CHAPTER III
RESEARCH METHODOLOGY

A. Research Design

In order to make the research going in the right way, a research design is needed. The research design is a unified, detailed and specific plan on how to acquire, analyze, and interpret data. Research design is used to analyze and identify the subject of this study. According to (Cresswell, 2012) research designs are the specific procedures involved in the research process: data collection, data analysis, and report writing. The design of this research is descriptive quantitative method because the data is presented in numerical and descriptive.

A descriptive method is employed in the current study. According to (Loeb *et al*., 2017.) Descriptive analysis is a fundamental component of this process because of the role it plays in helping us to observe the world or a phenomenon and, subsequently, in identifying research questions and generating hypotheses based on what has been observed. In this quantitative research, the researcher investigated students' self-efficacy in English. Quantitative is used to examine the population or sample using measuring instruments or research instruments, data analysis is quantitative or statistical in nature with the aim of testing the hypotheses that have been made.

B. Research Subject

The research subjects of this research involved eleventh-grade of senior high school students. This research will be conducted at SMAN 2 Sambas in the Academic Year of 2021/2022 with a sample of thirty students in one class. This research will use Simple Random Sampling. The intent of simple random sampling is to choose individuals to be sampled who will be representative of the population (Creswell, 2012).

C. The Technique of Data Collection

The data collection process involves more than just gathering information. Techniques in data collection are divided into two, namely direct and indirect communication. The researcher will use direct and indirect communication techniques as data collection techniques.

The first is a direct method to collect data that can be evaluated (Creswell, 2012: 217). Of course, this method is appropriate to obtain information about students' self-efficacy in learning English. The researcher will use interviews as a tool to collect data. Interviews were conducted face-to-face according to the prepared questions.

The second is the indirect method is a method that allows the collection of data about perceptions, opinions, attitudes of students or others (Creswell, 2012: 218). Of course, this method is appropriate to determine the level students' self-efficacy in learning English. To manage the indirect method effectively, the researcher will apply a questionnaire in sheet form as a tool to collect data consisting of a closed-ended questionnaire.

D. Tools of Data Collection

The process of data collection involves more than simply gathering information. This part discusses how the research will collect the primary data from the participants. Quantitative approaches use more closed-ended approaches in which the researcher identifies set response categories (Cresswell, 2012).

1. Questioner

The questionnaire enables you to organize the questions and receive replies without actually having to talk to every respondent (Walliman, 2011). As a method of data collection, the questionnaire is a very flexible tool, that have the advantages of having a structured format and is easy and convenient for respondents. The type of questionnaire is close-ended. In this research, researcher used Questionnaire sheets to ask students about self-efficacy in learning English. The researcher collected data by

giving questionnaires to respondents during a predetermined time. Each individual have the same questionnaire but must have their answers to each of the questions contain in the questionnaire that give.

The questionnaire will use in this research adopted and modified from Franata (2020) which consist of 15 questionnaire items. The questionnaire includes positive and negative statements. Students will choose an answer by check (✓) the options that they prefer. The questions that will be given are 15 questions with 11 positive questions and 4 negative questions. One statement only has one answer. The researcher will calculate the percentage of students with scale "Strongly agree (5), Agree (4), Neither agree nor disagree (3), Disagree (2), Strongly disagree (1). If the statements are negative scale "Strongly agree (1), Agree (2), Neither agree nor disagree (3), Disagree (4), Strongly disagree (5).

Table 3.1 Scoring Rubric

Respondent Responses	Score Positive statement (+)	Score Negative statement (-)
Strongly disagree	1	5
Disagree	2	4
Neither agree neither disagree	3	3
Agree	4	2
Strongly agree	5	1

2. Interview

Interviews are more suitable for questions that require probing to obtain adequate information (Walliman, 2011). An interview is a conversation with a specific purpose. The conversation was carried out by two parties, namely interviewer asking questions and being interviewed which provides the answer to that question. The interview technique will be used to support the data resulting from the

questionnaire technique. The researcher will interview English teachers to support the data resulting.

E. Technique of data analysis

In this research, the researcher only uses one data to be studied, namely quantitative. Quantitative research, the investigator identifies a research problem based on trends in the field or on the need to explain why something occurs (Cresswell, 2012). Describing a trend means that the research problem can be answered best by a study in which the researcher seeks to establish the overall tendency of responses from individuals and to note how this tendency varies among people.

According to Cresswell (2013) there are five steps in the process of quantitative data collection. This process involves more than simply gathering information; it includes interrelated steps. It involves the steps of determining the participants to study, obtaining permissions needed from several individuals and organizations, considering what types of information to collect from several sources available to the quantitative research, locating and selecting instruments to use that will net useful data for the study, and finally, administering the data collection process to collect data.

The researcher calculating the average value with the formula

$$M = \frac{\sum M}{N}$$

Where:

M = mean

$\sum M$ = total score given by respondent

N = number of case

Look for percentages using formula

$$p = \frac{f}{N} \times 100\%$$

Where

p = percentages

N = number of cases

f = frequency

Table 3.2 Category for Scale

Respondent Score	Category
$X > \bar{X}_i + 1{,}0 \text{ SB}i$	Very Good
$\bar{X}_i + 1{,}0 \text{ SB}i > X \geq \bar{X}_i$	Good
$\bar{X}_i > X \geq \bar{X}_i - 1{,}0 \text{ SB}i$	Sufficient
$X < \bar{X}_i - 1{,}0 \text{ SB}i$	Low

Mardapi, 2012: 123 in (Murti & Panggayuh, 2019)

Where

$$\bar{X}i = \frac{1}{2}(Ideal\ maximum\ value + ideal\ minimum\ value)$$

$$\text{SB}i = \frac{1}{6}(Ideal\ maximum\ value - ideal\ minimum\ value)$$

F. Research procedure

1. Pre-observation

At this stage, the researcher first observes before starting the research. Through pre-observation, the researcher wants to know the condition of the school that will be used as a research location, namely SMA Negeri 2 Sambas.

2. Selection of Research Subject

At this stage the researcher selected the class that will be the subject of the research. The selected classes are XI MIPA 2

3. Data collecting process

At this stage the researcher used close-ended questionnaire and observation technique to obtain accurate data. The steps of collected data from the participants are as follows:

1) The researcher visited to the school and meets the English teacher to discussing the time to meet with the students.

2) The researcher met with students in the classroom to give questionnaire sheets to the students.

3) The students answer the questionnaire and researcher observed at the class