

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

#### **A. Research Design**

In this study, the researcher applied a cross-sectional survey design to conduct the quantitative research. A cross-sectional survey is in which the researcher gathers data at a specific point in time by a survey (Creswell, 2012). Additionally, this research applied a quantitative approach to collect, analyze, and report the data later on. Thus, the researcher applied this research to describe the perception of students on Peer Learning Strategy in the academic year of 2021/2022 at IKIP PGRI Pontianak.

This research attempted to describe the current trends of certain groups of people that as the perception of Peer-Learning Strategy in Blended Learning Community. Quantitative research seeks to detect patterns in a big group of people's attitudes, beliefs, actions, and qualities toward specific topics or concerns (Creswell, 2012). Hence, this descriptive quantitative generated statistical analysis.

#### **B. Population, Sample, and Sampling Technique**

This stage entails identifying and choosing persons or communities who are appropriate for the research. Below is a more detailed explanation.

##### **a. Population**

Population is important for this research. A population is a collection of people in a certain community who share some traits (Creswell, 2012). The population in this research is students who are enrolled at IKIP PGRI Pontianak specifically in their third year of majoring English Education program.

##### **b. Sample Size and Sampling Technique**

In a population, a smaller group of people had chosen as representatives from the population to be studied further (Ary et al., 2012). The sample used above were selected by a procedure called the

sampling technique. In this research, the researcher used total population sampling. Total population sampling is the type of the purposive sampling. According to Ary et al. (2012: 169), total population is a type of purposive sampling that select the entire population (i.e., the total population) that have a particular set of characteristics. The total population of this research fulfill specific criteria such as students who are studying in blended learning community; who are using peer learning strategy in a course / courses they are currently taking in the current academic year; and who have administered themselves in the current semester. These criteria are confirmed in the demographic information placed in the tool of data collection.

### **C. Technique and Tool of Data Collection**

This stage explained the method of collecting the data and the instrument that is the researcher used to collecting the data.

#### **1. Technique of Data Collection**

After the samples are determined, the researcher proceeds to collect the data from them. For this aim, the researcher used indirect communication technique. This technique is illustrated as a procedure where the researcher collects the data without having to attend to the respondents in person but still attends to assist respondents with the necessary instructions of providing their attitudes and opinions on the tool(s) of data collection (Creswell, 2012). There are two sets of data that are acquired by this procedure in order to explore (purpose of research). The required data consists of demographic information that includes the criteria of respondents mentioned previously as well as other relevant details (e.g., GPA or others) and the perception of the appliance of Peer Learning Strategy in Blended Learning Community by respondents in the current academic year.

To collect those data, the indirect communication technique is conducted by administering a questionnaire through an internet survey. Ary et al (2014) illustrates an internet survey as placing the tool(s) of data collection on a website constructed/utilized by the researcher or housing it on a paid survey-related platform. In this research, the procedure only involves placing the questionnaire on an online platform commonly used to build or develop a form to acquire information. In particular, the platform used in this research is Google Form. The researcher used it due to its familiarity and ease of use. The main reason for this is to increase the response rate that usually becomes a challenge when conducting this procedure. The data collection took about one to two weeks to complete. In the meantime, the researcher gave reminders to the respondents to complete the online questionnaire in every 4-5 days until the deadline. The researcher was aware that there are risks in applying this procedure in collecting the data, but the aforementioned preventive actions had been done in case a problem occurred.

## **2. Tool of Data Collection**

At the time of data collection, researchers used one technique which is indirect communication. The researcher used a questionnaire as a tool for indirect communication.

### **a. Questionnaire**

Collecting numeric data from a population utilizing instrument(s) with preset questions and responses is one of the characteristics of the quantitative approach in research (Creswell, 2012). The data were collected by completing an online questionnaire. There are two types of questions in questionnaires in collecting the data, which are open-ended and close-ended, and the researcher used the close-ended type with a Likert Scale as the option. The Likert point that is used as the options are degree of frequency to illustrate how frequent the peer learning strategy is used particularly in blended learning community.

There are two sections in the online questionnaire, consisting of opening section (instructions on completing the data and demographic information) and a section of the students' perception of the appliance of peer learning strategy in the blended learning community. The opening section collected several information, such as personal data, contact, semester, and GPA. This can be seen in the appendix. While the other one is adopted from relevant previous studies. The questionnaire in section of the students' perception of the appliance of peer learning strategy is adopted from de Leon-Carillo (2005) and the details can be seen in table 3.1.

Table 3.1 Indicators of Questionnaire of The Perception of The Appliance of Peer Learning Strategy

Peer Learning Strategy		Description	Question No.	Total
Group	Factor			
As knowledge seeker	Clarifying	Seeking better understanding of teacher's explanation	1, 2, 3, 4, 5, 6	6
	Consulting	Asking assistance to learn better	7, 8, 9	3
As knowledge giver	Leading	Highlight the self-confidence in sharing knowledge or information	10, 11, 12, 13	4
	Modeling	Helping by devising and using techniques in studying	14, 15, 16	3
	Adjusting	Adjusting the kind of support to the perceived level of the	17, 18, 19	3

		needs of peers who need it		
As knowledge collaborator	Engaging	Attracted to work together and attain to make team	20, 21, 22, 23	4
	Endorsing	Recognizing each other's needs, interests, and abilities, and an instinctive respect for each other's strengths and weaknesses	24, 25, 26	3
	Evaluating	Open to offer or get the peer judgment	27, 28, 29	3
			<b>Total</b>	29

(de Leon-Carillo, 2005)

#### b. Pilot Study

Before conducting the data, the researcher had conducted a pilot study before the main survey as a try out. The researcher employed a non-structured form of survey to discuss sets of questionnaires which means as the pilot study (Ary et al., 2012). The researcher gathered representatives of the study's population for the pilot study. The focus of this pilot study was to obtain some clarification of the questionnaire such that it may highlight some issues, concerns, or points of view about the topic of the research. The respondents of the pilot study had answered the questions and provided feedback to the researcher on any difficulties they have with the items. These respondents were not included in the main survey.

#### **D. Technique of Data Analysis**

The data for this research has been taken by using questionnaire. Processing the responses of the surveyed participants into numerical data is the first stage of data analysis. The researcher who conducted a quantitative study requires statistics to evaluate and interpret data, as well as to convey results to others (Ary et al., 2012). In this research, the researcher conducted a descriptive statistics analysis. In quantitative studies, descriptive statistics are usually reported as the mean, median, or mode (Creswell, 2012). It is the mean that is used for this research.

After closing the online questionnaire, the researcher downloaded the responses from the platform. Then, the responses of the students' perception of Peer Learning Strategy were transferred to databases (spreadsheets) to explore their perceptions of the appliance of peer learning strategies. This makes the researcher able to analyze the data quantitatively and present the results later on in which the procedures are explained below:

##### **1. The Statistical Procedures**

In order to rank the categories of the students' perception of peer learning strategies from high perception to low perception, descriptive statistics were used. The researcher utilized a software which is Microsoft Excel in analyzing and describing the data. The results from the questionnaire that the students provided were then also analyzed using descriptive statistics. In this research, the overall average score represents the frequency of the students' perception, whereas the mean scores for each of the peer learning strategy included in the questionnaire represent the most often employed peer learning strategy. The type of learners in the appliance of the peer learning strategy is then indicated by the overall average score for each indicator, whereas the mean scores for each type of learners in the appliance of the peer learning strategy indicate the learner type that occurs most frequently in peer learning.

## **2. Presenting the Results**

After the statistical data were obtained from the statistical procedure, the data presented in the form of table or with charts (e.g histogram, pie) for visualization. It shows the findings of the research that will be discussed in the following section.