

CHAPTER III

RESEARCH METHOD

A. Research Design

This research is used quantitative research with descriptive quantitative. Quantitative research is data analysis techniques an activity after data from all respondents or other data sources collected. Activities in data analysis are grouping data based on variables and types of respondents, tabulating data based on variables of all respondents, presenting data for each variable studied, conducting calculations to answer the problem formulation, and perform calculations for test for hypotension that has been proposed (Sugiono, 2012).

Quantitative description can be an invaluable tool for those interested in developing new theories tailored to the technological and social context of the present. The empirical work required to build the foundations of a research agenda is too often minimized as “theory building.” But in a sense, taking the incoherency critique seriously requires even more theory building: taking descriptive stock of a phenomenon and the context in which it occurs, noting the conditions under which it seems to happen or not, and identifying patterns. (Handel, Stephan, Zikuda, & Kopp, 2020)

B. Research Setting

This research is taken place in SMPN 23 Banjarmasin. This is located at Jl. Harmoni komplek Bumi Raya Permai I. SMPN 23 has nine classes. The data was conducted at 20 January 2021. The writer shared a questionnaire to the students at class IX. In the first day at 21 January 2021 the writer randomly chooses some students who do the questionnaire.

C. Participants

The subject of this research is students of SMPN 23 Banjarmasin class IX. The reason writer chose grade IX as the participants in this research because the online learning application system in this school is more emphasized for the ninth grade compared to the seventh and eighth grades. Students of ninth grade are considered more capable to do online learning and they have passed computer learning.

D. Population and Sample / Subject

1. Population

Population is a collection of objects or subjects that have certain criteria and characteristics that are determined by the study and then a conclusion is drawn (Sugiyono, 2015). The population in this study is class IX from SMPN 23 Banjarmasin who found 150 students.

2. Sample

Sample is part of the total population to be studied (Sugiyono, 2015). According to Arikunto if the population is more than 100, the research could take 20% or 25% from the population to become the sample of the research (Arikunto A. , 2013).

To determine the sample, the research chooses 25% sample from the population using formula as follow:

Percent value (Percent value x (fractional value) /100

$$25 \times \frac{145}{100}$$

$$25 \times 1,45 = 36,25=36$$

To choose 36 samples from 145 populations the research chose using cluster sampling. Cluster sampling is a random sample that purposes obtaining the sample from a population with all members from each of group have opportunity to become the samples. In the research, I take some students from several classes.

E. Research Instruments

1. Questionnaire

The research instrument used is the questionnaire instrument. Questionnaire is a list of questions about something. The purpose of the questionnaire instrument is obtain information relevant to the

purpose of the research and obtain information about a problem simultaneously. Questionnaires are distributed to respondents with the aim of obtaining data that will be used as information that relevant. (narbuko & Achmadi, 2009)

The questionnaire used was adopted from previous similar studies and there are some questions are adjusted to the characteristics of SMP 23 Banjarmasin. This type of questionnaire is question. This questionnaire assessment scale uses the *likert scale* (1-5). This study uses the check list method.by providing a check mark (√) on the appropriate choice of answers in the assessment sheet. The scores used are 5, 4, 3, 2, 1 for each assessment. Answer to every question. The category of likert's scale and the score could be seen in the following table:

Table 1	
Likert's scale	
<u>Description</u>	<u>Rating</u>
Strongly disagree	1
Disagree	2
Neutral/uncertain	3
Agree	4
Strongly agree	5

Table 3. 1 Likert's Scale

F. Data Collection Procedure

In this stud, there were some procedures that were carried out by the researcher, as follow :

1. Planning step

First, the researcher made planning about approach and technique to collect the data. The researcher also consulted with advisors. After consulting, the researcher decided to use observation and questionnaires for collecting the data. The researcher also created a questionnaire and print out it. The printed questionnaire will be distributed to the participants. The researcher asked several students from 5 classes to fill out the questionnaire that had been provided.

2. Implementation step

For the implementation step, the researcher collected the data by spreading the questionnaire to participants. After collecting the data, the researcher gathered the data that been obtained from questionnaires and observation. The researcher then analyzed the data and created the result of the data by using the table.

3. Reporting step

After completing analyzing data and find the result of the data, the researcher wrote report from the result into thesis form.

G. Data Analysis

Based on the data collected researcher use descriptive analysis data using Microsoft Excel. The quantitative data were analyzed from questionnaire in the study. Namely each component whose pre-service teacher scores were given scores according to the activities carried out.

Quantitative description can be an invaluable tool for those interested in developing new theories tailored to the technological and social context of the present. The technique used in this research is descriptive analysis. Descriptive analysis functions as a technique used to describe something in details. It means that the data are analyzed and described in details to student readiness and emotional perception.

Quantitative analysis techniques are used to manage and Interpret data in the form of numbers or systematic. This type of analysis uses percentage analysis using English formula. To determine the percentage of each of the statements from questionnaire, the researcher used the formula;

$$P = \frac{F}{N} \times 100\% =$$

P= Percentage

F= Frequency

N= The total number of participants

The numbers entered into the percentage formula above are data obtained from the respondent's answers to questions Filed. The results of these calculations are then compared with the criteria. According Arikunto the criteria for interpreting percentage values can be seen in Table 2 below: (Arikunto A. , 2013)

Table 2 Percentage Values	
<u>Persentase</u>	<u>Criteria</u>
0%	No one
1% - 24%	A small part
25% - 49%	Less than half
50%	A half
51% - 74%	More than half
75% - 99%	Most
100%	Entirety

Table 3. 2 Percentage Values