CHAPTER III
METHODOLOGY

This chapter highlights several points that elaborate on the methodology of the research, including the research design being implemented, the participants and sites involved, and the methods for collecting and analysing data.

3.1 Research Design

The research adopted a case study design, with a particular focus on multiple cases. The current research focuses on the investigation of pre-service teachers' beliefs, a subject that requires profound inquiry due to its vast and complex nature (Pajares, 1992; Borg, 2003). Thus, the investigation needs to be done in-depth so that a comprehensive understanding of the phenomenon can be drawn. The case study design allows for such investigation as the design puts emphasis on a "detailed examination" of a phenomenon (Schwandt & Gates, 2018 p. 602). This detailed examination led to the "discovery of systematic connections among experiences, behaviors, and relevant features of context" (Johnson, 1992 p. 84 as cited in Duff, 2008).

In terms of the number of cases involved, the study focused on three individual cases, since case study research usually selects less than four or five cases" (Creswell & Poth, 2018). The cases being investigated are real people, specifically three EFL pre-service teachers. The multiple-case design enables the current study to give broader explanations to answer the research questions since it analyses the cases in relation to one another in terms of their similarities and differences (Eisenhardt & Graebner, 2007; Baxter & Jack, 2008). Thus, the current study describes each of the cases and, at the same time, draws conclusions on the similarities and differences present between them. However, this does not mean that the current study aims to generalize the results of the inquiry because case study research is not concerned with generalizing the findings but with understanding each case's complexity (Cresswell & Poth, 2018).

3.2 Research Participants and Sites

As mentioned previously, the current research adopted a multiple case study design that focuses on pre-service EFL teachers as the cases. A total of three pre-service English teachers (one female and two males) took part in the study. In seeking out the participants, the research employed voluntary sampling, similar to what had been done by Ishtihari (2017) in which the participants were selected based on their willingness to participate in the research. Before any data had been gathered, each participant was made aware of the data collection procedure and their rights throughout the period of data collection and gave consent for their participation.

To ensure confidentiality, the participants' names were replaced with pseudonyms in all generated reports and analyses. Kvale (1996, p. 114) mentioned changing the participants' identities and other "identifiable features" with pseudonyms protects the participants' privacy. This protection of privacy is crucial in the process of reporting the collected data. The participants have been made fully aware of how their private information is handled in the research and further academic publications. In reporting the research, the participants were given the pseudonyms "PST 1", "PST 2", and "PST 3".

All of the pre-service teachers were enrolled in the English Education study program at one state university in Bandung. During the time of the data collection, the pre-service teachers were conducting their teaching practicums. The teaching practicum is one of two fieldwork courses that the pre-service teachers must complete in order to obtain their undergraduate degrees. Throughout the practicum, the pre-service teachers were required to conduct at least ten class meetings under the supervision of the university's lecturer and a teacher from the institution where they teach. The practicum started in March 2022 and ended in May 2022. Two of the participants had prior experience in teaching English before the practicum started (PST 1 & PST 3). During the practicum, PST 1 taught in the 8th grade, PST 2 taught in the 7th and 8th grade, while PST 3 only taught in the 7th grade. All of them taught English around two to four times a week.

The research was conducted in two Indonesian junior high schools where the pre-service teachers carried out their teaching practicums. The first school is an Indonesian state-owned school operating in Tokyo. The school follows Indonesia's K-13 curriculum and provides education for the country's citizens who are currently living in Tokyo. The pre-service teachers who taught in the school (PST 1 & PST 3) conducted their classes online, mainly via conference video meetings. Each of them only taught one class that consists of around 6 to 12 students. The second school is a state-owned junior high school located in Bandung. The school followed the same K-13 curriculum. In contrast to the Indonesian-Tokyo school, the second school often switched between online and offline learning to accommodate the situations surrounding the COVID-19 pandemic. The pre-service teacher who taught in this school (PST 2) handled multiple classes consisting of 30 students.

3.3 Data Collection

To collect the data, a series of classroom observations and individual interviews were conducted. The classroom observations were conducted in April 2022 while the interview took place in May 2022. de la Campa and Nassaji (2009) suggested doing classroom observations before interviewing participants. This is done in order to avoid the possibility of altering the pre-service teachers' practice with the insights gained from the interviews. Further explanation of both data collection methods will be provided below.

3.3.1 Classroom Observations

The classroom observations were carried out as a means of investigating how the pre-service teachers use the first language (L1) in their teaching practices. Thus, the observations were not concerned with evaluating the participants' teaching practice. Rather, they were utilized to 'assess the extent to which the teachers' beliefs and reported practices corresponded to what actually happened in the classroom' (Mohamed, 2006 p. 84). The observations provided the research with what Robson (2002, p. 310 as cited in Cohen et al, 2018) referred to as a 'reality check'. If the research were to rely only on the participants' reports of their teaching practices, there is a chance for inaccuracies to occur in the data gained from such reports. This is because people's accounts of their practices may differ from what they actually do in reality (Robson & McCartan, 2016). Furthermore, observations are considered to be a way through which the researcher can directly see how the participants' beliefs transpire in their practices (Susanti, 2015).

The classroom observations were done in a non-participatory manner, in accordance with the nature of the case study research. The focus of. Each of the participants agreed to have two of their class meetings observed and recorded, amounting to six observations in total. In terms of the observations' duration, each participant contributed approximately two hours of their classroom time to be observed. During the observations, the researcher also generated field notes in which the researcher wrote down important happenings that occurred related to the use of L1 during the class.

3.3.2 Interviews

At its core, conducting interviews allows the researcher to not only comprehend the participants' experience but also the 'meaning that they make of that experience' (Seidman, 2006 p. 9). In the case of the current research, the experiences being excavated are in the form of pedagogical beliefs. Interviews are also utilized to explore how the participants look at and feel about certain issues, what they value, and what is meaningful to them (Cohen et al, 2018). Throughout the data collection period, the researcher conducted three individual semi-structured interviews to gain in-depth insight into the beliefs that the pre-service teachers have about L1 use in their English classes. Semi-structured interviews are known for being flexible in terms of inquiring for information and navigating through the participants' responses (Robson & McCartan, 2016); a feature that aligns with the case study's need to be adaptive (Debreli, 2016; Yin, 2018).

The interviews covered three discussion topics: pre-service teachers' personal biographies, their experiences with L1 use as former students and practicing teachers, and how they think L1 should be during the class. To conduct further inquiry related to these topics, the researcher adapted interview questions from previous studies related to teachers' beliefs on L1 use. Questions related to the participants' pedagogical experiences were adapted from Farrel's (2013) guide for exploring sources of teachers' beliefs. Each interview lasted around one hour. While interviewing the participants, the researcher took notes of their responses. All of the interviews were recorded in order to aid the data analysis process.

3.4 Data Analysis

To analyse data collected from both the classroom observations and interview sessions, the researcher employed thematic analysis. The analysis method assisted the study in arranging the data into meaningful codes through which themes are identified (Peel, 2020; Fereday & Muir-Cochrane, 2006). In this analysis, themes refer to patterns of meaning that appeared within the data (Braun & Clarke, 2016). Thematic analysis recognizes these patterns of meaning, analyses them, and interprets them in accordance with the research question (Braun & Clarke, 2006).

The current research followed Braun and Clarke's (2006) six-step framework for thematic analysis. The steps are elaborated as follows:

1) Becoming familiar with the data

   Before undergoing a thematic analysis, data from the observations and interviews were transcribed in order to aid the analysis. In this first phase, the researcher repeatedly reads the transcriptions to be aware of the depth of the data and to get an initial understanding of the meaning behind them.

2) Generating initial codes

   This phase involves the clustering of chunks of data that are similar in meaning (Miles et al, 2014). The coding process puts its primary focus on grouping data in detail. At the same time, the process allowed the researcher to look out for interesting data items that are repetitive (Braun & Clarke, 2006). The coding of the observation transcripts was theory-driven. The process relied on an already-established coding scheme by de la Campa & Nassaji (2009) to analyse pre-service teachers' use of L1 during the observations. Furthermore, Braun and Clarke (2006) noted that a coding process is theory-driven when it aims to identify certain features in the data. This is in line with one of the purposes of the study, that is, to investigate how pre-service teachers use L1 in their teaching practices. On the other hand, the coding of interview sessions was data-driven in character because the process analysed the interviews in their entirety.

3) Searching for themes

   In this process, the codes which have been identified in the data set are assigned into bigger categories according to their similar features. These categories are referred to as themes. This phase focuses on analysing each code and searching for patterns and similarities among them to generate themes.

4) Reviewing themes

   After initial themes have been identified, the researcher reviewed all the themes to make sure that each theme has clear distinctions from one another. This reviewing process is also concerned with the coherence of meaning between the data sets inside each theme.

5) Defining and naming themes

   In this step, the themes were further refined and analysed. The refinement process involved identifying "the essence of each theme and what aspect of data the theme captures" (Braun & Clarke, 2006 p. 92). To do this, the researcher revisited the assembled data set in each theme and establish a systematic account of the themes accompanied by several narratives.

6) Generating report

   The final phase involves analysing and interpreting the refined themes. The analysis was conducted within and across each of them in the form of a coherent and non-repetitive account. The written report also includes an analysis within and across each of the cases being investigated in the study.