

CHAPTER III RESEARCH METHODOLOGY

This chapter is categorized into six subchapters. The first subchapter, research design (3.1), presents the design utilized in this research which is a case study, and its rationale. The second one is research context (3.2) which discusses the participants along with the settings of the research. It is followed by the research instruments (3.3) subchapter in which the questionnaire, interview guideline, and observations sheet employed in collecting the necessary data for this research are elaborated. The procedure of how the research was carried out is provided in the research procedure (3.4) subchapter. How the collected data were analyzed in order to answer the three research questions is explained in the data analysis (3.5) subchapter. The next sub-chapter, ethical issues (3.6), informs the ethical concerns of this research as it involves human beings as subjects. This chapter is closed with concluding remarks (3.7).

3.1. Research Design

As an effort to answer the two formulated questions, this qualitative research employs a case study design. Qualitative research tries to answer problems connected with creating an understanding of the meaning and experience components of persons' lives and social settings (Silverman, 2005; Yin, 2018). Case study design is selected as it is relevant to the nature of this research which is to perform an in-depth study of the particular case within its context along with portraying the phenomenon in the form of individuals' beliefs and behaviors. A case is defined as any specific real-life object or entity, that can be concrete or abstract, studied in an in-depth manner employing various forms of data within its context (Silverman, 2005; Stake, 2010; Yin, 2018). The case in this research is attitudes possessed and reflected by two Indonesian EFL lecturers teaching in different two higher education institutions upon the critical pedagogy principles consisting of dialogue, problem-posing, praxis, and conscientization (Crawford, 1978; Shor and Freire, 1987; Giroux, 1997; Pennycook, 1999; McLaren, 2003; Emilia, 2005; Freire, 2005a; Macedo & Freire, 2005; Leal (2018). Moreover, the

case of this study includes the observed participants' teaching practices especially the first four meetings of their classes.

Employing the classification of a case study made by Creswell and Poth (2018), the present research can be categorized as a single instrumental case study as it selects one particular bounded issue to be studied. In executing the research, Yin (2018) mentions that a case study consists of three major stages namely (1) define and design; (2) prepare, collect, and analyze; and (3) analyze and conclude. The three Yin's case study stages were decided to be adopted in this research as it provided more doable guidelines compared to the technique of conducting a case study developed by Creswell and Poth (2018) that consists of five stages. The following Figure 3.1 summarizes how the case study is executed using the framework proposed by Yin (2018).



Figure 3.1 Case Study Design

It can be inferred from the previous figure, that in the initial stage, the case study starts with defining the case and designing the study. It is then followed by the next activities consisting of preparing the instruments, collecting data, and analysing the collected data. The case study is closed with the last set of activities consisting of analysing and concluding the findings. However, as it is suggested by Creswell and Poth (2018), a case study should be executed in a cyclical pattern. It means, the current research, in undertaking the three-stage case study, when necessary, in collecting the data, the first stage can still be executed especially in defining the case under study. As with any other case study research, this current research is also context-bound which means that this research was performed with no intention to generalize the revealed findings. The context of this research is elaborated in the following section.

3.2. Research Context and Participants

This study was conducted in two higher education institutions in two different cities in West Java: Bandung dan Subang during the 2021/2022 and 2022/2023 academic years (from September 2021 until August 2023). The English course selected in

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each higher education institution is *General English* for Machine Engineering Study Program students in one public Polytechnique in Bandung and *General English* for Law Study Program students in one private university in Subang. Both courses were taught to first-year students in the second semester of the academic year. The rationale behind the selection is after studying the two courses' descriptions and syllabi, each course has the promising potential of integrating and utilizing CP principles in its brought topics, classroom interactions, as well as discussions. The two sites are also selected as an effort to fill the research gap due to the absence of a reported identical study in West Java province, Indonesia. The following Table 3.1 displays the research sites in more detailed information.

Table 3.1 Research Sites

No.	City	Higher Education Institution	Study Program	Course Name	Credit Hours	Number of Students
1	Bandung	Polytechnique	Machine Engineering	General English	3	30
2	Subang	University	Law	General English	2	29

Although both participating EFL lecturers taught the same General English course, they had different focuses considering the study programs they taught in and the contexts of their students. While the participant teaching in Bandung emphasized the oracy skills, the participant teaching in Subang highlighted the literacy skills. This can be identified in the first-four topics written in the syllabus they offered to be taught to their students. The first-four topics and language aspects taught by the participant in Bandung are (1) Introducing Self and Other, (2) Describing People, (3) Describing Places, and Describing Jobs. In the meantime, the first-four topics and language aspects taught by the participant in Subang Elements of Legal Writing consisting of (1) Articles and Prepositions; (2) Pronouns, Adjectives, and Adverbs; (3) Collective Nouns and Uncountable Nouns; and (4) Past Tenses.

Participants

The participants in this study are two English lecturers teaching in two classes as displayed in Table 3.1. The rationale behind this decision is, as mentioned by Zarei and Dobakhti (2023), that researching teachers, including those who teach in higher education institutions, is essential to obtain clear insight into the educational

processes for they directly interact with students on a daily basis. The two participants are master's degree holders in the field of English education granted from the same higher education institution having various teaching experiences and relatively the same level of familiarity towards CP. For the purpose of research ethics and confidentiality, based upon what the participants requested, all participants' names are renamed using pseudonyms.

The first participant, Andi (male, 32 years old), has six-year experience of teaching English in a higher education institution in Bandung. The second participant, Meli (female, 31 years old), has five-year experience of teaching different English for specific purposes courses in varied departments and study programs in Subang. The more detailed information about this research participants can be seen in the following Table 3.2.

Table 3.2 Research Participants

No.	City	Name	Sex	Teaching Experience	Age
1	Bandung	Andi	Male	6 years	32
2	Subang	Meli	Female	5 years	31

The participants that are relatively in the same age and having the same master's degree as well as the moderately same year of teaching experience are intentionally selected in order to lessen the possibility of different attitudes upon CP principles as has been discovered by Aliakbari and Amoli (2014). Additionally, the composition of participants that consist of male and female lecturers are purposively in order to seek the differences between the genders. The research conducted by Aliakbari and Amoli (2014) found that EFL teachers' attitudes toward CP principles are different based on their gender, age, education level, and teaching experience.

Based upon the interviews performed during the preliminary research stage conducted in order to obtain consent and access as well as to build rapport, it is found that the two participants were at the relatively same level of familiarity with the theory as well as the concept of CP. They claimed they heard or read the phrase CP from their lecturers, colleagues, or journal articles. Although both participants claimed that they have been familiar with, or at least have heard of, CP, they are not, quoting Breuing (2005) and Clark (2018), self-identifying critical pedagogues (SICPs). Additionally, they did not have adequate procedural knowledge about

how to implement or incorporate CP principles in their class. The selection of these EFL lecturers who have limited theoretical and procedural knowledge of CP as the current research participants is in accordance with the call being made by Sulityowardani et al. (2020) for researchers to study the practice of non-SICPs but have the potential to implement CP in their classrooms.

3.3. Research Instruments

In an attempt to collect as well as to triangulate the data needed to answer the formulated questions, this present research employs three data collection instruments. Those are questionnaires, interview guidelines, and observation sheets. In utilizing those three data collection instruments, it is recommended by Silverman (2005) and Yin (2011), that different techniques were undertaken in order to enrich the obtained data to pursue a clearer comprehension of the studied case. Various procedures were carried out in developing the instruments including adapting the existing well-known CP questionnaires by taking into consideration the present research context, creating the instruments based on the CP theories and practices, requesting experts' judgment, revising the instruments based on the feedback provided by the experts, and performing a piloting study to ensure the quality, validity, as well as the reliability of the instruments. The upcoming sections elaborate on each of the employed data collection instruments.

3.3.1. Questionnaire

A questionnaire consisting of 5-number open-ended and 40-item close-ended items was employed in the form of Teacher Critical Pedagogy Attitude and Implementation (is referred as TCPAI in the whole document). The questionnaire was distributed to both participants through e-mail and other online platform such as Whatsapp the early stage of the study. The questionnaire was not utilized to survey in a quantitative way nor with the intention to uncover the data from samples that represent particular population. On the contrary, it was used to collect the initial data from both participating EFL lecturers before conducting interviews and classroom observations. The data collected using questionnaire are the additional ones that were intended to support the data gained from two other instruments.

TCPAI was developed by adapting the six questionnaires constructed for diverse research mainly to study teachers' as well as students' responses upon the integration of CP in various levels of EFL classes in different Asian countries.

Those six questionnaires are Principles of Critical Pedagogy Scale (Yilmaz, 2009), Slamet Wahyudi Yulianto, 2024

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Critical Pedagogy Implementation Inventory (Mozaffari, 2011), Critical Pedagogy Questionnaire (Macki & Alibakhshi, 2011), Critical Pedagogy Attitude Questionnaire (Pishvaei & Kasaian, 2013), EFL Teachers' Beliefs about Critical Pedagogy (Mahmoodabari & Khodabaksh, 2015), and Teacher Critical Pedagogy Questionnaire (Ali *et al.*, 2016). The questionnaires were adapted as they shared a similar EFL context with the present study. The adaptation was carried out by selecting, rewording, as well as reordering the most relevant items and statements. Only the items from the six questionnaires that are closely related with the studied CP principles in this research were selected. After being selected, the items were revised to make them more readable and understandable for the two research participants. The revised items were then ordered in the questionnaire labelled as TCPAI based on the purposes and the context of the present research to avoid biases.

To attain the credibility, transferability, and dependability of the questionnaire before being used to collect the data, three activities were performed. Firstly, expert judgement was requested by consulting the constructed questionnaire to the two scholars in the field of TEFL, CP, and qualitative research. Additionally, two qualitative researchers were involved to review TCPAI and provided their corrective feedbacks to better the readability and the accuracy of TCPAI. Lastly, the piloting study was carried out by asking the four EFL lecturers teaching in various higher education institutions to fill out the questionnaire. During the process of this instrument quality assurance, several revisions were made including reducing the number of items, simplifying the item sentences, and reordering the items.

TCPAI is an open-ended as well as close-ended questionnaire. The open-ended items are placed in the beginning section of the instrument questioning participants' demographic information. In the meantime, the following forty Likert-scale close-ended items are divided into two parts; the first twenty items investigate participants' opinions regarding the CP principle-based classroom activities ranging from strongly disagree, disagree, undecided, agree, to strongly agree (Likert, 1932 in Ajzen, 2005) and other items are requesting participants to respond based on how often they practice the CP principle-based classroom activities in their EFL class ranging from never, seldom, sometimes, usually, to always. The following Table 3.3 demonstrates the distribution of the items categorized based on

the four CP principles in both the attitude and implementation sections of the close-ended TCPAI questionnaire as synthesized and adapted from Shor and Freire (1987), Canagarajah (2005), Freire (2005a), Freire (2005b), Freire and Macedo (2005), Kincheloe (2008), Mochinski (2008), Yilmaz (2009), Kaufmann (2010), Macki and Alibakhshi (2011), Mozaffari (2011), Pishvaei and Kasaian (2013), Mahmoodabari and Khodabakshs (2015), and Ali et al. (2016).

Table 3.3 TCPAI Positive Item Distribution

No.	CP Principle	Attitude		Implementation	
		Statement Number	Total	Statement Number	Total
1	Dialogue	1, 3, 4, 14, 16, 17	6	22, 25, 28, 31, 33, 35, 36, 37	8
2	Problem-posing	2, 13, 15, 18	4	21, 24, 26, 27, 34	5
3	Praxis	5, 19	2	23, 32, 38, 39, 40	5
4	Conscientization	6, 7, 8, 9, 10, 11, 12, 20	8	29, 30	2

In both the attitude and implementation sections of TCPAI, there are positive as well as negative statements. Positive statements are statements that confirm the tenets and theory of CP, while negative ones are those that contradict the principles of CP. Along with the positive statement items that are dominant in the TCPAI, there are also negative statement items that are spread in items number 8 to 11, 14, 16, 17, 27, 28, 37, and 39. In TCPAI, the negative statement items were constructed in order to avoid the existence of extreme acquiescence and extreme response biases. The following Table 3.4 displays the negative statement items in TCPAI as synthesized and adapted from Shor and Freire (1987), Canagarajah (2005), Freire (2005a), Freire (2005b), Freire and Macedo (2005), Kincheloe (2008), Mochinski (2008), and Kaufman (2010).

Table 3.4 TCPAI Negative Items

No.	Items Number	Statement	CP Principle
1.	8	English should only be taught through English	Conscientization
2.	11	In English teaching as a foreign language, Indonesian language must not be used	Conscientization

3.	14	Only the teacher must speak in the class and students must only listen	Dialogue
4.	16	Students are not knowledgeable enough for program planning	Dialogue
5.	17	Students are knowledge receivers and teacher is knowledge transmitter	Dialogue
6.	27	In my class, I just follow the goals and objectives of the program.	Problem-posing
7.	28	In my class, my students are knowledge receivers and I am knowledge transmitter.	Dialogue
8.	37	In class discussion, I do not allow all students to express their opinions.	Dialogue
9.	39	I evaluate my students only at the end of the term.	Praxis

As the first twenty TCPAI items focus on the respondents' attitudes, they are intended to investigate their cognitive, affective, and conative aspects of attitude on the classroom activities that are based upon the four CP principles namely dialogue, problem-posing, praxis, and critical consciousness (conscientization). The second twenty TPCAI items require the participants to respond by selecting one from the five degrees of frequency ranging from never (1) to always (5) on the statements. The constructed statements are CP principle-based twenty classroom activities reflecting EFL lecturers' attitudes. (see Appendix I)

3.3.2. Interview Guideline

Mainly to triangulate and to confirm the data collected using two other instruments, the interviews were performed twice in this research with the researcher as an interviewer and all two participants as interviewees both face to face as well as through video call using Zoom application. In executing both interviews, a guideline consisting of four major sections was prepared. The four major sections are introduction, personal data, attitudes and practices, and CP. The introduction is the early stage of interview when the interviewer explained the initial information regarding himself, the purpose of the interview session, and the procedure of how the interview would be undertaken. The second major section, personal data, is the time when the interviewer confirmed the demographic data of both participants. The next major section, namely attitudes and practices, is part of the interview when the open-ended questions about the interviewees' attitudes and practices upon CP principles were asked. The last section, CP, is when the interviewer discussed the interviewees' knowledge about CP, the challenges they faced when practicing its principles, and the benefits they acknowledged as the result of implementing CP

principles.

The quality of interview guideline employed as instrument in both rounds of interview was assured by requesting two experts in CP and EFL to review the list of interview questions, asking two qualitative researchers to give their opinions on the guideline as well as the planned interview procedure, and piloting the revised guideline to one EFL lecturer teaching in one of the private universities in Garut, West Java. Both first and second interviews were undertaken using Indonesian language and lasted for 75 to 90 minutes for each session and were audio-visually recorded.

The first interview was conducted after the TCPAI responses had been analyzed and before performing classroom observations. The objective of the first interview was to confirm the respondents' TCPAI responses as well as to discover the respondents' prior knowledge about CP and their familiarity with the CP principles. The guideline for this first round of interview was developed mainly based on the items listed in the questionnaire instrument (Shor & Freire, 1987; Canagarajah, 2005; Freire, 2005a; Freire, 2005b; Freire & Macedo, 2005; Kincheloe, 2008; Mochinski, 2008; Yilmaz, 2009; Kaufmann, 2010; Macki & Alibakhshi, 2011; Mozaffari, 2011; Pishvaei & Kasaian, 2013; Mahmoodabari & Khodabakhs, 2015; Ali *et al.*, 2016).

The second interview was a semi-structured one conducted online after the classroom observation data collection technique was carried out. The purpose of this second interview was to discuss as well as to confront the respondents' CP attitudes they demonstrated in the questionnaire as well as in the first interview and their CP attitudes reflected in their actual day-to-day classroom practices. Moreover, the second interviews aimed at uncovering the participants' perceived obstacles and possible benefits in executing CP principle-based classroom activities. (see Appendix 2)

3.3.3. Observation Sheet

In order to investigate whether the participants' classroom practices reflect the CP attitudes they expressed in the questionnaire response and during the first interview, a non-participatory overt classroom observation was carried out. Non-participatory overt classroom observation means the researcher as the outsider openly observed the research participants. Furthermore, the classroom observation was executed to

uncover the EFL classroom activities that are based on the CP principles performed by the participants. In order to identify the patterns of all two participants' teaching practices, their first four meetings were observed. The classes that were observed were synchronous ones in which there were online and offline meetings. Considering the absence of physical presence and the restricted visual observation, the online meetings were observed differently in terms of the focus was given mainly to the classroom talks produced during the observed lessons. The instruments employed when performing the classroom observations were observation sheets.

The observation sheet was composed to make the observer focus on the classroom talks and activities that are categorized based on the four CP principles; dialogue, problem-posing, praxis, and critical consciousness (conscientization). Under each of the principles, there were three classroom activities that have to be identified by the observer during the observation periods that were executed in the first four meetings of the 2022/2023 academic year in Bandung and Subang. The following Table 3.5 lists the classroom activities executed by both research participants that were tried to be identified during the classroom observations.

Table 3.5 CP Principle-based Classroom Activities

CP Principle	No.	Classroom Activity	Code
Dialogue	1.	Negotiating classroom decision	1.1
	2.	Encouraging and appreciating students' opinions	1.2
	3.	Using students' L1	1.3
Problem-posing	4.	Presenting and discussing students' real problems	2.1
	5.	Connecting learning materials to students' life	2.2
	6.	Using students' prior knowledge, experience, and local culture	2.3
Praxis	7.	Inviting students to take action based on classroom discussion	3.1
	8.	Assisting students to reflect on their learning activity	3.2
	9.	Encouraging students to continually act and reflect	3.3
Conscientization	10.	Incorporating problematic sociocultural and political issues	4.1
	11.	Asking students to think critically	4.2
	12.	Promoting justice and equality	4.3

In addition to write the field notes in the observation sheets, the observer digitally

recorded the classroom activities and interactions emerged during the observed classes. the detailed information regarding the format and the content of classroom observation sheet can be seen in the Appendix 3.

The instrument quality assurance process, to pursue the credibility, dependability, transferability, and confirmability, was also executed to the interview guideline and the observation sheet. The process consisted of requesting expert judgement, asking two qualitative researchers to review the instruments, and trying out the instruments to the four EFL lecturers in a piloting study. Similar to the quality assurance process of TCPAI, revisions were made to the interview guideline and classroom observation sheet. However, different from TCPAI and observation sheet that were written in English, the interview guideline including the interview questions were written in Indonesian language. In the meantime, while the trying out the TCPAI was carried out by asking the four EFL lecturers to give their responses to the instrument and the interview guideline was piloted to one EFL lecturer, observation sheet was tried out by observing one teaching session performed by an EFL lecturer. It is discovered from the piloting study to try out the instruments that the participating EFL lecturer viewed CP principle-based classroom activities positively and represented her positive view in the observed teaching session.

3.4. Research Procedure

In collecting the data required to answer the research questions, a series of activities had been performed during the data collection period by the researcher since September 2021 until December 2022. The activities undertaken in the first six months were studying the literature, developing, piloting, validating, and revising questionnaires, interview guidelines, and classroom observation sheets. The next six months were the data collection period. The following Figure 3.2 illustrates the procedure executed in collecting the data.

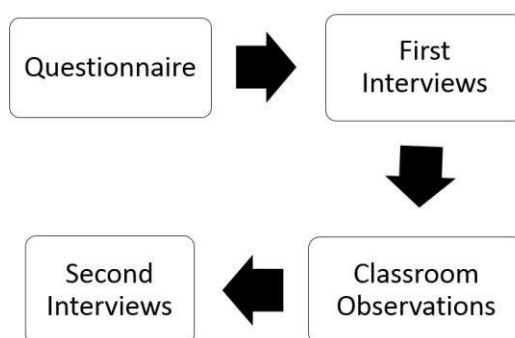


Figure 3.2 Data Collection Procedure

Those activities illustrated in the previously displayed figure are elaborated in the following order:

1. TCPAI was distributed through email and other online media to the purposively selected seven Indonesian EFL lecturers teaching at higher education institutions in West Java as the prospective research participants in March 2022;
2. Two TCPAI respondents from two different cities were selected as the research participants and were interviewed in Indonesian language to confirm what they have responded to in the questionnaire and to collect more data regarding their familiarity and understanding of CP. This first round of interviews was also carried out as a pre-observation interview on the 16th and 22nd of June, 2022. The processes of these initial structured interviews were digitally recorded;
3. The research was then continued by executing classroom observation (non-participatory overt/audio-visual recorded) during the first four meetings with each participant to uncover the teaching pattern and the consistency between what the participants have claimed in the questionnaire as well as the interview and what they actually do in their teaching. The observations were performed eight times consisting of four times in Andi's classroom and four times in Meli's classroom. In addition to that, the classroom observation sessions were also undertaken to identify the evidence of procedural challenges dealt with by the two EFL participating lecturers and the possible benefits on students' competency as the impact of practicing CP principle-based EFL classroom activities. The following Table 3.6 provides detail information about the date when the observations were undertaken in both Andi's and Meli's classrooms.

Table 3.6 Classroom Observation Date

Meeting	Andi	Mode	Meli	Mode
1	August 24, 2022	Offline	September 21, 2022	Offline
2	August 31, 2022	Offline	September 28, 2022	Online
3	September 7, 2022	Online	October 5, 2022	Offline
4	September 14, 2022	Offline	October 12, 2022	Offline

It is also considered essential to note that as the participants practiced their teaching in a flipped mode, there were offline and online classrooms. As it can be seen in the data displayed in the previous table that among the four meetings from each participant, there was only one meeting executed online using a video conference application named Zoom. In conducting the online classroom observation, the focus was given mostly to the classroom talks created by the participating lecturers and their students' responses upon the talks.

The non-participatory classroom observations were not only executed by filling out the classroom observation forms or sheets but also by writing the field notes regarding the events that happened along with behaviors that occurred during the observed lessons. These field note data were then utilized as additional or secondary data in making sense of the primary data obtained in order to answer the two formulated research questions.

4. The final data collection procedure performed in this research is the semi-structured post-observation interview that was carried out in Bahasa Indonesia after the observation phase was finished to confirm the data gained through observation as well as to obtain more data regarding their claim-practice consistency or inconsistency, obstacles they face, and support they get in practicing CP principle-based classroom activities in their EFL class. The second interviews were conducted on October 15, 2022, and 4th of November, 2022.

In addition to collecting data, there was another set of activities performed in conducting this research. It includes formulating research questions, conducting library research, selecting participants, reformulating research questions, gaining rapport and participants' consent during preliminary research, preparing data collection and data analysis instruments, analysing data, and writing research reports. The procedure undertaken in analysing the obtained data is delineated in detail in the subsequent section.

3.5. Data Analysis

In order to answer the two formulated research questions, the organized accumulated valid data in the form of questionnaire responses, interview

transcriptions, and observation sheets were analyzed by performing thematic analysis including descriptive statistics, coding, thematically categorizing, interpreting, cross-case comparing, and concluding (Bogdan & Biklen, 1992; Miles & Huberman, 1994; Strauss, 2003; Silverman, 2005; Yin, 2011; Alwasilah, 2012; Fraenkel *et al.*, 2012; Yin, 2018). Because the data collected using interviews and classroom observations are mostly in Indonesian language, the selected excerpts were translated into English language by also involving two translation experts and practitioners to make sure that the translations are accurate. The data analyses were performed both during and after collecting the data based on how the data were collected (Bogdan, & Biklen, 1992; Silverman, 2005; Creswell & Poth, 2018; Yin, 2018). The upcoming Figure 3.3 displays the cyclical illustration of the present research data analysis sequence.

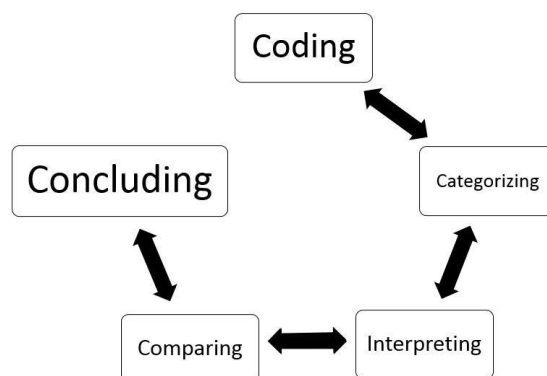


Figure 3.3 Data Analysis Sequence

However, the whole process of data analysis for this study, except concluding, was carried out back and forth. There were moments when, for example, undertaking comparing the findings, the result of the categorizing stage had to be revisited and revised. In order to obtain the data saturation, before and during the execution of data analysis, prolonged engagement with the research context, participants, as well as data, was carried out by the researcher. The detailed procedure of data analyses from each data collection instrument is elaborated in the subsequent sections.

3.5.1 Questionnaire Data Analysis

The data that were collected using a questionnaire were analyzed by quantifying the responses and categorizing them into positive as well as negative attitudes

towards the four principles of CP: dialogue, problem-posing, praxis, and conscientization (Crawford, 1978; Shor & Freire, 1987; Giroux, 1997; Pennycook, 1999; McLaren, 2003; Freire, 2005a; Macedo & Freire, 2005; Leal, 2018). This activity was undertaken to uncover the tendency of participants' attitudes as well as to unearth the frequently occurred responses towards particular TCPAI (Teacher Critical Pedagogy Principles Attitude and Implementation) statements. The analysis procedure is applied to both the first twenty numbers of TCPAI and the second one. As the responses ranged from 1 to 5, the quantification is carried out through the following procedure:

1. Regrouping the statements referring to the four CP principles to uncover the respondents' responses toward each of them;
2. Separating the negative statement items from the positive ones.
3. Totalling the respondents' responses toward the positive items in each principle.
4. Calculating the average score from the respondents for each CP principle;
5. Interpreting a more than 2.5 average score as A positive attitude, and a less than 2.5 average score is interpreted as a negative one; and
6. Comparing the average score from each respondent to investigate if there is an inconsistency between the responses for attitude statements (the first twenty numbers of close-ended TCPAI) and for the implementation statements (the second twenty numbers of close-ended TCPAI).

In addition to discovering who has what attitude upon which CP principle, the TCPAI data were also analyzed to unearth the most favourable CP principle-based classroom activities by identifying the three highest average scores among the twenty implementation statements. The results of the questionnaire data analysis are displayed in the form of tables and diagrams. After being analyzed and displayed, the questionnaire data were then compared with the data collected using interviews and observations before being interpreted and concluded.

3.5.2 Interview Data Analysis

After the interview data recordings were transcribed, the systematic inductive analysis was performed following the five-phase analysis procedure consisting of

and reading, coding, categorizing, interpreting, and concluding (Miles & Humberan, 1994; Yin, 2011). While closely repeatedly reading the interview transcript to identify the possible patterns in the transcriptions, the recordings were listened and notes were made to highlight the interesting and most relevant- to-research-questions data. After being highlighted, the codes were created to shorten along with to organize the complex excerpts into more comprehensible data. The codes created in this stage of data analysis were consulted to the two other qualitative researchers in order to avoid the occurrence of possible biases. The identical codes were then grouped and categorized under the frequently emerged themes.

The categorization was executed using deductive one where the predetermined codes were classified into groups of themes considering research questions and theoretical frameworks. After that, the interpretation was constructed based upon the theories of CP, (Freire, 2005a, 2005b; Freire & Macedo, 2005; Giroux, 1997; McLaren, 2003; Shor, 1996; Mochinski. 2008; Kincheloe, 2008) and attitude related to its aspects and classifications (Eagly & Chaiken, 1993; Ajzen, 2005). Drawing a conclusion, as the last analysis stage, was performed after comparing the present research discoveries and the findings of the previous relevant studies. The procedure was applied for both initial and after-observation interviews.

The analysis of initial interviews was executed to triangulate the attitude data obtained using TCPAI in terms of avoiding the contradictions and ensuring consistency along with investigating the participants' prior understanding regarding CP principles and as well as their classroom application. In the meantime, the after-observation interview data analysis was conducted particularly to confirm the data obtained using the observation sheet as well as to unearth challenges of bringing CP principles into the classroom from the participants' perspectives. The procedure of analysing the interview data was also carried out to uncover the potential benefits possibly received by the students as a result of implementing CP principles in their EFL classrooms.

3.5.3 Observation Data Analysis

The classroom observation data analysis was carried out to identify the

participants' attitudes toward the CP principle-based classroom activities represented in their teaching practices as well as to confirm the data that have been gathered using TCPAI and the initial interview especially those that are related to the classroom practices. This type of data was also analyzed to discover the observed challenges and benefits of performing CP principle-based EFL classroom activities. In performing so, the classroom activities recorded in the observation sheets were coded, calculated, and thematically classified into the four main categories of CP principles that are dialogue, problem-posing, praxis, and critical consciousness. After being classified, the data were then compared and interpreted to uncover which CP principles were frequently represented by the participants in their actual teaching practice patterns. In addition to that, the obtained classroom observation data were also analyzed by performing the quantification of occurrence frequency classroom activities undertaken by the two participants representing each of their attitudes upon CP principles. Two different focuses of analysis were given to the classroom observation data. Whereas upon the offline classroom observation data, the analysis was performed by also considering the physical condition of the classroom and the participants, regarding the data collected through online classroom observation, the analysis was mainly undertaken towards the verbal communication produced during the lesson.

3.6 Ethical Issues

As mentioned in section 3.2., in order to protect the confidentiality of any sensitive data, the names of the higher education institutions as the research site and the students' names are not displayed in a published report. Especially for the EFL teachers' names, as the research participants, for the purpose of publication, are mentioned under the pseudonyms. Furthermore, before conducting the research, the informed consents were distributed to the research participants to make sure they voluntarily participated in the research.

3.7 Concluding Remarks

The methodological aspects of this research including the employed research design, research sites and participants, and data collection instruments as well as analysis have been elaborated in detail in the present chapter. Moreover, the chapter delineates the procedure of how this research was conducted. The next chapter four

provides the detail elaborations of the research findings and discuss them when being compared to the discoveries of the related previous studies.