

CHAPTER III: RESEARCH METHODOLOGY

3.1.Introduction

The chapter consists of sub-chapters. The first sub-chapter is an introduction that describes a general overview of each sub-chapter. The second sub-chapter is the research aims, which restate the aims of the research provided in the first chapter. The third sub-chapter is the site and participants of the research, which describes the reasons for choosing a research location. This part also described the reasons for choosing the participants. The fourth sub-chapter is research design, which describes and presents a design used in the research. The fifth sub-chapter is about the data collection, which describes the technique of data collection used in this research. The sixth sub-chapter is about data analysis, which describes the technique of data analysis used in this research. The seventh sub-chapter is about ethical codes. The eighth sub-chapter is about trustworthiness.

3.2.Research Aims

As mentioned in chapter I this study aims to investigate project-based learning practices in the academic writing course in the context of higher education. Therefore, the objectives of this research are as follows:

1. To explore the implementation of project-based learning in academic writing.
2. To identify the teaching-learning activities that indicate the stages of project-based learning.
3. To find out the way students learn academic writing through project-based learning.
4. To identify the extent of project-based learning enhances student engagement in academic writing courses in Indonesian higher education.

3.3. Site and Participants of the Research

This section describes two issues: the site and the participants of the research. This first part describes the site of research, where the researcher conducted research. The second part explains who the participants are and how they were chosen as the participants in this research.

3.3.1. Site of the Research

This study was conducted in one of the private universities in Kediri, East Java. It was conducted in the Faculty of Teacher Training and Education, especially in the English Education study program. The researcher conducted research in the third semester of the Academic Writing course, both in A and B classes. The two classes were taught by the same lecturer, hereafter WI. However, the classes had different teaching policies due to the COVID-19 health protocol. In compliance with instructions from the Acting Director General of Higher Education, Research, and Technology, the university has implemented regulations regarding Limited Face-to-Face Lectures. These regulations stipulate that a maximum of 25 students are allowed per class. The A class, with a total number of more than twenty-five, had to conduct face-to-face learning in turn each week. For students who were not scheduled for face-to-face lectures, they can take lectures online. Meanwhile, the B class, where the total number of students was less than twenty-five, implemented face-to-face learning every week.

The researcher conducted the study for one semester from October 2021 to January 2022. The study was conducted during the academic writing learning hours on Thursday for A class and Sunday for B class. This was a non-participatory observation, in which the researcher could not be directly involved in the activities so the researcher also needed to conduct research outside of learning hours to dig deeper into the data. Therefore, the study was also conducted outside of the learning hours. Research activities carried out outside learning hours include observing the student's and the lecturer activities and interactions in WAG, interviews the respondents, and collecting the required document such as lesson plan and students' writing project.

3.3.2. Participants of the Research

The participants in this study were divided into two parts: lecturer and students. The first participant was the lecturer of the academic writing course. The second group of participants is the students of the academic writing course.

The first participant is the lecturer. The lecturer chosen to participate in this research is WI. The reasons for choosing WI are: 1) WI is an academic writing

lecturer with five years of teaching experience in the university being observed. Previously, WI had experience teaching at another university for one year, in English courses for two years, and at a senior high school for four years. 2) WI has experience implementing PjBL in some writing courses, such as paragraph writing, academic writing, and professional writing courses.

As a lecturer, WI has completed his bachelor's education, majoring in English language education at one of the state universities in Kediri. Then, WI continues his master's degree, majoring in English language education at one of the state universities in Malang. Besides formal education, W.I. participated in informal education, such as workshops and seminars.

The second participant is the students of the Academic Writing Class. All students in the A and B classes is chosen to participate in this research. There are 38 students in class A and 18 students in class B. Besides the educational policies during the COVID-19 pandemic, some differences exist between students in A and B classes. The first difference is that the lecture in A class was held from Monday to Thursday in the morning. Meanwhile, the class was held in B from Thursday to Saturday night. The other difference is that most of the B-class students were workers. At the same time, most students in A class were fresh graduates who only focused on study.

3.4. Research Design

The main purpose of this study is to investigate how PjBL was implemented in the academic writing course in a higher education context. This qualitative research used a descriptive case study as the research design. There are several reasons for choosing this research design. First, this is qualitative research that allows researchers to delve deeply into the complexity and details of a phenomenon. This design is suitable for exploring contemporary phenomena in real-life contexts and specific contexts or phenomena (Hamied, 2017; Yin, 2018). This is especially useful when researching important issues that involve many interrelated factors and have rich context. Besides, this research combines multiple sources of evidence, such as observations, interviews, documents, and artifacts, to strengthen findings and increase the credibility of the research. Yin (2018) suggests the use of multiple sources of evidence to overcome the weaknesses of each data collection method.

Second, this is a descriptive qualitative study that expands the existing understanding of a phenomenon. Yin (2018) states that these designs can be used to build theory and provide deeper insight into the phenomenon under study. Third, this is a single case related to the implementation of PjBL which is currently being widely discussed. Yin (2018) explains that single case studies can provide important evidence for established theories and reveal the case itself. Besides, selecting a single case allows the researcher to focus on one situation in depth, thereby saving time and resources compared to more extensive multi-case research. Yin (2018) acknowledged that “single-case studies require less time and resources than multi-case studies.

The research design is illustrated in Figure 3.1.

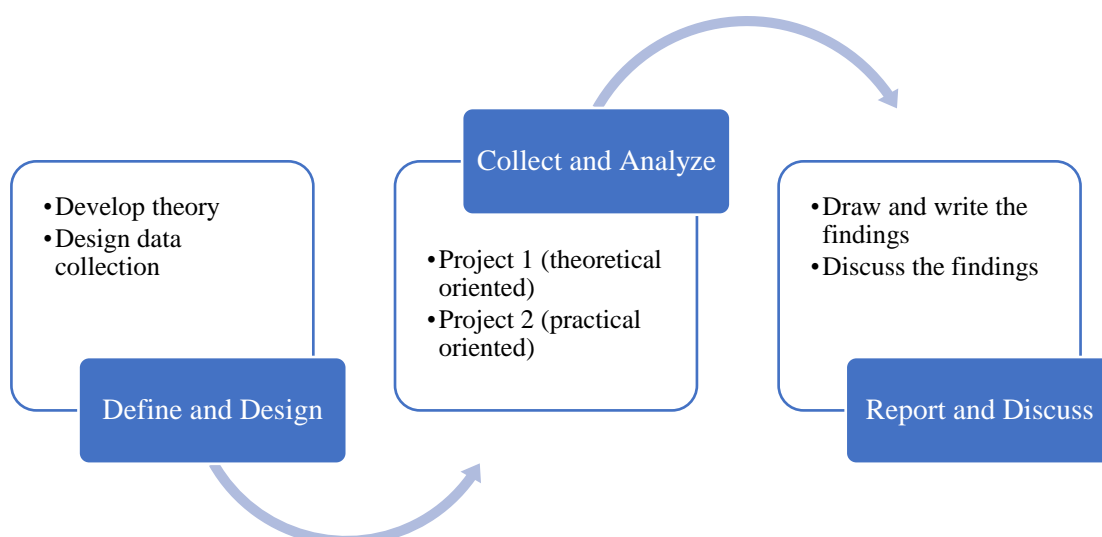


Figure 3.1. Research Design

Figure 3.1 illustrates the design of the present study. The study was divided into three procedural phases: the definition and design, data collection and analysis, and report and discussion. In the first phase, the study defined the case and the literature review and designed the data collection. The second phase was the data collection and analysis. In this phase, the data were gathered from two cases, and the analysis was done toward the gathered data. The last stage was to report the two cases in the cross-case analysis and discuss the findings.

3.5.Data Collection

Data collection took place from October 2021 to January 2022. Data derived from one semester of the two academic writing courses. All data collected from

participant resources is with the participants' explicit agreement and is fully compliant with university academic affairs. According to Creswell and Creswell (2018), there are various qualitative data collection methods commonly used in research, including interviews, observation, documentation, artifact analysis, group discussions, and other methods (such as the Delphi method, storytelling, and action research). This research combines multiple sources of evidence, such as observations, interviews, documents, and student writing analysis in a pilot study, to collect the data for the research.

3.5.1. Classroom Observation

The first method to collect data is observation. Observation is the way to record events during the implementation of PjBL. The observation data is gathered to answer research questions 1 and 3 (see table 3.1.). The data set for this study included observation results, i.e., filed notes, observation transcription, and WAG screenshots. This is a systematic noting and recording of first-hand information (Creswell, 2009) in the form of events, behaviors, and objects in the social setting chosen for the study (Marshall & Rossman, 2006).

Table 3.1. Data Collections: Classroom Observation

Research Question	RQ. 1. How is project-based learning implemented in the academic writing course? RQ. 2. What teaching-learning patterns are indicative of this Project-based Learning? RQ. 3. How did students learn academic writing through projects?
Time	During the courses
Tools/ instrument	Field note Video recorder
Focus	Investigate the classroom activities during the academic writing courses, which cover the lecturers' and students' roles, the list of activities during the course, and how lecturers assess the students' work.
Participants	Lecturers, students

Table 3.1. described the aims of the classroom observation, the time of the observation took place, the instruments used during the observation, the focus of the classroom observation, and the participants of classroom observation. First, classroom observation aimed to answer research question number 1, 2, and 3. Second, classroom observation was held during the academic writing courses in both class A and class B. Third, the observer used field notes and a video recorder as tools to gain the observation data. Fourth, the focus of classroom observation

was to record activities during the course. Fifth, the participants in the classroom observation were the lecturer and the students.

In this research, the observer took field notes to document teacher's performance against preset benchmarks. The researcher was interested in classroom teaching and learning and did the research observation. Direct observations were carried out during lectures in class A and class B which is in each meeting and lasts 100 minutes. There were twelve meetings in each class but most of the lectures repeated the same PjBL pattern. Therefore, the researcher decided to conduct direct observations only three times at each different PjBL pattern. Observers use notes to record the observation. Apart from that, observations were also made on WAG. Observations were carried out during the COVID-19 pandemic so, several learning activities were carried out outside the classroom via several digital platforms. This is because observations were carried out during the Covid-19 pandemic so lecturers limited face-to-face contact and maximized digital platform for communication. One platform that is often used to discuss, convey information, and collect assignments is WAG.

This study involves a non-participatory observation. This study employed a research observatory as a full observer researcher. According to Creswell ((2018) non-participatory observation allows researchers to observe activities from outside without being directly involved. However, the researcher did not meddle throughout the implementation. The researcher just reflected on study observations and requested the lecturer and students if any phases of the PjBL required clarification. During the observation, the researcher sat in the back seat to take notes and record the activities of the lecturer and students.

3.5.2. Interview

The second method to collect data was direct interview. In the direct interview, researchers met directly with participants to dialogue and acquire in-depth information from the informant (Creswell & Creswell, 2018). The interview was conducted with both the lecturer and the student. The data of the interview was gathered to answer research questions 1 and 3. The interview was conducted to explore the implementation of PjBL from the lecturer's and students' points of view and also to clarify some unclear information during the observation. Therefore, the

interview was only conducted when the researcher wanted to clarify the findings of the observation. Thus, the interview schedule was uncertain and the number of interviews was unlimited. The data for this study was only interview notes because the interviewer did not use a recorder during the interview. A brief description of the interview method can be seen in Table 3.2.

Table 3.2. Data Collections: Interview

Research Question	RQ. 1. How is project-based learning implemented in the academic writing course? RQ. 3. How did students learn academic writing through projects?
Time	After the implementation of PjBL/ anytime when needed
Tools/ instrument	Notes
Focus	Clarify the findings during the observation.
Informant	Lecturers, students

Table 3.2. described the aims of the interview, the interview took place, the instruments used during the interview, the focus of the interview, and the participants of the interview. First, the interview aimed to answer research question number 1 and 3. Second, the interview was held when the researcher needed additional information. Third, the interview used field notes as tools to gain the interview data. Fourth, the focus of the interview was to clarify the findings during the classroom observation. Fifth, the participants in the interview were the lecturer and the students.

This is an unstructured interview so the researcher did not use an interview guide to gain the data from the lecturer. Interview question guides were determined by information that was unclear during the observation. The main purpose of interviews was to complete observation data so conducting interviews was very dependent on observation data. The interview was conducted after the researcher checked the observation data and found incomplete information in the data.

This is a direct interview where the interviewer meets directly with the informants. The informants here are divided into two, namely lecturers and students. Interviews with lecturers are conducted casually before class starts or after it ends. If these two times are deemed insufficient, interviews can also be conducted via WhatsApp chat. For student informants, no special conditions apply. The selection of student informants was carried out based on student willingness. The interviews were conducted during the Covid-19 pandemic so they were carried out

by enforcing health protocols and following the regulations in force at the research site.

3.5.3. Documentation

The documentation was needed to describe how students learn academic writing through projects, especially students' writing progress. The documentation data was gathered to answer research question 3. According to Creswell (2018) there were three kinds of documents such as official documents, personal documents, and media documents. In this research, the researcher used official documents i.e. lesson plans, and personal documents i.e. three kinds of students' writing projects Essay 1 (obtained from the pre-test results), essay 2 (obtained from the result of the quiz), and Essay 3 (obtained from the outcome of Project 2). A brief description of the documentation method can be seen in Table 3.3.

Table 3.3. Data Collections: Document

Research Question	RQ. 3. How did students learn academic writing through projects?
Time	During one semester
Tools/ instrument	Writing scoring rubric
Focus	Investigate the way students learn academic writing through projects.
Participants	Students, lecturer

The table 3.3. described the aims of the documentation, the time the documentation took place, the instruments used during the documentation, the focus of the documentation, and the participants of the documentation. First, the documentation aimed to answer research question number 3. Second, the documentation was held during one semester by asking for some needed documents from the lecturer. Third, the documentation used a writing scoring rubric as a tool to analyze the student's writing projects. Fourth, the focus of the documentation was to know the way students learn academic writing through projects. Fifth, the participants in the documentation were the lecturer and the students.

The researcher's role here was to collect the required documents and analyze the documents that have been obtained following the data analysis guide. The document was obtained from the lecturer. The document data consists of the lesson plan and three students' writing projects: Essay 1 (obtained from the pre-test results), essay 2 (obtained from the result of the quiz), and Essay 3 (obtained from the outcome of Project 2).

There are 38 students in class A and 18 students in class B so there were 168 project essays from students. Due to limited time and energy, researchers would only analyze 51 samples of the total essays. The 51 samples consist of 17 Essay 1, 17 Essay 2, and 17 Essay 3. A sample of 51 documents or 30% of the population was considered sufficient to represent the population. Creswell (2018) provides several examples of sample sizes in qualitative research based on the type of research and research objectives: exploratory research that aims to understand a new phenomenon should ideally have 6-10 participants, descriptive research that aims to describe a more detailed phenomenon should ideally have 10-25 participants, and research Explanatory, which aims to explain the relationship between variables, should ideally have 25-40 participants.

3.6.Data Analysis

After collecting the data, the data analysis was conducted. Data obtained in the present study were analyzed based on the data source. The data collections include field notes, observation recordings, WAG screenshots, interview notes, lesson plan, and student scores. Those data will be analyzed interactively using the qualitative framework which consists of activity analysis, meaning analysis, context analysis, process analysis, and case analysis (Miles & Huberman, 1994). The interactive data analysis includes data collection, reading and utilizing data, data reduction, data analysis, data verification, and data presentation. A detailed explanation will be given in the following sub-chapter.

3.6.1. Classroom Observation Data Analysis

The data obtained in an academic writing course observation are video recordings, the researcher's field notes, and the WAG screenshots. For the video recording, the researcher transcribed some important conversations in the video to support the findings. For the researcher's field notes and the WAG screenshots, the researcher summarized and categorized data to focus on the most important information.

There were some steps in analyzing the result of the observation. First, after each meeting ended, the result of the field notes was reviewed by watching the video of the learning process. It was aimed to see if any activities were missed from

the classroom observation. Then, the interview with the lecturer or students was conducted when the researcher found some unclear information. However, if the information obtained is clear, the researcher will proceed to the next stage of analysis. Second, the data were arranged and typed, referring to the activities. The data about the activities of students during the implementation of PjBL were used to answer research question 1. Third, the data about the list of students' activities were categorized into some PjBL patterns to answer the second research question. Lastly, the data on students' activity and PjBL patterns were analyzed to determine how their learning improved academic writing. Finally, the interpretation was made from the findings.

3.6.2. Interview Data Analysis

The data obtained by interviewing the lecturer was used to explore the implementation of PjBL from the lecturer's and students' points of view and also to clarify some unclear information during the observation. It consisted of the lecturer's interview notes and the student's interview notes. Both of the data were analyzed using the same steps including separated, translated, coded and categorized, and interpreted.

In analyzing the interview data, the researcher used some steps. First, since there were two kinds of data interviews (the lecturer's interview notes and the student's interview notes), they were analyzed separately. This separation was carried out to make it easier for researchers during the coding, categorization and interpretation process. Second, the interview notes were translated into English since the interview was conducted in Indonesian language. The interview was conducted using Indonesian to avoid misunderstandings and ambiguity with informants. However, this research report was written in English so the researcher had to translate the interview notes. Next, the interview data were coded and categorized based on the research questions. As mentioned in the data collection, the interview question guides were determined by information that was unclear during the observation. Therefore, Researchers need to categorize interview data according to themes. Finally, the findings were interpreted and reported in chapter four.

3.6.3. Documentation Data Analysis

The data obtained from the document are in the form of lesson plan and students' essay projects. In the lesson plan document, the researcher summarized and categorized data to focus on the most important information. Besides, the researcher followed three steps in analyzing the students' essays. First, the documents were categorized according to the type of essay. As mentioned in the data collection, there were three kinds of students' writing projects: Essay 1 (obtained from the pre-test results), essay 2 (obtained from the result of the quiz), and Essay 3 (obtained from the outcome of Project 2).

Second, the essay was prepared for analysis. The essays were analyzed using the scoring rubric provided in this study to describe the quality of the students' texts (see Table 3.4.).

Table 3.4. Rose and Martin Writing Assessment Criteria

No	Criteria	R2L Description	Score (1-3)
CONTEXT			
1	Purpose	How appropriate and well-developed is the genre for the writing purpose?	
2	Staging	Does it go through appropriate stages, and how well is each stage developed?	
3	Phases	A well-organized text goes through a logical sequence of steps. Phases are the steps a text goes through (within each stage!). Each phase may be a paragraph or a few sentences long.	
4	Field	How well does the writer understand and explain the field in factual texts, construct the plot, settings, and characters in stories, or describe the issues in arguments?	
5	Tenor	How well does the writer engage the reader in stories, persuade in arguments, or objectively inform in factual texts?	
6	Mode	How highly written is the language for the school stage? Is it too spoken?	
DISCOURSE			
7	Lexis	Lexis is the word choice writers use to build the field of a text. They are the content words and the relations between these lexical words from sentence to sentence.	
8	Appraisal	Appraisal is the word choice that writers use to evaluate. They include feelings, judgments of people, appreciations of things, and words that amplify and diminish.	
9	Conjunction	Conjunction is the logical relations between sentences and within sentences. Mark the conjunctions the writer uses. Logical relations may also be implicit. Is there a clear, logical relation between all sentences?	
10	Reference	Reference is the words used to keep track of people and things through a text, including pronouns, articles,	

		demonstratives (this, that), and comparatives (each, all, same, other).
GRAMMAR		
11	Grammar	Are the grammatical conventions of written English used accurately? Is there an appropriate variety of sentence and word group structures for the school stage, or is it too simple?
GRAPHIC FEATURE		
12	Spelling	How accurately spelled are core words (frequent) and non-core words (less frequent)?
13	Punctuation	How appropriately and accurately is punctuation used?
14	Presentation	Are paragraphs used? How legible is the writing? Is the layout straightforward.? Are illustrations/diagrams used appropriately?
TOTAL		

Table 3.4. summarizes the writing scoring rubric to describe the quality of the students' text. The scoring rubric has four levels including context, discourse, grammar, and graphic features. Each level has several criteria and the total criteria for the four levels is twelve. The twelve criteria include purpose, staging, phases, field, tenor, mode, lexis, appraisal, conjunction, reference, grammar, spelling, punctuation, and presentation. Each criterion has a score range of 1 to 3 so that the minimum overall score that can be obtained is 12 and the maximum overall score that can be obtained is 36. Purpose is the element of the text that can be seen or reflected from the beginning section of the text. It is a general impression of the text. Staging is the arrangement of information in text. It covers writing structure, paragraph organization, and effective use of transitions. Phases are the logical development of ideas in writing. It sees the writing flow well and have a logical sequence. Field refers to the subject matter of the writing. Usually, it as a scientific report, a historical account, a fictional story, or an argumentative essay. It is assessing how well the writer understand and explain the subject matter. Tenor is a language style that suits the situation and intended audience. It assesses the formality and informality of the language style used by the writer. Mode is how the text is constructed. It assesses whether the text is written-like or spoken-like. Lexis is the richness and accuracy of the vocabulary a writer uses. It assesses using varied and appropriate vocabulary according to context. Appraisal is a way for writers to express their attitudes and opinions in writing. It looks at whether the writing is delivered clearly and logically or not. Conjunction is the use of conjunctions to connect words, phrases or sentences. It assesses that the conjunction is used

appropriately to show the relationship between ideas. Reference is the way a writer refers to other information in his writing. Writers can use pronouns, articles, demonstratives (this, that), and comparatives (each, all, same, other). Grammar is the correct and effective use of sentence structure. This section assesses whether the sentences used by the writer are grammatical and easy to understand. Spelling is a collection of rules for writing words. It assesses the accuracy of writing words according to applicable spelling rules. Punctuation is a sign or symbol used in the spelling system. Punctuation assesses the appropriate use of punctuation to organize the structure and meaning of a sentence. Presentation is a display of the writing as a whole. It assesses the neatness and cleanliness of writing, including writing format, use of letters, and spacing between lines.

Third, the description of the student's writing was categorized to see the progress of students' writing during the implementation of the PjBL. To categorize the students' quality of writing, the researcher searched for the average score of Essays 1, Essays 2, and Essays 3. Then, the average value was presented in chart form to make it easier for readers to see the progress of students' writing projects.

3.7. Research Procedure

This research, in general, has three stages including pre-research, data collection, and analyzing, discussing, and reporting data. The first stage is pre-research. At this stage, the researcher was conducted a literature study related to the research topic which is then continued with the preparation of a research proposal. Furthermore, the researcher was conducted in-depth interviews with lecturers to explore what learning methods are implemented in academic writing classes. After ensuring that academic writing teaching uses the PjBL method, the researcher submitted a research permission procedure and prepares the research instruments that will be used to collect data.

The second stage is data collection. At this stage, researcher was collected the needed data through classroom observations, interviews with lecturers and students, and document collection. The classroom observations were conducted for one semester by recording activities during the teaching and learning process and making field notes. While the interviews were conducted with lecturers and students only to clarify the unclear information during classroom observations.

Meanwhile, the documents needed are in the form of learning plans, student project outcomes, lecturer assessment results, and various types of student essays.

The last stage is analyzing, discussing, and reporting data. This stage begins with selecting observation and interview data that need to be analyzed. After determining which data needs to be analyzed, the researcher transcribed the observation and interview data. Next, the researcher did code and analysis those transcripts. For documentation data, especially student essays, the researcher did analysis using a writing rubric adopted from Rose and Martin. The analyzed data was discussed and reported in chapter 4.

3.8. Ethical Codes

The research ethical code is a rule or guideline that regulates professional behavior in research. According to Creswell (2009), the importance of ethical codes and trustworthiness is to protect the rights and welfare of research participants, maintain the quality and credibility of research, and increase public trust in research. This research maintains ethical codes by sending a research request letter to the head of the university where the research took place. Thus, this research was carried out with the permission of the head of the institution.

After obtaining permission from the university leadership, the researcher provided an explanation regarding the aims, risks, and benefits of the research to the lecturer who taught the academic writing course. In the end, the lecturer concerned also approved the research to be carried out. However, before the data collection process was carried out, the data collection techniques used by researchers had previously been discussed with the lecturer. The techniques were concerned with maintaining students' comfort. Therefore, the researcher can obtain natural conditions during the data collection process.

3.9. Trustworthiness

A study's trustworthiness or rigor relates to the level of confidence in the data, interpretation, and procedures employed to ensure its quality (Polit & Beck, 2014). In this investigation, a protocol is constructed to demonstrate that the study is feasible and worthwhile. The outline of trustworthiness follows the criteria established by Lincoln and Guba (1985). The requirements include credibility, transferability, dependability, and conformability.

Credibility in research developed by engaging over extended periods, observing persistently, and using triangulation. Extended engagement means devoting considerable time in the field, engaging with participants, and thoroughly watching their activities, allowing researchers to gain comprehensive insights. Persistent observation entails maintaining an open mind, acknowledging personal biases, and engaging in self-reflection throughout the study process. Furthermore, the use of triangulation, which entails integrating many data sources or methodologies, helps to validate findings, boosting their credibility. Transferability pertains to the degree to which the research findings can be extrapolated to alternative contexts or situations. Merriam (1998) defined the word "external validity" as the extent to which a study's findings can be transferred to other settings. Qualitative researchers aim to offer comprehensive and intricate depictions of the study's environment, participants, and procedures to enhance the potential for transferability. By providing detailed and comprehensive explanations, researchers allow readers to evaluate how applicable the findings are to similar situations, thus improving the study's transferability. Dependability refers to the persistent and consistent quality of study findings throughout time. In other words, if the experiment were replicated in the same setting, with the same procedure and participants, similar results would be produced (Shenton, 2004). To ensure trustworthiness, researchers thoroughly document their methods, data collection strategies, and analysis procedures. Creating and keeping an audit trail, which consists of a detailed log documenting the decisions taken throughout the research process, enables other researchers to replicate the study, ensuring the reliability of the findings. Conformability measures the objectivity of quantitative research (Polit & Beck, 2014). Confirmability pertains to the impartiality and objectivity of the findings, guaranteeing that they remain unaffected by any biases or preferences of the researchers. Researchers utilize peer debriefing to improve the confirmability of the findings. Peer debriefing entails soliciting input from colleagues or experts to authenticate interpretations and mitigate researcher bias. In this study, the research draft was assessed during a seminar and conversation with supervisors.

In conclusion, teachers' knowledge goes beyond just formal education and shared experiences. Their unique backgrounds and personal histories significantly

influence how they interpret and learn from those experiences. This variation in teacher knowledge base has important consequences for teaching and learning. Since teachers bring different perspectives, they may require diverse forms of support and professional development to best serve their students.

3.10. Conclusion of the Research Methodology

This chapter has focused on a detailed methodological description of the conduct of the study, including the research questions formulated, the site, the participants involved, the data collection techniques and analyses employed in the study, the ethical codes, and the trustworthiness. A brief account of PjBL practices in academic writing courses has also been provided. The whole research program will now be delineated in Chapter IV.