Workshop on Pertukaran Mahasiswa (Student Exchange). She has reflected from her experiences in implemented PjBL in teaching writing and she argued that individual project is important to encourage students to participate actively in writing before they face the group writing project. In other words, individual writing project develops students' readiness for the group writing. In spite of not taking one expert as a role model in recontextualizing PjBL, she follows the steps of PjBL that she acquired from references and workshops.

3.3.2. Bintang

Bintang is a lecturer in a private university in West Java province. She was 34 years old when this study was conducted. She is a Sundanese woman. She is married and has two kids. She graduated from the undergraduate English education study program of a state university in Bandung in 2012 and finished her master degree in English education from the same university in 2016. She started teaching writing in 2016.

Bintang got to know about Project-based Learning when she was doing her master degree in 2013. Moreover, In the topic of Indonesian 2013 curriculum, PjBL is one of the teaching model and strategy that is endorsed. In 2018, she and her colleague awarded a research grant on the topic of PjBL. She has published a paper about PjBL in Writing in the same year. However, she has never joined a specific workshop on PjBL. Her experiences in implementing PjBL were challenging. She realized that students' diverse basic English level is a crucial issue in PjBL.

3.3.3. Mentari

Mentari is a lecturer at the English education study program in a private university in West Java. She was 34 years old and married. She graduated from a private university in Jakarta in 2014 and finished her master degree from another private university also in Jakarta in 2017. She started teaching writing in 2019.

Mentari acquired material about PjBL from reading journals and other relevant resources. She never joined a class on the topic of PjBL at the university. She has never joined any workshop on PjBL either. She has formerly implemented PjBL in teaching writing with essay writing as the product. Moreover, she has personalized stages of PjBL recontextualization. Formerly, she follows the steps of BKoF- Modelling - Group Project - Evaluation-Individual Project-Evaluation in teaching writing based on the information from pilot study.

3.4. Data Collection

Data collection took place from December 2021- June 2022 for pilot study and main data. Data derived from one semester of the three participants applying PjBL. All data gathered from participant resources are with explicit consent from the participants and in full compliance university academic affair. This case study is primarily concerned with providing descriptive insight and understanding of the unique cases or situations. Stake (1995) asserts that qualitative research tries to establish an empathetic understanding for the reader, through description, sometimes thick description. The outcome of a case study depends on organized, flexible, and careful data collection. This multi-case study collected data through Observation document analysis, and interview as well as survey in pilot study.

3.4.1. Survey

The survey was organized to map the knowledge of the lecturers about PjBL. The survey was part of pilot study as a preliminary study for the real study. The survey questions included the questions about their role model in applying PjBL, the stages of PjBL that they have contextualized, the realization of several PjBL features in their classroom practice, the writing product of the project, and the assessment of the project.

3.4.2. Observation

The Observation was to see the recontextualization of PjBL in the classroom. The observation data is gathered to answered research question 1 and research question. The data set for this study included Lesson plans, observation results i.e. filed notes and observation transcription, interview transcriptions, and FGD transcriptions. O'Leary (2020) identifies three main types of classroom

observation: performance management observation, research observation, and peer observation. Performance management observation is typically used for teacher appraisal or accountability purposes, and it is conducted by a supervisor or administrator. In this study, the observer used field notes to document the teacher's performance against a set of predetermined standards. Research observation was conducted by a researcher who is interested in studying classroom teaching and learning. The observer typically used a more qualitative approach by collecting data through interviews, observations, and document analysis. Peer observation is conducted by a colleague of the teacher being observed, and it is often used for professional development purposes. The observer used a checklist or rubric, but they may also simply take notes on their observations.

In a research observation and peer observation, the observer typically used a more qualitative approach, collecting data through interviews, observations, and document analysis. This study applied research observation as a full observer researcher and peer observation as a lecturer of English. However, the researcher did not intervene the recontextualization. Researcher only reflected from research observation and asked the lecturer if any stages of the PjBL need clarification. Table 3.1. is the rubric of classroom observation that is adopted from (O'Leary, 2020).

Table 3.1. Rubric of Observation

Result of Observation	Reflection/ Question

3.4.3. Interview

The purpose of the interviews in this study was to obtain descriptive information about lecturers' acquisition of PjBL, implementation of PjBL, outcomes of PjBL and the challenges that they face during the implementation. This data collection method is to support the classroom observation. The first part of the interview explored the knowledge of lecturer about PjBL during the recruitment. In addition, the interview data was gathered to answered research question 3.

3.4.4. Forum Group Discussion

Forum Group Discussion (FGD) was organized to investigate students' voice about the writing project. This data collection is to addressed to support the observation data of Research Question 1, 2, and 3. In addition, this study not only investigate the challenges encountered by teachers, but also the ones encountered by students. The data collection is to identify students' opinion and challenges in completing the project. FGDs were divided into three sessions with the following detail of topic.

Table. 3.2. The Detail of Focus Group Discussion

Sessions	Topic	Participant
I	PjBL 1 Participants' voice about PjBL and collaborative writing project	14 students'
II	PjBL 2 participants' voice about PjBL and collaborative writing project	12 students
III	PjBL 3 participants voice about PjBL and collaborative writing project	11 students

3.5. Data Analysis

Analysis followed several steps. The first step was the coding of the data set. The second is the analysis on the data while the final step of the analysis was the cross-case analysis.

3.5.1 Analysis of Interview Data

Transcription of interviews occurred immediately after each session. The first step in analysis was to become familiar with the information in all of the transcripts, including re-reading, comparing notes taken during the interview to the actual transcripts, and creating summaries. The coding was based on the stage of the PjBL and the key features of PjBL that has been formulated in literature review. Coding included key points highlighted within the transcripts from each teacher.

Relating both the interview data to the classroom implementation data allowed for a more coherent picture of the teachers' recontextualizing PjBL. This included a better understanding of how the teachers planned for a lesson, the resources involved, the selection process behind those resources, and the role of reflection in the teachers' planning process.

3.5.2. Analysis of Observation Data

Verification for accuracy categorized the transcription of each lecturer's PjBL recontextualization. Initial coding during data analysis is the basis for development of descriptive cases for each teacher. The examination of data to generate codes proceeded sentence by sentence and by a holistic analysis of the raw data.

Initial coding of the data required generating questions, such as: 1. What are the stages of PjBL recontextualized by the lecturers, 2. Did the lecturer recontextualized the key features of PjBL? The questions are derived from the research questions of the study. The research explored three different categories: lecturers' way of recontextualized PjBL, the support of PjBL on students' collaborative writing, and the challenges in recontextualizing the best practices of PjBL.

3.5.3. Analysis of Document

The analysis of document was conducted to analyze the improvement of students' writing. The analysis of the improvement was conducted by comparing the students' text before and after review process. The analysis was based on the feedback from teacher and peers.

3.5.4 Cross-Case Analysis

The final phase of analysis involved analyzing similarities and differences between the two cases by exploring themes and categories that emerged from the analysis of the two cases. This allows examination of the similarities and differences in planning process across the two different cases, the contextualization of PjBL and the outcomes of the implementation. This led this study to see how this case

potentially relates one another. Furthermore, this phase discussed the emerging issue of best practice in the three cases.

3.6. Ethical Codes

In this research, an *informed consent* is issued to advocate participant's roles and rights during the research. The letter contains brief explanation about research objectives, research procedures, and the roles and the rights of participants and is distributed to participants. The participants ought to sign the letter without any offense. The data collection process needs to ensure the convenience of the participants under the letter (Polit et al., 2001). Therefore, the *informed consent* will come first before the data collection.

3.7. Trustworthiness

Trustworthiness or rigor of a study refers to the degree of confidence in data, interpretation, and methods used to ensure the quality of a study (Polit & Beck, 2014). In this study, a protocol is established to show that this study is doable and considered worthy. The outline of the trustworthiness follows the criteria that is proposed by Lincoln & Guba (1985). The criteria cover *credibility, dependability, conformability, and transferability.*

3.7.1. Credibility

Credibility of a study is the confidence of truth of the study that also reflects in the findings (Polit and Beck, 2014). This term is also called internal validity (Connelly, 2016). The internal validity in this study is realized in the research protocol from the early stage. The realization includes the research design, participant recruitment, and researcher's reflective commentary.

3.7.2. Dependability

Dependability represents the stability of the data over time and over the condition of the study (Polit & Beck, 2014). In other word, if the work were repeated, in the same context with same method and the same participants, similar results would be obtained (Shenton, 2004). The dependability of this study follows the internal validity in terms of data collection.

3.7.3. Confirmability

Conformability reflects the objectivity in quantitative research (Polit & Beck, 2014). In this study, the draft of research was reviewed through seminar and consultation with supervisors.

3.7.4. Transferability

Merriam (1998) introduced term 'external validity" as the extent to which the findings of a study can be applied to other situations. In this study, the transferability was elaborated in the discussion of the findings.