CHAPTER 3

RESEARCH PROCEDURES

3.1 Method of the Research

This descriptive qualitative research was conducted by way of a case study. Simply put, a descriptive case study provides a detailed description of a phenomenon in its context (Salminen, Harra, & Lautamo, 2006). A case study was selective and focused on specific aspects to fully explain the phenomenon under examination (Stake, 1995). Furthermore, applying this methodology in this study involved an up-close, in-depth, and detailed investigation of a subject of study and its contextual position. Additionally, Yin (2003) stated that a descriptive case study mainly focused on "what" questions. Therefore, the researcher used this method to find out what the informatics engineering students needed for their English learning.

3.2 Focus of the Study

The focus of this research was carried out to identify target needs (needs, lacks, and wants) and the learning needs of informatics engineering students as non-English basics in English class. Then, the results of this study were used as a reference for material development. This research was conducted solely based on the gap in the previous study, which was conducted on survey studies that did not provide an in-depth explanation of the case. From the previous research, students from ESP students who studied English sometimes did not address their needs; in other words, the English learning model was only taught in general (General English), so many students or graduates did not receive the right teaching in their field. This research only focused on one sought-after topic; namely, researchers only focused on target needs.

3.3 Setting and Participants

This research was conducted with students from the faculty of engineering at a university in Tasikmalaya. It involved six participants in the

undergraduate degree program of the informatics engineering study program in the second semester of the academic year 2022-2023 and Indonesian was used for the interviews. These six participants included two people selected from students with the highest scores, two from middle-score students, and two from students with the lowest scores. The consideration was that these students had to be in their second semester.

3.4 Technique of Collecting the Data

The researcher provided the predetermined form as an ethical code to the participant. Then, in collecting the data, the researcher utilized semi-structured interviews and documentation; this technique was used because it could provide a deeper understanding of the issue. During these interviews, students were asked several questions about their learning needs, such as the material they wanted and the kind of learning process they expected. The choice of a semi-structured interview was based on its ability to allow the conversation to change substantially (Fylan, 2005). Therefore, participants could express personal descriptions regarding emotions, actions, and thinking throughout the course (Harrell & Bradley, 2009).

Semi-structured interviews, according to Melissa De Jonckheere and Lisa M. Vaughn (2019), were a successful method of data collection when the researcher wanted to gather qualitative, open data, explore participants' thoughts, feelings, and opinions on a particular subject, and delve deeply into personal and frequently delicate issues.

There were guidelines and interview forms for conducting interviews to obtain high-quality interviews by Axmedovna (2015):

1. Choosing respondents and arranging the interview
   This phase focused on the issues that must be addressed throughout the study's execution. The interview was limited to two people. In addition, the researcher called them to seek and set an interview time.
2. Creating the interview guide and questions

Existing resources on conducting research interviews individually offer valuable guidance but do not come together to offer a systematic framework for developing and refining interview protocols. The researcher chose the structure of the interview procedure according to Castillo Montoya's (2016) The interview protocol framework is comprised of four phases:

A. Ensuring interview questions align with research questions

B. Constructing an inquiry-based conversation

C. Receiving feedback on interview protocols

D. Piloting the interview protocol

The researcher developed an interview technique and a list of interview questions that were useful for presenting the questions to the participants and the form of concern as the first step in the planning process. Additionally, the face-to-face distribution of interview guidelines included several themes related to the target needs and learning needs of Informatics Engineering students in learning English.

4. Starting the interview

The interview was conducted face-to-face, with the availability of the participant's time. It was held at their campus. The researcher interviewed the respondents in Bahasa Indonesia to avoid miscommunication and misinterpretation for the sake of smooth data retrieval in this research, as well as to make the interview run smoothly.

5. Polishing interview techniques

Interviews were conducted face to face to make it clearer in conducting interviews. Recording data using voice notes was done to obtain data from the documentation technique.

6. Analyzing and reporting the semi-structured interview

The researcher analyzed the data from the recording for accuracy in this stage. The information was also translated and transcribed. Then, the data was analyzed using thematic analysis.

3.5 Technique of Analyzing the Data

Data analysis techniques in qualitative research were carried out during data collection and after the completion of data collection within a certain period (Sugiyono, 2018). Data analysis was the process of systematically searching and compiling data obtained from interviews, field notes, and documentation by processing data that had been transcribed through the data reduction process. The data would be filtered and rearranged, presented, verified, and conclusions drawn so that it was easily understood by oneself and others. Data analysis had the aim of making it easier for researchers to organize data that must be kept or that must be put aside because it was not needed by researchers.

This research used qualitative analysis. Research results emphasized meaning rather than results, and research results could change according to the conditions faced in the research field. They were interpreted and written in the form of words or descriptions based on facts in the field (Sugiyono, 2016). The model of data analysis proposed by Miles and Huberman (1994). The components above could be explained as follows.

1. Data Condensation

Choosing data chunks from interview transcripts to strengthen the data in order to sharpen, focus, and arrange the data.

Table 3.1 Data Condensation

Original Data	Condensed Data
My goal is to study English so that I can better grasp what English is like. I frequently use computers in my major, and the language used in computers is English. I hope that this English learning is relevant to my field and degree.	I hope that English learning is in accordance with my field and major

1.1 First Cycle Coding

This section's data chunks were assigned starting codes by the researcher. The Process Coding approach was utilized by the researcher to investigate the cycle of coding's introspective, social, and cognitive experiences. The goal was to imply acts that are intrinsically tied to time dynamics, such as things that develop, alter, happen in specific sequences, or become strategically implemented. Furthermore, the researcher employed the Process Coding approach throughout the component because it attempts to quote participants' actions/interactions as well as the impact of the activity itself. Additionally, the researcher used number 1 for the initial needs, number 2 for lacks, number 3 for wants, and number 4 for the learning process, as it was the way for the researcher to assign initial codes based on the data analysis method by Miles, Huberman, and Saldaña (2014).

Table 3.2 Initialling Codes

Data	Initial Codes
[1] I hope that the English that I learned can help me to get a better job in the future	[1] students' expectations from learning English
[2] I think grammar because grammar is the arrangement of English sentences, if we want to be able to speak the arrangement of sentences must be good so that other people can understand	[2] material that is less studied in English class
[3] I think speaking because when I try to speak English, I get nervous, and afraid of mispronouncing it, especially in public speaking	[3] skills that wanted to learn
[4] I prefer to work in groups because I can exchange opinions.	[4] expected learning process

After assigning initial codes, the researcher developed a provisional listed code of codes prior to fieldwork that comes from the conceptual framework.

Table 3.3 Developing Code

Needs
- Students' expectations of learning English
Lacks
- Material that is less studied in English class
Wants
- Skill that wanted to learn
Leaning Process
- Expected learning process

1.2 Second Cycle Coding

Pattern coding was the next step in the analysis process. The researcher divided the first cycle's result codes into a smaller number of groups or topics.

Table 3.4 Generating Pattern Codes

Theme	Sub-theme	Codes
Target Needs	Students Need in Learn English	students' expectations of learning English
	Students' Lacks in Learning English	material that is less studied in English class
	Students' Wants in Learning English	skill that wanted to learn
Learning Needs	Leaning Process	expected learning process

2. Data Display

Presenting and arranging a full data set in the same location systematically allows conclusion drawing. Additionally, each participant is denoted by a fourth abbreviation. P1 stands for the first participant, P2 for the second, P3 for the third, and P4 for the fourth participant.

Table 3.5 Data Display

		Target Needs	**Learning Needs**
P1	-	I hope that English learning is in accordance with my field and major	- I prefer to work in groups because I can exchange opinions
	-	vocabulary, if we want to be able to speak, it seems like we have to know what we are going to say, meaning we have to know the vocabulary in English, a little difficult to memorize	
	-	I think speaking because when I try to speak English, I get nervous, and afraid of mispronouncing it, especially in public speaking	
P2	-	I hope that the English that I learn is in accordance with my major, from the material to the practice	- For learning English, I prefer studying in a group because I can practice speaking, listening, and communicating directly with others in English. These social interactions can boost confidence and provide opportunities to practice
	-	vocabulary, because knowing vocabulary in English is very important	
	-	I think reading because, in the first semester, we mostly read English texts, then words in English	

P3	-	I hope to be able to learn English well according to my major, be able to master grammar, and be able to speak a little English correctly	-	individual, because I believe in myself
	-	I think grammar because grammar is the arrangement of English sentences, if we want to be able to speak the arrangement of sentences must be good so that other people can understand		
	-	speaking, because I think speaking is the hardest thing to learn		
P4	-	What I expect in English is to be able to communicate better in English. This involves the ability to speak fluently, understand well, and respond appropriately in diverse communication situations. As well as to open doors to my wider career opportunities, both locally and internationally	-	For learning English, I prefer studying in a group because I can practice speaking, listening, and communicating directly with others in English. These social interactions can boost confidence and provide opportunities to practice speaking skills in real situations
	-	pronunciation, because we have to know how to read it, I'm afraid if the pronunciation is wrong, the meaning will be wrong too		
	-	Reading. Because we are required to read and understand articles, books, and technical documentation in English, and also		

	- be able to explore the latest information about the development of information technology through sources in English	
P5	- I hope that the English I learnt is in accordance with what I need for now which is related to my major and for preparation for work later - vocabulary, because it's really hard to memorize and there has to be a technique for memorizing vocab, it seems like vocab is the most important. Especially for speaking, we have to know the words, and we have to increase our vocabulary collection - I think speaking because speaking is very difficult and it takes practice to be able to speak	- I prefer working in groups because if we work in groups we can discuss with others.
P6	- I hope that the English that I learned can help me to get a better job in the future - I think grammar is important because the arrangement of words in English sentences is not easy; it's also complicated. If we get the grammar wrong, the meaning will be different - speaking, I want to be able to	- Working in groups, because working in groups makes me not feel bored, and also if something is wrong it can be corrected by the others too

speak English fluently, because	-
speaking English is very difficult	

3. Drawing and Verifying Conclusion

　　　Drawing and verifying conclusions is the third step in qualitative data analysis. From the beginning of data collection, qualitative analysis determines what things mean by observing regularities, patterns, explanations, alternative configurations, causal processes, and propositions (Miles, Huberman, and Saldana, 1994). The researcher also double-checks the findings. Following the collection of data, the process of drawing a conclusion begins with a preliminary conclusion. To put it another way, the conclusion is constantly analyzed and confirmed in order to get the greatest possible conclusion.

3.6 Steps of the Research

The researcher did several steps in this study as follows:

Table 3.6 Steps of the Research

Steps	Description
1	Identifying and defining a problem/phenomenon that occurred in one of the junior high schools in Tasikmalaya, West Java, Indonesia.
2	Exploring relevant studies, finding the research gap, and formulating the research question.
3	Writing the research proposal, including the background, literature review, and research procedures.
4	Examining the research proposal in front of the examiners and supervisors.
5	Revising the proposal and interview guidelines.

6	Starting to collect the data from the chosen participants by conducting an interview.
7	Analyzing the data from the transcripts of the interview.
8	Make a report on the thesis.
9	Examining the thesis.

3.7 Time and Place of the Research

The research will be conducted in one of the private universities in Tasikmalaya, on DD/05/2023. Moreover, The data will be obtained from students in the Department of Informatics Engineering at one of the universities in this city. In addition, analyzing the data will be carried out flexibly everywhere as far as the researcher can copy the recordings effectively. The following table is the timeline of this research for the next few months.

Table 3.7 Research Schedule

No	Activities	Research Schedule 2023			
		Jan-March	May	June-Nov	Dec-Jan
1	Research Proposal Writing	�			
2	Proposal Examination		▇		
3	Collection Data			▇	
4	Analysis Data			▇	
5	Research Report			▇	
6	*Seminar Hasil*				▇
7	Thesis Examination				▇