

CHAPTER 3

METHODOLOGY

A. Research Design

This study used a qualitative approach with a descriptive case study design. Yin (2009) defines a case study as an empirical investigation into an everyday occurrence within its real-life setting. This method enables an in-depth, contextually grounded examination of a single phenomenon or case within its real-world environment. This case study was chosen because it would provide an opportunity to explore in detail the strategies teachers use to implement Pedagogical Deep Learning (PDL) in vocational English as a Foreign Language (EFL) class.

B. Research Setting and Participant or Research Object

This study was conducted at a vocational high school located in Ciamis, West Java, Indonesia. This school was chosen because it has actively implemented the emancipated curriculum, integrating PDL principles into EFL classes since the 2025/2026 academic year. This context provides a relevant and authentic setting for examining how Deep Learning is applied in English language teaching, particularly in developing students' 21st-century skills.

The implementation of PDL in this school has been carried out through various instructional strategies designed to promote active, meaningful, and reflective learning. Teachers have incorporated student-centered approaches, such as problem-solving tasks and collaborative activities, to enhance students' engagement and deeper understanding of the material. These practices align with the goals of the Emancipated Curriculum, which emphasizes student autonomy, critical thinking, and real-world relevance in learning. Additionally, participants were selected using purposive sampling, which is relevant to the following criteria: (1) they had more than 10 years of experience in teaching English, (2) they used teaching strategies that were in accordance with the implementation of the emancipated curriculum and PDL in EFL vocational classes, and (3) they were willing to participate in the study.

This study involved two participants, both female English teachers at the

selected school. Teacher 1 is 37 years old, and Teacher 2 is 34 years old. The first teacher has 14 years of experience teaching English in a vocational high school since 2012. The second teacher has 12 years of experience teaching English in a vocational high school since 2014. Their teaching experience was considered an important factor, as it enabled the consistent and effective application of PDL strategies in EFL classrooms. Participants were briefed on the research objectives and their rights as participants before data collection began. Participation in this study was entirely voluntary, and informed consent was obtained from all participants before their involvement in the research. To protect their privacy and maintain confidentiality, pseudonyms were assigned, and participants were identified as Teacher 1 (T1) and Teacher 2 (T2) throughout the study. The use of pseudonyms was intended to prevent the disclosure of participants' identities and to ensure the confidentiality of the information they provided during the research process (Creswell & Poth, 2018). Both teachers taught English in Grade X, specifically in the Computer Network Engineering (TKJ) and Visual Communication Design (DKV) programs. These participants were deliberately selected because their teaching practices were expected to yield rich, in-depth data on the implementation of PDL strategies to foster students' 21st-century skills.

C. Data Collection

To collect data, the study employed classroom observation and semi-structured interviews. These approaches were chosen to investigate in depth how “teachers’ strategies” in implementing Pedagogical Deep Learning (PDL) were applied in English as a Foreign Language (EFL) classes in vocational high schools. The first observation was conducted to determine whether the target schools met the criteria and were willing to participate in this study.

Observation is the process of observing phenomena in the field using the observer's five senses, typically with the aid of recording devices, and documenting them for use in scientific research (Creswell & Poth, 2018). The purpose of this observation is to identify the implementation of mindful, meaningful, and joyful learning and to examine how teachers facilitate students' 21st-century skills

through deep learning methods. The researcher acted as a non-participant observer, meaning they did not interfere with the learning process. Before the observation, the teachers were asked for permission. Observation sessions were conducted twice for each participant in the classroom, with each session consisting of one English lesson (approximately 60 minutes). By conducting two observation sessions, researchers can gain a more comprehensive understanding of how teachers implement PDL strategies and verify the consistency of teaching practices across multiple learning sessions. Classroom observations and evidence of PDL implementation have been recorded using a smartphone and an observation sheet.

Following classroom observations, researchers conducted semi-structured interviews aimed to gain a deeper understanding of the strategies teachers use to implement PDL in EFL classrooms. Semi-structured interviews are a data collection method that uses open-ended questions, in which the interviewer asks respondents to elicit comprehensive information and evidence (Ruslin et al., 2022). This interview data complements the observational findings by explaining the reasons behind teachers' practices in implementing PDL. The 10 main interview questions were developed in accordance with the theoretical orientation of Deep Learning established by the Ministry of Education and Culture (2025), with an emphasis on mindful, meaningful, and joyful learning processes. This framework was chosen because it addresses the educational challenges currently facing Indonesia, particularly the need to promote students' active learning for developing their 21st-century skills.

To ensure the trustworthiness of the findings, this study employed data triangulation using three data sources: classroom observations, semi-structured interviews, and documentation. Data triangulation was used to strengthen the credibility of the findings (Creswell, 2009). The researcher compared and synthesized information from observations, interviews, and relevant documents, including classroom notes. By examining these sources, the researcher verified the data's consistency and gained a deeper understanding of how teachers implement Pedagogically Deep Learning to foster students' 21st-century skills. This process helped ensure that the findings accurately reflected actual teaching practices and

enhanced the reliability of the research.

D. Data Analysis

The data was analyzed using thematic analysis. Thematic analysis is a method for identifying, organizing, and providing insight into consistent patterns of meaning (themes) within a dataset (Braun & Clarke, 2022). This approach was chosen because it is well-suited to qualitative research aimed at identifying and explaining patterns and meanings in repeated data. This study applied the framework to analyze data from classroom observations and semi-structured interviews, focusing on the strategies teachers use to implement PDL. Thus, the researchers can gain insight into how teachers plan and implement teaching strategies in PDL that foster 21st-century skills in the EFL vocational classroom. The analysis is based on Braun & Clarke's (2006) six systematic stages:

1. Familiarizing with the Data

The process involved transcription, reading, listening, repeatedly writing down raw data, and taking notes. The information was presented as video recordings of observations and audio recordings of interviews. The author transcribed the videos and interviews to facilitate the data interpretation.

2. Generating Initial Codes

In this step, the researcher began organizing the data using a color-coding method (e.g., red, blue, green, yellow, orange, gray, navy). It aims to differentiate among the areas identified by participants, in line with the research objectives. The coding table used in the first part of the observation and interview was divided into two parts to facilitate reading the results.

Table 1

Generating initial codes of observation

00.06-	T: Good morning	Building routines &
00.10	How are you today?	learning readiness
02.20-	T: Do you know about descriptive	Stimulating students'
02.35	text?	critical thinking
	T: Gaada yang tahu?	
	Apa itu descriptive text?	

	Yang terlintas dalam pikiran kalian, descriptive text itu berupa apa?	
02.47-02.59	T: Ya, to describe something or someone ya Jadi mendeskripsikan sesuatu atau seseorang ya	Concept clarification
04.10-04.18	T: Picture, apa sih ini gambar tentang apa?	Identifying descriptive elements
16.48-17.03	T: Nah kalian coba tahu ga, dari contoh tersebut coba cari adjective-nya apa aja.	Identifying linguistic pattern
06.41-06.49	T: Yeah, rambutnya coklat, kemudian third, blue glasses	Meaning clarification
07.17-07.42	T: Celana Panjang biru dan kemeja putih. Nah dari deskripsi ini kalian coba buat questionnya. For example, kalau 175 (one hundred seventy-five cm)	Stimulating active production
12.40-12.46	T: Now, can you make a group with two persons	Facilitating peer collaboration
17.56-18.00	T: Tadi definition dari descriptive text udah ya?	Conceptual reinforcement
29.28-29.34	T: Kind (T correct their pronunciation) Kind yah, use like 'ngain'	Developing linguistic awareness
52.13-52.32	T: Oke, look at the picture! Please, sit down.	Contextualizing learning

12.51– 12.18	T: Ee jadi, coba dibaca definition of recount text! Recount text is a text that tell experiences or events that occurs in the past chronologically. Ada yang bisa translate?	Presenting conceptual content
17.47– 17.48	Kalau visit gimana?	Seeking clarification
24.07– 24.25	T: Nah, oke look at the exercise! Answer the question, number 1 identify the orientation part! Mana yang termasuk kedalam orientasi-nya?	Identifying text structure
46.58– 47.46	T: Yes, thank you. And then, mungkin ternyata rata-rata kesulitan-nya di wordsnya yah Mungkin kata per-kata kalian ada kebingungan yah. Nanti kita belajar lagi yah tentang itu. Tentang adjective, verb dll.	Teacher reflection
50.35– 51.55	T: Tidak ada yang intorvert semua orang itu bisa berubah ya kalau mereka mau untuk belajar. I hope you learn something today. Ya, ini eh ini pokoknya pelajaran hari ini semoga bisa bermanfaat untuk kalian ke depannya.	Motivating students' participation

A total of 16 initial codes represent various aspects identified in the participants' classroom observation transcripts. The following is a list of these initial codes along with their frequencies.

Table 2

List Initial Codes of Observation and Their Frequencies

No	Initial Code	Total
1	Building routines & learning readiness	11
2	Stimulating students' critical thinking	24
3	Concept clarification	28
4	Identifying descriptive elements	5
5	Identifying linguistic pattern	31
6	Meaning clarification	30
7	Stimulating active production	14
8	Facilitating peer collaboration	11
9	Conceptual reinforcement	31
10	Developing linguistic awareness	6
11	Contextualizing learning	13
12	Presenting conceptual content	12
13	Seeking clarification	4
14	Identifying text structure	6
15	Teacher reflection	2
16	Motivating students' participation	2

Table 3

Generating initial codes of the interview

T: Pertama saya menerapkan strategi Reflective Learning pembelajaran ya yang mendorong kesadaran Strategy siswa dan merefleksi siswa terhadap proses pembelajaran. Mmm hal ini dilakukan melalui pembelajaran mmm reflektif,
T: biasanya saya itu memberikan berupa Reflective questioning

pertanyaan di akhir pembelajaran. Seperti menanyakan, sudah paham atau belum, sudah enggak ngerti apa enggak,

T: Kemudian juga ada siswa itu disuruh seperti meringkas materi. Menulis sebuah materinya.

T: Kemudian menuliskan perasaan mereka selama proses pembelajaran itu gimana? Jadi kan itu untuk menilai tentang self-awareness nya ya seperti itu.

T: Biasanya siswa itu responnya beragam-ragam ya, karena siswa itu karakternya berbeda-beda ya,

T: tetapi alhamdulillah secara keseluruhan menerima ya.

T: Kemudian itu untuk pembelajarannya juga alhamdulillah pada aktif.

T: untuk memastikan efektifitas strategi itu saya melakukan evalusai terhadap refleksi siswa selama proses pembelajaran baik secara tertulis maupun tidak tertulis,

T: kemudian saya juga mengamati perkembangan dalam pemahaman dalam tugas.

T: Misalkan tugas-tugas baru itu siswa itu masih berkaitan engga selama dengan pembelajaran kemarin siswa itu masih mengetahui tidak jadi ada keterkaitan atau tidak jadi kalau misalkan ada keterkaitan atau siswa itu masih mengingat,

T: jadi ada kesadaran untuk tentang pemahaman belajar tersebut sehingga strategi itu cukup efektif dilakukan pendekatan mindfull learning.

T: Perubahan mungkin ada ya, jadi tidak hanya terfokus pada satu strategi itu saja	Flexibel teaching strategy
T: Dimana kan semua siswa itu kan harus semuanya aktif.	Promoting students participation
T: Nah untuk memastikan pembelajaran Bahasa Inggris dalam kehidupan sehari-hari yang terutama berhubungan dengan kejuruan.	Contextual learning
T: agar siswa itu lebih relevan sama memiliki pengetahuan yang lebih bermakna gitu ya.	Students understand learning purpose
T: Contohnya seperti ini kalo untuk jurusan DKV kan tentang desain komunikasi visual berhubungan dengan video misal saya kadang memberikan tugas membuat video tentang promosi produk dan jasa dalam berbentuk Bahasa Inggris seperti itu.	Project-based learning
T: bisa membantu untuk nanti siswa itu di dunia nyata dan di dunia kerja.	Workplace readiness orientation
T: Aktivitas yang digunakan salah satunya ada role play,	Role play activity
T: bisa juga dengan diskusi kelompok	Collaborative discussion
T: atau presentasi ya	Presentation activity
T: Iya pernah misalkan untuk kelas lpbs saya pernah melakukan survey dalam proses pelayanan jasa.	Real-world task implementation
T: atau pertanyaan terbuka tanya	Stimulating critical thinking
T: kemudian ada tugas menganalisis teks misalkan jadi tidak hanya membaca teks tetapi juga menganalisis teks	Text analysis task

T: sehingga siswa itu bisa mengemukakan opini serta menemukan fakta	Express students' opinion
T: serta menemukan solusi dalam memecahkan suatu masalah dalam suatu fenomena.	Problem solving skills
T: Hasil kreativitasnya dalam membuat project presentation alhamdulillah, ya, bagus. Untuk kreativitasnya, ya, lumayan bagus.	Students creativity development
T: jadi harus bertahap	Teacher provides scaffolding
T: itu kan harus dalam pendekatannya terlebih dahulu	Individualized support
T: dalam eh studi kasus	Case-based learning
T: menerapkan bahasa Inggris dalam situasi yang lebih nyata gitu.	Language application
T: jadi pasti ada situasi kerjanya gitu	Workplace simulation
T: Oh iya. Eh biasanya diadakan games seperti wordwall	Game-based learning activity
T: kalau si siswa mah biasanya jadi lebih senang dengan adanya games yang happy gitu	Positive students engagement
T: Sepertinya ada siswa mah apalagi ya suka ada yang kadang kurang paham dalam diskusi gitu atau dalam eh pembelajarannya gitu.	Students' difficulties
T: Tantangannya ada sih karena memang deep learning ini mmm kalau dikatakan gampang susah-susah gampang ya	Teaching challenges
T: Nah itu harus ya prepare. Prepare sebelum masuk kelas biasanya memang harus dilaksanakan agar bagaimana nih caranya kita eh persiapan agar si siswa itu masuk atau ya	Teacher preparation

masuk ke kelas terus masuk ke dalam
pembelajaran yang kita ajar begitu.

A total of 34 initial codes represent various aspects identified in the participants' interview transcripts. The following is a list of these initial codes along with their frequencies.

Table 4
List Initial Codes of Interview and Their Frequencies

No	Initial Codes	Total
1	Reflective Learning Strategy	2
2	Reflective questioning	3
3	Summarizing learning	1
4	Self-awareness	1
5	Students' diversity	7
6	Positive students' acceptance	1
7	Active students' participation	4
8	Reflection based evaluation	3
9	Monitoring students understanding	3
10	Connecting prior knowledge	2
11	Metacognitive awareness	1
12	Flexibles teaching strategy	2
13	Promoting students' participation	10
14	Contextual learning	5
15	Students understand the learning purpose	1
16	Project-based learning	5
17	Workplace readiness orientation	1
18	Role-play activity	3
19	Collaborative discussions	10
20	Presentation activity	3
21	Real-world task implementation	1
22	Stimulating critical thinking	2

23	Text analysis task	1
24	Express students' opinion	3
25	Problem solving skills	1
26	Students' creativity development	1
27	Teacher provides scaffolding	1
28	Individualized support	2
29	Case-based learning	1
30	Language application	1
31	Workplace simulation	1
32	Game-based learning activity	2
33	Positive students' engagement	3
34	Students' difficulties	1

3. Searching for Potential Themes

At this stage, the researcher identified themes within the categorized information and labeled them. While identifying these themes, the researcher also selected relevant codes and discarded those unrelated to the themes and research questions. In this step, the researcher combined the relevant initial codes identified in the previous step into broader themes, thereby providing meaningful answers to the research questions. The tables of observation and interview themes are separated to facilitate reading.

Table 5
Searching for Themes of Observation

No	Initial Codes	Potential Themes
1	Building routines and learning readiness	Pedagogical Deep Learning Strategies
2	Motivating students' participation	
3	Concept clarification	
4	Meaning clarification	
5	Conceptual reinforcement	
6	Presenting conceptual content	

7	Contextualizing learning	
8	Teacher reflection	
9	Stimulating students critical thinking	Development of students' 21st-century skills
10	Stimulating active production	
11	Seeking clarification	
12	Identifying descriptive elements	
13	Identifying linguistic pattern	
14	Identifying text structure	
15	Developing linguistic awareness	
16	Facilitating peer collaboration	

Table 6
Searching for Themes of the Interview

No	Initial Codes	Potential Themes
1	Reflective Learning Strategy	Pedagogical Deep Learning Strategies
2	Reflective questioning strategy	
3	Summarizing learning	
4	Reflection based-evaluation	
5	Monitoring students understanding	
6	Connecting prior knowledge	
7	Active students' participation	
8	Promoting students' participation	
9	Positive students' engagement	
10	Game-based learning activity	
11	Contextual learning	
12	Project based learning	
13	Real-world task implementation	
14	Case-based learning	
15	Teacher provides scaffolding	

16	Individualized support	Development of students' 21 st - century skills
17	Flexible teaching strategy	
18	Students' diversity	
19	Positive students' acceptance	
20	Teacher preparation	
21	Metacognitive awareness	
22	Self-awareness	
23	Stimulating critical thinking	
24	Text analysis task	
25	Problem solving skills	
26	Express students' opinions	
27	Collaborative discussion	
28	Role play activity	
29	Presentation activity	
30	Students' understanding learning purpose	
31	Language application	
32	Work-place readiness orientation	
33	Workplace simulation	
34	Students' creativity development	

4. Reviewing Themes

At this stage, the researcher examined the themes identified in the third stage. The researcher reviewed these themes to ensure their coherence and alignment with the data set. The table reviewing themes from observations and interviews is consolidated into a single section to make the results easier to read.

Table 7

Reviewing Themes of Observation and Interview

Themes	Sub Themes
Teacher Strategies in	Mindful learning strategies

Implementing PDL	Meaningful learning strategies
	Joyful learning strategies
Development of Students' 21 st -Century Skills	Critical thinking skills
	Collaboration skills
	Communication skills
	Creativity skills

5. Defining and Naming Themes

The researcher rechecked the analyzed data to determine whether it was coherent during interpretation.

Themes	Definition
Teacher Strategies in Implementing PDL	It refers to the teaching strategies used by English teachers to implement Pedagogical Deep Learning (PDL) in vocational EFL classrooms, guided by the three principles of mindful, meaningful, and joyful learning. It includes reflective questioning, contextual learning, project-based learning, collaborative discussions, games, and other student-centered activities that encourage active participation, and meaningful learning experiences. These strategies also support students in connecting English learning to real-life while fostering engagement during the learning process.
Development of Students' 21 st -Century Skills	It refers to the development of students' 21st-century skills through the implementation of Pedagogical Deep Learning in vocational EFL classrooms. It includes students' ability to think critically through text analysis and problem-solving, collaborate through group discussions, communicate ideas through presentations, and demonstrate creativity through project-based tasks. It also covers students' active participation, self-awareness, and ability to apply English skills in real-world or workplace-related situations.

6. Producing a Detailed Report on the Analysis

In this final stage, researchers compile a report on their research findings.

E. Research Schedule

This research was conducted at a vocational high school in Ciamis, West Java, Indonesia. Meanwhile, the study was conducted over the period from September 2025 to June 2026:

Table 8
Research Schedule

Description	Sept/ 2025	Oct/ 2025	Nov/ 2025	Feb/ 2026	Mar/ 2026	Apr/ 2026	May/ 2026	June/ 2026
Research Proposal writing								
Research Proposal examination								
Data Collection								
Data Analysis								
Report								
Thesis Result Seminar								
Thesis Examination								