CHAPTER III
RESEARCH METHODOLOGY

A. Research Design

This research is a descriptive quantitative research method that consisted of one variable. The researcher focused on Students' Difficulties and fine out factors in Vocabulary Mastery. According to Creswell (2012:13), quantitative research identified a research problem based on a trend in the field or on the need to explain why something occurred. In quantitative research, the researcher relied on statical analysis or mathematical analysis of the data, which is typically in numeric form (Creswell, 2012:19). So, the researcher used a descriptive method to find out the dominant difficulty in vocabulary mastery.

B. **Subjects of Research**

The researcher will choose IKIP PGRI Pontianak as a site for research which is located in Jalan Ampera, South Pontianak.

1. *Population*

The population is everything that uses as objects of research. The population is not only a number that exists on the object of research but also includes the characteristics of the object observed. Based on Creswell (2012:13), "the Population is the group of individuals having one characteristic that distinguishes them from other groups". The population of this research is C-Afternoon Class in the fourth semester students of English Education Study Program of IKIP PGRI Pontianak in the academic year of 2021/2022.

2. Sample and sampling technique

The researcher used the purposive sampling technique in deciding the subject. Fraenkel and Wallen (2009:114) stated that the purposive sampling technique is specific where the researcher used "their judgment to select a sample that they believe based on prior information, will provide the data they need". The researcher choose 30 C-Afternoon

students in the fourth semester based on consideration of four aspects and two factors of research such as meaning, spelling, pronunciation, and grammar the factor internal and external.

C. Technique of Data Collecting

This part discusses how the researcher collected primary data from the students. Kothari (2004:95), states that "primary data are known as fresh and original data because the data are collected for the first time". These data obtain combined explain that the indirect method is a possible method to gather data on students' difficulties. To administer an effective indirect method, the researcher applies an online questionnaire as a tool for collecting data, consisting of a close-ended questionnaire. Online questionnaires facilitate students to complete the instruments online by accessing through Google form.

D. Tool of Data Collecting

In the tool of data collecting used to support data collection technique for this research, the researcher used questionnaire. Cohen et al (2007:501) stated that "numerical analysis can be performed using software". furthermore, performed the data into charts. The chart could have shown the student's difficulties in learning vocabulary mastery. Data collection tools in this study are as follows.

Questionnaire

A questionnaire is a research instrument consisting of a series of questions or other types of instructions that aim to collecti information from a respondent. According to Sugiyono (2014:230) questionnaire is a data collection technique by means of researchers providing a list of questions or written statements to be answered by respondents .In this study , researchers distributed questionnaires directly.

E. Technique of Data Analysis

Regarding the technique of data analysis that used in this research, the appropriated tool is questionnaire. Ary et al (2010:204) explained that, "a

survey or questionnaire is the main tool or instrument to collect data in a descriptive study".

The object to get the data of students' result study is online questionnaire. Online questionnaire is design through a Google form. The great advantage for using online questionnaire is of course, this method is paperless. In case of distance, the respondents still have possible access to fill out the questionnaire. This instrument is also easy to reach because the sample students of fourth semester has a device that is connect to the internet. Questions may take two general forms: they may be "open ended" question, which are subject answers in his own words, or "closed ended" questions, which are subject answers by choosing from a number of fixed alternative responses. In this research will use closed-ended questions which data will describe in the form of written questions and the respondents give the answer. A questionnaire is provides alternative answers that can be choose by the respondents as one of the right answer.

1. Score Determination

In this research, the researcher will analyze the data quantitatively with descriptive statistics analysis. The researcher will apply the Likert scaling technique. A Likert scale (a summated rating scale) assesses attitudes toward a topic by presenting a set of statements about the topic and asking respondents to indicate for each whether they strongly agree, agree, undecided, disagree, or strongly disagree (Ary et al., 2010:210). The researcher will score the responses of the sample based on the gradation from positive to negative. The researcher will give a score, of 5 (strongly agree), 4 (agree), 3 (undecided), 2 (disagree), and 1 (strongly disagree).

Table 1.1

Score of Likert Scale

Scale	Score
Strongly Agree	5
Agree	4
Undecided	3
Disagree	2
Strongly Disagree	1

Taken from Ary et al, 2010:210
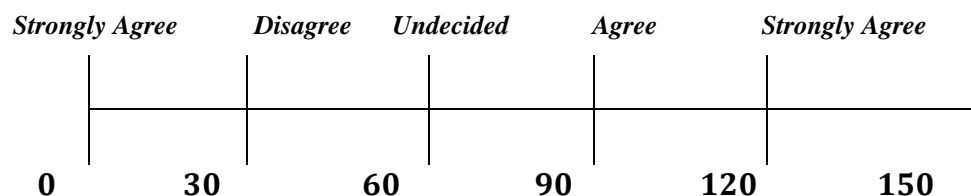
2. Determination Ideal Score

Here, an ideal score will use to find out the rating scale and total answer from this research. Then, the researcher will calculate the score for each scale to know the high score and the low score of each scale in the total score. The formula to analysis the ideal score of eachitemsis:

$$Ideal\ Score = Likert\ Score \times Number\ of\ Respondents$$

Taken from Sugiyono, 2018:137

3. Score Rating

A rating scale was needed to discover the result area of questionnaire data. The rating scale grouped the data to the five likert scales base on the respondents answers. Constantly, the rating scale of this research purposed is depicted as below:

Strongly Agree	*Disagree*	*Undecided*	*Agree*	*Strongly Agree*

0	30	60	90	120	150

Taken from Sugiyono, 2018:13

Rating scale also describe in table 1.2 below:

Table 1.2

Rating Scale

Rating	Scale
121 – 150	Strongly Agree
91 – 120	Agree
61 – 90	Undecided
31 – 60	Disagree
0 – 30	Strongly Disagree

4. Measurement the Frequency and Percentage

To calculate the scale score of every competency specification, the researcher will analyze the data into percentages. The formula was adopted from Sugiyono (2018:137):

$$P = \frac{Total\ Score}{Y} \times 100\%$$

Where:

p = percentage

Y = maximum of likert score

The researcher will serve the data into a bar chart and column chart to visualize the data. To help the researcher calculating the data and managing the table, the researcher will use descriptive analysis and operate Ms.Excel 2013.

F. Research Procedures

Firstly, researcher prepared for questionnaire that would be given to the student's through the link of Google form as the way to collect data. For the next, researcher would inform each leader C afternoon class in the fourth semester students of English study program of IKIP PGRI Pontianak and researcher would explain clearly by using Whatsapp about researchers purpose, ways to answer the questionnaire and the criteria of the sample. Further, researcher would spread the questionnaire to the students by using Google

form. The link of questionnaire was available at https://docs.google.com/forms/d/e/1FAIpQLSdN7-Xu1lWGc06-FemeVecJIr5xjoKXqjx1wNhbfcaNGuTrCQ/viewform?usp=sf_link , this process takes approximately 2 days to be completed. If all data had been taken from the fourth semester student's, researcher would analyze the data used Ms. Excel. The final step of conducting this researcher would be write the results of students difficulties in learning vocabulary mastery.