

## CHAPTER III

### RESEARCH METHODS

This chapter presents the research methods, which the researcher uses for answering the formulation of problems. It covers the research design, data and data source, technique of data collection, technique of data analysis, and technique of data verification.

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

This research basically used descriptive qualitative research design, that is research that produces descriptive data in the form of human verbal information and observable behavior to obtain facts and factual information. Facts related to the teacher's problems in online learning. According to Creswell (2016), qualitative research is a type of research that explores and makes sense of many individuals or groups of people from a social problem. Qualitative research can generally be used to study people's lives, history, behavior, concepts or phenomena, society, and other issues.

The approach used in this descriptive qualitative research is a case study approach. A case study is a study that explores a case in-depth and collects information purely using different data collection procedures based on a predefined time period. This case can be an event, activity, process, or program (Creswell, 2016). In addition, according to Nawawi (2003: 1) case study is a research strategy in which the researcher carefully investigates a program, event,

activity, process, or group of individuals. A case study can be defined as a technique of studying an individual in-depth to help him to make good adjustments. Case study data can be obtained from all parties concerned, in other words, this study collected from various sources.

## **B. Data and Data Source**

In selecting the data source, the researcher used the purposive sampling technique. According to Creswell (2008: 214) in qualitative research, the object or participant to be studied is determined by the researcher, that is by selecting the right person or place that can help us understand a phenomenon. For example, the person is considered to know best about the problems of teachers in online learning so that researcher can obtain accurate information and actually meet the requirements. The rationale for using the purposive sampling technique is that not all samples have the right criteria for the phenomenon studied. Therefore, the researcher chose the purposive sampling technique to identify some considerations or criteria that must be met by the data source or informants in this research. The criteria used in this research were:

1. Attended in SMPN 2 Sumbergempol
2. A teacher who teaches English subjects
3. Participated in the online learning process
4. Know the problems faced in the online learning process

Thus, the informants in this study were: 1. The school principal as the aspects of policies in the implementation of online learning, 2. The English

teachers who experienced problems in online learning, and 3. The students who follow the online learning process.

There are two types of data used in this research including primary data and secondary data. Primary data is data collected directly from data sources or informants through interviews, observations, and documents. Primary data obtained from the results of research in the field directly from the source and the parties concerned with the problem will be discussed related to the problems of English teachers at SMPN 2 Sumbergempol in online learning.

While secondary data is data that is used to help complete primary data obtained from blogs, web, and journals that are related to online learning, critically examine the English teacher problems at SMPN 2 Sumbergempol as well as archives and documents from related agencies. To obtain secondary data, the researcher collected data through written information, pictures, and charts related to the research problem, which is English teacher problems in online learning.

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

Technique of data collection is the most strategic step in research because the main purpose of research is to obtain data. The technique of data collection used in this study included direct observation, interviews, and document analysis. The researcher interacts directly with the research subject about the problems of English teachers at SMPN 2 Sumbergempol in online learning as well as practical solutions in implementing online learning.

a. Observation

This study used the method of observation. Observation is the process of making observations by researchers on the data sources. Qualitative observation involves the researcher directly going to the field to observe English teachers' problems in online learning at the research location. As Creswell (2016: 254) stated that in this observation, the researcher recorded either in a structured or semi-structured manner, such as asking some questions that the researcher really wanted to know. In general, this observation is open-ended as the researcher asked common questions to possible participants and they are free to share their views. Observation is not limited to people, but also to other natural objects. This observation method was carried out to collect data in the form of English teachers' problematic activities at SMPN 2 Sumbergempol in online learning and practical solutions for teachers in implementing online learning.

For the convenience of observation, the researcher used an observation guide as a reference, providing clues about the object observations during research in the field. During the observation process, the researcher observed the English teachers' activity during the online learning process. Everything that the researcher hears, sees, and feels during the observation process that takes place related to the required data in this research is then summarized as field notes.

b. Interview

In qualitative interviews, the researcher may conduct face-to-face interviews with the participants, interview them by telephone, or participate in focus group interviews or interviews in several groups consisting of six to eight

participants per group (Creswell, 2016: 254). The researcher conducted a structured interview because the researcher has prepared the interview instruments in the form of systematically organized written questions. The questions asked in this interview focused on the problems faced by English teachers in online learning and the teacher's practical solutions in implementing online learning.

#### c. Document Analysis

During the research, researchers can also collect qualitative documents. This document can be a public document, for example a daily book, a diary, a letter, or an e-mail (Creswell, 2016: 255). The researcher collected qualitative documents such as books, journals, articles, blogs, and websites. This document analysis is a complement of observation and interview data collection techniques to make the obtained research data more reliable and trustworthy. required documents are related to internal documents.

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

Data analysis is the process of organizing and sorting data into basic patterns, categories, and basic descriptive units so that themes can be found and hypotheses that work on the data's suggestions can be formed. The data analysis aims to narrow down and limit the results to data that is organized and arranged systematically and neatly. Qualitative data analysis according to Miles and Hubberman (2014) includes the efforts of working with data, organizing data, breaking data down into manageable units, synthesizing it, looking for patterns, figure out what is important and what is learned, and deciding what to publish.

The technique of data analysis used by the researcher is an interactive model of Miles, Huberman, and Saldana (2014: 12-14) that analyzes data in three steps including data condensation, data display, and drawing conclusions. Data condensation refers to the process of selecting, focusing, simplifying, abstracting, and transforming data. The components of the data analysis by Miles Huberman and Saldana (2014: 12-13) are as follows:

1. Data condensation

Data condensation refers to the process of selecting, focusing, simplifying, abstracting, and transforming data that is close to all parts of written field notes, interview transcripts, documents, and experimental documents. The conclusion is that this data condensation process was obtained after the researcher conducted interviews and obtained written data in the field, later, after which the interview transcripts were arranged to get the research focus needed by the researcher.

- a. Selecting

The researcher should act selectively, that is, determine which aspects are most important, which relationships might be more meaningful, and therefore, what information can be collected and analyzed.

- b. Focusing

Focusing on data is a form of pre-analysis. At this stage, the researcher focus on the data relevant to the formulation of research questions. This stage is the next stage of the data from the selection stage. The researcher only limits the data based only to the formulation of research questions.

### c. Abstracting

The stage of making a summary of the core, process, and statements that need to be maintained to keep them there. At this stage, the data that has been collected is evaluated, especially for quality and completeness of the data.

### d. Data Simplifying and Transforming

The data in this study continued to be simplified and transformed in various ways, that is through strict selection through summaries or brief descriptions, classifying data in a broader pattern, and so on.

## 2. Data display

Data display is organizing, unifying, and conclusive information. The presentation of the data here also helps to understand the research context of the study upon further analysis. The data obtained is presented in detail and thoroughly and how is the relationship pattern studied. The data piles up and it's hard to see the detailed relationships, it's also hard to see the entire research context to draw the right conclusions. Therefore, in order to be able to see the entire research then the researcher must try to create different types of graphs or matrices.

## 3. Conclusions drawing

The researcher tries to find conclusions from the data obtained collected from the beginning to the end of the study. This is done to find patterns, themes, similar relationships, things that often arise, hypotheses, and so on. The conclusions that have been drawn since the beginning of the research are of course

still very good tentative, vague, and doubtful. However, with increasing data, the conclusion is more comprehensive. So the researcher in drawing conclusions always verified during the research. The three steps in analyzing qualitative data are interrelated with one another during research is underway.

### **E. Technique of Data Verification**

Checking the data validity is essential for qualitative research on the level of validity and reliability of the data that has been collected. According to Creswell (2009: 191) stated that “triangulate different informational data sources by examining the sources of evidence and using it to build a coherent justification for themes” means that the data source is collected by examining the sources of evidence and using a coherent justification to build theme.

Creswell (2010) explained that qualitative validity is an examination of the accuracy of research results with the application of certain procedures, while qualitative reliability indicates that the approach taken by the researcher is consistent if it is applied by other researchers. Gibbs as cited by Creswell (2010) defined several reliability procedures as follows:

- 1) Checking the transcript to ensure that no errors were made during the transcription.
- 2) Ensure that there are no ambiguous definitions or meanings floating around the codes during the coding process. This can be done by continuously comparing the data with codes or by noting codes and definitions.



- 3) For team research, discuss code with team partners in regular meetings and share analysis.
- 4) Cross-check and compare codes created by other researchers with codes created by yourself. Another aspect that must be considered in qualitative research as described above is the validity of the data. Validity in qualitative research is based on the certainty that the research findings are correct from the point of view of the researcher, the participant, or the general reader (Creswell and Miller, in Creswell, 2010).

In addition to reliability, validity is also another strength in qualitative research. Qualitative validity is an examination effort of the accuracy of research results by applying certain procedures. The following are several kinds of validity strategies that have been developed based on the most frequent or easy to use to the rareness or difficult to implement (Creswell, 2016), including:

1. Use the triangulation technique from different data sources to look at evidence that comes from these sources and use it to provide consistent evidence around themes. Themes that are built on multiple data sources add to the validity of the research.
2. Implement member checking to determine the accuracy of the research results. Membership checking can be done by reporting the final report or descriptions or themes that are specific to the subject to check if the subject believes that the report or description or theme is accurate.
3. Create a rich and dense description of research results. This description includes at least about the research setting and discusses one element of the experience—the subject's experience.

4. Clarifying any biases that the researcher might have introduced into the study. It is hoped that the researcher will be able to create open and honest narratives that the reader will perceive.
5. Presenting “different” or “negative” information or contradictory information. Researchers can do this by discussing the evidence of a theme. Many cases presented by researchers will create a separate problem on the theme.
6. Take advantage of the relatively long time at the research location. In this case, researchers are expected to be able to better understand about the phenomenon studied and can communicate in detail about the location and the people in the research result.
7. Conducting questions and answers with other researchers is known as a peer reviewer to improve the accuracy of the researcher's findings. This process requires researchers to find a peer reviewer who can judge to discuss qualitative research so that people other than the researchers themselves can perceive the research results.
8. Invite external auditors to review the entire research. The presence of an external auditor is expected to provide an assessment objective, starting from the research process to the conclusion study.

Eight strategies according to Creswell (2016) as stated above, the researcher in this study did not use all of them to validate the researcher's data. The researcher used only one of the strategies of triangulation. The reason for using the triangulation strategy is that this strategy is easily affordable for the researcher to use and in fact, it is easier to practice to validate these data.

Validation of data by triangulation in research through significant others such as co-workers of research subjects. The results of interviews with subjects were verified by different sources, which in this case were other important sources as mentioned above. Checks focused on themes that the researcher found based on the results of the interviews.