

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

In this chapter the researcher explained the research design, research subjects, data collection techniques and instruments, data analysis and validity.

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

Research design is a research design that is used as a guide in conducting the research process. Creswell (2014, p. 31) says that a research approach is a research plan and procedure that includes steps from any broad assumptions to detailed methods of collecting, analyzing, and interpreting data....(called research design). It means research design is the strategy chosen by researchers to fully integrate and discuss the components of research in a logical and systematic way, and to analyze what is at the center of the research. The purpose of research design is to provide a clear and structured guide to researchers in conducting their research.

This research design uses a qualitative approach.

Qualitative research is a method for exploring and understanding the meaning of individuals or communities from social and humanitarian problems. The qualitative research process involves important efforts such as questioning, presupposing, collecting specific data from participants, analyzing data through inductively becoming generals and interpreting data. The final report is a flexible structure or framework (Creswell, 2017, p. 4-5).

It means that anyone involved in this research must be able to apply an inductive research perspective, focus on individual meanings and explain the complexity of a problem. Qualitative research emphasizes the analysis process of inductive thinking processes that are related to the dynamics of the

relationship between observed phenomena and always prioritizes scientific logic.

Furthermore, qualitative research results are research results that cannot be described statistically or quantitatively (Ghony & Almanshur, 2012,p. 25). It means that qualitative research is descriptive research and tends to use analysis. Process and meaning are highlighted in qualitative research. These theories are used as guidelines so that the focus of the relevance of the research is based on facts. While the theories that support the general description of the background and material for discussion in the research results. Other experts argue qualitative research is a key instrument in which data is collected by the researcher himself not by other people (Creswell, 2017,p. 248). That is, researchers are the only instrument in gathering information and do not use other researchers' instruments.

Further, Gay & Mills (2012,p. 16) explain that qualitative research starts from the process of collecting data, analyzing data, and interpreting data in comprehensive and visual data. That is, qualitative research consists of searching for data to trace those traces and construct meaning in results. Qualitative research works on data, organizes the selected data into a single unit to manage, synthesize, look for and find patterns, including what is important, what is learned further, what should be described.

Objectives concerning the main phenomena explored in the study, research participants, and research locations. Schwandt (2007, p. 107) states that qualitative research objectives can also state the research design chosen.

This objective is written in terms of "technical" research which is sourced from the language of qualitative research. It means that the purpose of qualitative research is an effort to uncover the factual meaning of a phenomenon. Phenomenological research seeks to articulate the "essences" of meaning in experiences and facts that occur in the object of research.

The purpose of qualitative research in this study is that the researcher wants to explain intends to understand the phenomenon of what is experienced by the research subject such as their behavior and actions holistically. It will be describe in the form of words and language. Further the writer use a special natural context and by utilizing various natural method.

## **B. The Subject of the Study**

The subject of this study is class VIII B in the SMPN 6 Satu Atap Sintang in the academic year 2021/2022. The total number of students in VIII B is 15. These students are active students of class VII B since limited face-to-face learning is implemented after the online learning process.

## **C. Data Collection Technique**

Data collection techniques are techniques or ways that can be used by researcher for data collection. The technique designs an abstract word and is not realized in objects, but can only be seen using it through questionnaires, interviews, observations, tests and others. The data collection techniques in this study were observation, questionnaire and interview.

## 1. Observation

In general, observation is an observation of various aspects that occur in the object of research. Ghony & Almanshur (2012, p. 165), state that:

Observation is a data collection technique that emphasizes researchers to make direct observations to analyze phenomena or cases that occur on an object. This observation is good enough to minimize objects.

It means that the researcher goes directly to the field to observe the object's behavior. In this case the researcher made observations and notes. Researchers can also be involved as non-participants or complete participants.

Fatchan said (2015, p. 42), after considering the informants in the study, researchers observed the participants. It means that observations in this study are to find out how the object to be studied. In general observation is a scientific method that is still used as a reference in empirical science as a way that is often used to collect data.

In addition, Creswell (2013, p. 267), also argues that,

Qualitative observation is an observation in which the researcher goes directly to the field to observe the behavior and activities of the individuals allocated to the research. In this study, researchers recorded or recorded in a structured or semistructured way.

It means that observation is a complex process, consisting of various biological and psychological processes. However, the most important processes are memory and observation. That is, observation is an activity of observing, which is followed by recording sequentially. The results of the process are reported in a systematic report and in accordance with

applicable rules. Furthermore, the results of these observations are described in detail, precisely, accurately, thoroughly, objectively, and useful.

Observations in this study were carried out directly and indirectly. Direct observations are observations made on symptoms or processes that occur in actual situations and are directly observed by observers or researcher. The purpose of direct observation is to observe teachers and students directly to get an overview of process post-online learning in teaching functional text. Meanwhile, direct observations are observations made by recording events using equipment, photographic, or electronic equipment for later analysis.

## 2. Questionnaire

Questionnaire is a data collection technique by asking written questions to be answered in writing by the respondents. Singh (2006, p. 208) said that after compiling the questions items are given to a group of students to respond to each in terms of agreement or disagreement. The number of liked and disliked statements should be approximately equal to the 1-5 response scale used. It means that Likert scale is used to measure attitudes, perceptions and opinions of a person or group of people about social phenomena. The purpose of distributing the questionnaire is to find complete information about a problem, without feeling worried if the respondent gives answers that are not in accordance with the reality in filling out the list of questions.

In addition, respondents know certain information requested. In this study, the researcher used a likert scale and was closed to obtain data related to student responses to the post-online learning on the object of research. That is the answer has been provided by the researcher so that respondents just choose and put a mark (√) on the answer that is already available.

### 3. Interview

Interview is doing by the researcher in face to face, telephone or focus group interview (Creswell, 2013, p. 267). It means, interview can be conducted either directly or indirectly based on the researcher considered. Interview is a question and answer activity that can be carried out orally or in writing to obtain informations on the object. The form of information can be started in writing, audio recorder, visual and audio visual. Interview is main part of the observation. The function of the interview for the researchers is to overcomes the weakness of the observations result in data collection. Informations from informants can be examined more deeply through interview. Interviews are conversations performed by the interviewer to obtain information from interviews, speakers or informanees. In the case study interviews are usually done structured. Structured interviews are interviews by first preparing material interviews or questions.

## **D. Data Collection Instrumentation**

Data collection instruments are ways that can be used by researchers to collect data. Instruments as a tool for using data collection methods is a means that can be realized in objects, such as questionnaires, test devices, interview guidelines, observation guidelines, and scales. The instruments in this study were observation sheets, questionnaire sheet, interview guideline and documents.

### **1. Observation Sheet**

According to Kothari (2004, p. 96) his states that observation becomes a scientific tool and data collection method for researchers, and also serves for research purposes that are formulated, planned and recorded systematically and subject to checks and controls on validity or reliability. Based on the explanation, the observation sheet or guideline is the sheet that is used if the observation is structured or unstructured. Observation sheets are used if the observation is structured or unstructured. The observation sheet in this study is the teacher's teaching activity observation sheet and the learning activity observation sheet.

### **2. Questionnaire Sheet**

Questionnaire sheet is a set of questions or written statements to respondents to answer. A questionnaire sheet is given to respondents who provide structured questions to make it easier to provide information about the data needed in the research process. In this study, the closed answer format of "Totally Agree" "Agree" "Doubtful" and "Do not

agree” ” Strongly disagree” was used for a number of questions related to how the students responded toward post-online learning, this method adapted from Singh, (2007, p. 326).

### 3. Interview Guideline

An interview guideline is a guide used to collect results of interviews that are designed regularly or unstructured. According to Goddard and Melville (2001: 49) state that in interview is direct or indirect interactions between interviewer and interview. It means, interview guide is a sheet which contains a list of questions that will be submitted to the speaker both directly and indirectly. The sheet is provided if the case that occurs in the structured question. In this research the interview conducted through indirect.

### 4. Documents

After the observation guidelines and interview guidelines, the instruments that support the data must be prepared, namely documents. Documents consist of materials produced by researchers such as files, folders and others (Bogdan and Biklen, 2007, p. 133). It means that documents are notes, writings or records in the past when the research was carried out. The document is used by researchers to support the results of observations and questionnaire.

## **E. Data Analysis**

Data analysis is a systematic process of searching and arranging interview scripts, field notes, material that has been collected to improve understanding of the material itself (Emzir, 2016, p. 85). That is, data analysis is how to process data into information so that the data can be understood. This data can be converted into an explanation and can be used to describe the conclusions that occur on the object of research.

In addition, qualitative research and data analysis must take place simultaneously. It means that, qualitative data analysis primarily involves classifying objects, people and events, as well as other properties that characterize them. Typically throughout the data analysis process ethnographers index and code their data using as many categories as possible.

During the data analysis, the data were arranged categorically and chronologically, returned repeatedly, and continuously coded. Main ideas that are informed by the sequence of their emergence. The recorded documents, the results of recordings or copies of observations and interviews are transcribed word for word. Recorded notes and entries therein are reviewed continuously. Furthermore the researcher described the steps in data analysis.

### **1. Observation Results Analysis**

The processing of the results of the researcher's observations will describe in the form of narratives after being processed from statistical

data into narratives. Processing the results of this observation, researchers use the analysis technique of presentation of results (X%).

$$x\% = \frac{n}{N} \times 100\%$$

Information:

X% = Percentage achieved

n = observation result (number of visible activities)

N = Total number of activities

If the results have been obtained, they can be categorized into the assessment criteria contained in the following table:

Table 3.1 Presentation Category Benchmark

Percentage	Categories.
100% - 75%	Very good
74% - 50%	Good
49% - 25%	Good enough
24% - 0%	Not good

## 2. Interview Results Analysis

The analysis of the results of the interview was carried out descriptively based on the information obtained from the informants. The results of the interview to know the obstacles of the teacher in teaching functional text in post-online learning process. To describe advantages and weaknesses the post-online learning in teaching functional text compared to the process online learning previously.

### 3. Questionnaire Results Analysis

Processing the results of the questionnaire, namely the formulation by calculating the index percentage of student responses to the post-online learning process in teaching functional text.

$$\text{Index percentage} = \frac{\text{total score} : \text{score maximum likert} (5 \times \text{total of student}) \times \text{total of students} \times \text{score minimum likert} (1 \times \text{total of student})}{\text{total of students} \times \text{score maximum likert} (5 \times \text{total of student})}$$

Table 3.2 Questionnaire Categories

Score	Categories
0% - 19,99%	Strongly disagree
20% - 39,99%	Do not agree
40% - 59,99%	Doubtful
60% - 79,99%	Agree
80% - 100%	Totally Agree

Adapted: Singh (2006, p. 208)

After the data calculating process, the final step in data analysis is making interpretations in qualitative research or interpreting the data. Asking questions such as "What can be learned from all this?" will help researchers reveal the essence of an idea (Lincoln & Guba, 1985, p. 117). It means that interpretation can also be in the form of meaning that comes from a comparison between research results and information from literature or theory. This interpretation or meaning can also be in the form of new

questions that need to be answered next: questions that arise from data and analysis, and not from the results of the researchers' predictions.

Further, Bogdan (2007, p. 159) states that interpretation data is developing ideas about research findings and connecting these data with literature, broader concepts and considerations. That is, data interpretation is form of combining the results of the analysis with questions, criteria, or at certain standards to create a meaning, the meaning of the existence of data that has been collected to find answers to a problem in a research that is beingcorrected.

Interpretation is an explanation that contains meaning or opinion from the theoretical view of an object of deep thought and is influenced by the background of the interpreter. It can describe a meaning in communicating through good interpretation so that it is easy to understand. The term interpretation can refer to an ongoing process of interpretation or the result of that process. Interpretation can be part of a presentation or description.

## **F. Validity**

Qualitative validity is an accurate examination of the results of research by applying certain procedures. Creswell & Miller(in Creswell, 2017, p. 269), state that validity is one of the strengths of qualitative research and is based on determining whether the findings obtained are accurate from the point of view of the researcher, participant, or reader. It means that the researcher

must document the case study procedures and document as many steps in the procedure as possible.

To prove the validity of the data in this study, triangulation was used. Triangulation was first borrowed in the social sciences to convey the idea that it is necessary to establish facts where researchers need more than one source of information. When triangulation enters into qualitative research, it carries its old meaning of fact verification but takes on something else. It means that multiple data sources are better in a study than a single source because multiple sources lead to a more complete understanding of the phenomenon under study. Further, Richards & Schmidt (2002, p. 565), state that:

Triangulation in qualitative research, the process of collecting data from several different sources becomes the object of research. Triangulation can be done by collecting data from documents, observation and interview results.

That is triangulation shows different sources of data by examining the evidence that comes from those sources and based on a number of data sources, or participants' perspectives, then this process adds to the validity of the data.