CHAPTER III
RESEARCH METHODOLOGY

The third chapter introduces the methodology used in this study. It is fragmented into several sub-chapters, namely: research design, research site and participant, data collection, and data analysis with the last two sub-chapters divided into each type of instruments utilized.

3.1 Research Design

This study adopts descriptive case study design, as it "attempt[s] to present a complete description of a phenomenon within its context" (Hancock & Algozzine, 2017, p. 33). According to Crowe et al. (2011), case study is utilized to examine a phenomenon in details. Hancock and Algozzine (2017), two of the pioneers in this type of study, emphasizes that case study seeks in-depth understandings of a "case or bounded system… an event, activity, process or one or more individuals." (p. 24). In their work, it is highlighted that Yin in 2013 asserts that conducting a case study research deals with investigating a "contemporary phenomenon" in its "natural context" (cited from Hancock & Algozzine, 2017). Certainly, context is salient in this kind of research design. Additionally, Hancock and Algozzine (2017) also affirm that case study research is also confined by space and time; that is, in investigating a phenomenon, one must be aware of its dynamic nature. Another characteristic of case study research highlighted by Hancock and Algozzine is its tendency to be richly descriptive. It is argued that this is because case study research involves a wide variety of research instruments (e.g., interviews, document analysis and observations), resulting in abundance of information. Not to mention that, compared to other research designs, case study research is not focused on documenting differences or even testing a hypothesis; that is, a case study research is inclined to be exploratory and illustrative rather than comparative or predictive (Hancock & Algozzine, 2017).

Apart from being classified based on the subject field being investigated, case study is also divided into three types: intrinsic, instrumental, and collective with each type having its own distinctive focus affecting the approach of the study

(Hancock & Algozzine, 2017). Intrinsic investigates an individual, organization, or an event, seeking to understand it more. Instrumental case study is an attempt to understand a theoretical issue or question. Lastly, collective contributes to answering a problem in question while also adds to the rich of the literature foundation.

From those descriptions above, it is clear that this study uses intrinsic approach, as it merely focuses on investigating the English course as to determining whether or not it meets learners' language needs in the authentic occupational settings. The reason why case study is adopted in this study is because the research participants are seen as people confined with context and time, supported by Hutchinson's and Waters' views (1998). Therefore, this research takes into account their perspectives, beliefs, and experience as deep as possible, resulting in richly descriptive findings compared to that of quantitative research designs. It is also worth mentioning that this study adopts qualitative data analysis, as the data collection process involved descriptive data gathered from interviews, questionnaire (needs analysis), and document analysis.

3.2   Research Site and Participant

The research was primarily conducted in a vocational school in West Java, Indonesia, and partially in one of the most popular tourist attractions for both domestic and international visitors located in West Java. The research sites were chosen mainly because of limited accessibility during the Covid-19 pandemic. Specifically, culinary arts major was the focus of this research, as previously mentioned in the background of the study, this particular major receives less attention compared to other majors in vocational education. Although this research was only based on one educational institution, it is expected that the results of this study can further increase the awareness of English teachers dealing with ESP and pinpoint the ESP teaching and learning of ESP for culinary arts major in the future. The aforementioned expectations, in turn, are hoped to have a positive impact towards the development of ESP syllabus, teaching and learning materials, and the evaluation process.

Referring to the primary research site above, this study involved 15 culinary arts students in the targeted vocational school to answer the needs analysis questionnaire. Among the above-stated students, four students were selected to be interviewed. To further justify the accuracy of the needs analysis results' accuracy, I involved culinary arts students who, at the time of the data gathering, had experienced an internship or *Pelatihan Kerja Lapangan* (PKL). Their views, in turn, had a huger impact than, say, first-year students who, in terms of experience, were far inferior compared to their seniors.

The English teacher was also involved as a research participant to further elaborate and validate the findings from the questionnaire and interviews from the stakeholder and selected students. The interview with the teacher is also meaningful in terms of gathering information on how the learning activities in the classroom are carried out, highlighting his pedagogical views and the focus of the learning. Thus, it is primarily from this particular participant we can conclude whether or not the ESP teaching and learning meets the demands from the industry.

To further triangulate the data, a stakeholder/specialist from an institution in which some students experienced their internship was also interviewed. The stakeholder was working as the head of Training Development division in one of the most popular tourist attractions in West Java. The place attracts both domestic and international tourists, making it ideal in terms of the language contact (English-Indonesian). Similarly, the institution was chosen due to limited accessibility during the pandemic and due to the fact that other target institutions were currently not open. His views enrich the data gathered from the students and teacher. Furthermore, concerning the aims of the study, the results of the interview from the specialist lay a strong foundation in answering the question of the research.

3.3   Data Collection

The data of this study were collected through questionnaire of needs analysis, interviews, and document analysis. The following list further explains each instrument used in this study.

3.3.1 Questionnaire

When it comes to the framework of the needs analysis, this study mainly uses Hutchinson's and Waters' (1987) format of Target Needs Analysis (TNA), which include necessities, lacks, and wants with the first two as the primary focus. Additionally, it also partially adapts Hutchinson's and Waters' (1987) framework of Learning Needs Analysis (LNA), Richterich's and Chancerel's PSA framework (as cited in Flowerdew, 2013; and Rahman, 2015) and Chatsungnoen's (2015) questionnaire as to the fragmentation of the language skills (listening, reading, speaking, writing, vocabulary, and grammar).

For the content of the questionnaire, several studies (see Ayutami et. al., 2018; Brilianto et. al., 2020; Dewi & Amri, 2019; Maula, 2020; Widodo, 2016) inspired it in terms of the focus of the questionnaire. As explained earlier, their studies reveal that speaking and reading outmatch the other two language skills: writing and listening. Not to mention that both students and teachers give profound attention to vocabulary and grammar. Some elements in Gerhardt et al (2013) were also adapted in the questionnaire, particularly those involving with text types and advanced vocabulary in culinary linguistics. The questionnaire contains five sections, namely: (1) consent, (2) background information, (3) difficulties in general English language skills, (4) difficulties in English language sub-skills related to culinary arts major, and (5) importance of English language sub-skills related to culinary arts major.

The questionnaire was administered through a face-to-face meeting, although, concerning the pandemic condition, this could be administered through online platforms such as *Google Forms*. The rationale behind this decision came from the teacher's suggestion. As opposed to administering the questionnaire online that some may think it is more practical, this preference was advantageous concerning the clarity of instructions to answer the questionnaire, as it could be confusing for students due to its length and complexity.

3.3.2 Interviews

   Interview has been known as one of the primary sources for data gathering in qualitative research. Turner (2010) believes that the advantages of using interview lies in its potential to gather in-depth data regarding "participants' experiences and viewpoints of a particular topic". In line with this is Mann who affirms that it can be used to comprehend "informants' beliefs, experiences, and worlds… unfold[ing] the meaning of people's experiences [and] their lived world." (2016, p. 2) In case study research, the interview is utilized to uncover the people (Mann, 2016), or in this case the teacher, students, and stakeholder, who are part of the case. As for the type of the interview, I used semi-structured interviews, as they open a possibility for the interviewer to investigate more deeply about the interviewees (Mann, 2016), particularly about the views and experiences of each interview participant.

   The formats for all interview prompts of this study follow Jacob's (2015) guidelines (e.g., introduction, main interview, and closing). Moreover, he also provides several tips for conducting interview, such as checking the recording device, maintaining eye contact with the interviewee, and eliminating background noises that may interrupt the interview. Those tips were considered in the interview process to ensure clear recordings and maintain a good relationship with the interviewees.

   The content for interview protocol for the teacher was primarily based on TSA and LNA (Hutchinson and Waters, 1987) and partially from Richterich's and Chancerel's PSA framework (as cited in Flowerdew, 2013; and Rahman, 2015). It is also worth noting that, since specificity is the primary goal of ESP, some prompts in the interview were adapted from a linguistic guideline for chefs (see Gerhardt et. al., 2013). The prompt of the interview covers five topics: (1) Interviewee's background and teaching perspectives, (2) students' needs, (3) students' lacks/difficulties, (4) students' wants, and (5) learning materials used in the classroom. The transcript of the interview can be seen in the appendices section of this research paper.

   Similarly, the interview prompt for the four selected students was also based on TSA and LNA framework (Hutchinson and Waters, 1987). The TSA's outlines

that were primarily focused on was the 'wants' aspects, as it is arguably carried out better in a form of interview rather than in a form of questionnaire. Some elements in the PSA framework (Richterich's and Chancerel's, 1977) were also used, such as their learning experience from middle school and their attitudes towards English in general. The prompt of the interview is divided into three topics: (1) students' background, (2) confirming students' answers in the questionnaire (difficulties, needs, and personal evaluation), and (3) students' wants. Primarily, the content/topic of the interview was adjusted to their answers to the needs analysis questionnaire. The transcript of the interview can be seen in the appendices section of this research paper.

As for the interview for the stakeholder, the TSA was primarily focused on (the needs and lacks), as, according to Hutchinson and Waters (1987), it is the 'destination' part. This means that, specifically, the needs analysis questionnaire and interviews were administered to verify the needs required in the target situation, that is, in the authentic working atmosphere. Moreover, it was also aimed at determining the authentic text that learners will be dealing with, something that Gerhardt and her colleagues emphasize in their discussion on culinary linguistics (2013). The topic in the interview prompt for the stakeholder covers: (1) Interviewee's background, (2) investigating students' needs/necessities, and (3) investigating students' lacks/difficulties. The transcript of this interview can be viewed in the appendices section.

3.3.3 Document Analysis

In intertwining and triangulating the data gathered from the research participants, document analysis is used. The use of document analysis as a triangulation instrument in qualitative research is not new (e.g., Denzin, 1970), an instrument that Bowen (2009) believes it is used in converging through multiple data sources. Put simply, document analysis is a procedure used for evaluating documents, either printed or electronic (Bowen, 2009). Such a procedure involves searching, choosing, making sense of, and synthesizing the data found in the documents (Bowen, 2009), In this case, what I try to search, choose, make sense

of, and synthesize is related to the findings from previous research instruments, whether it is confirming or confronting them.

As for the document analyzed, they are: the syllabus, lesson plan, and the learning materials used by the teacher. The syllabus provides the overall picture concerning the expected outcomes after the course, the learning materials, and topic fragmentation for the course. The lesson plan, in turn, executes the syllabus and this document was analyzed for scrutinizing the activities in the learning process, showing the teachers' beliefs when it comes to his pedagogical approach in teaching ESP. Lastly, the learning materials were analyzed to match the findings from the needs analysis questionnaire, the interview with students, and the specialist as for the required language functions in the authentic working atmosphere.

3.4 Data Analysis

The collected data are then analyzed descriptively, presenting them in detailed explanations. Nassaji (2015) believes that the goal of this approach is to describe a phenomenon, along with its characteristics. Furthermore, it is also believed that this offers holistic and rich results, as it involves numerous data collection methods (Nassaji, 2015). The description of each instrument analysis can be seen in the following list.

3.4.1 Questionnaire

The needs analysis questionnaire is analyzed both using numerical/statistical and descriptive approach and it must be clarified in this section that 'numerical/statistical' does not mean it involves advanced statistical measurements (e.g., standard deviation). The statistical data analysis only covers the percentage of each questionnaire item with closed-ended questions, signifying the number of learners choosing the exact same answer. Thus, the basic formula below is used.

$$P = 100\frac{f}{n}$$

Description:

P = percentage

f = frequency (the number of students choose the answer)

n = total number of students

Regarding the descriptive analysis, not only is it used in analyzing the open-ended questions, it is also used in describing the closed-ended questions in a sense that the percentages shown are only a supplementary tool in describing the data. The decision to be faithful to qualitative analysis is to make the results richly descriptive, full of details, and in-depth. This is achieved by presenting the data in a descriptive forms, detailing every important finding from each item by validating it with interviews with the English teacher and four selected students.

3.4.2 Interviews

The recorded interviews are analyzed using several steps of procedure. First, it was fully transcribed and partially reduced, as data reduction in qualitative research is essential (Miles and Huberman, 1994), generating what Deterding and Waters (2021, p. 5) classifies as "codes that reflect only the data". Then, the information gathered was labeled. As the language used in interviews was Indonesian (to be more linguistically friendly with the interviewees), it was then translated into English. Later on, the data were scattered according to their connection with the subunit of the findings sub-chapter in chapter IV.

3.4.3 Document Analysis

The findings from document analysis intertwine the results from the interviews and the needs analysis questionnaire. The documents were analyzed through a procedure involving: (1) preparing the documents, (2) highlighting parts of the documents relevant to other findings, (3) translating the findings, and (4) scattering the results relevant to the types of findings. Simply put, the findings from document analysis are used in strengthening the results from other instruments, validating them in order to avoid biases.