

CHAPTER III

RESEARCH METHODOLOGY

A. Methodology of Research

The research will be conducted in a qualitative research design. According to Creswell (2012), qualitative research is a method of investigating and comprehending the significance that individuals or groups ascribe to a human social problem.¹ Qualitative research is used to understand the phenomena from the participant of students' points of view. However, this research is designed qualitatively by using descriptive study. According to Nazir, the descriptive study is a study in status research, an object, a set of conditions, a system of thought, or a class of events in the present.² The descriptive study explores societal problems and the procedure that apply in societal specific situations, such as relationships, activities, views and ongoing process and the effect of phenomenon.

In this research, the researcher uses a descriptive study to know the information about students' knowledge towards implementing digital literacy skill that includes three aspects; media literacy, information literacy and ICT literacy and also to explore the

¹ John W Creswell, *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research*, 4th editio (USA: PEARSON, 2012), 16.

² Moh. Nazir, *Metode Penelitian* (Bogor: Ghalia Indonesia, 2014), 43.

challenges that students found in implementing digital literacy skill during online learning. The focus of this research is knowing students' ability in accessing, using, evaluating, and implement their digital skills, including three aspects: media literacy, information literacy, and ICT literacy in online learning. According to Creswell, there are six steps of conducting the research:³

1. Identifying a research problem
2. Reviewing the literature
3. Specifying a purpose of research
4. Collecting data
5. Analyzing and interpreting the data
6. Reporting and evaluating the data of the research

The research will be conducted by applying an online questionnaire through google form to the students and interviews using voice call features by WhatsApp to obtain the data.

B. Unit of Analysis

The subject of this study is the eleventh grades students of SMAN 5 Cilegon. There were 180 students and divided into 6 classes. Based on the Arikunto, if the subject of population is less than a hundred, the researcher can take a sample of the entire

³ John W Creswell, *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research*, 4th editio (USA: PEARSON, 2012), 7.

population, but if it is more than a hundred, the researcher should take a sample only 20-25% or more. In order to represent the population, the researcher takes a sample of 45 students from eleventh grades. This sample size can generate findings that can be used to draw conclusions about the whole populations. Then, the researcher will interview 10 students to gain more the data. However, the research was conducted in SMAN 5 Cilegon that located at Jl. Sunan Bonang, Banjar Negara, Kec. Ciwandan, Kota Cilegon. The research was conducted on the first semester of 7th-13th October 2021. The interview with students was conducted on October 15th 2021.

C. Research instrument

In this research, the researcher used a questionnaire and interview:

1. Questionnaire

Sugiyono stated that a questionnaire is an instrument that provides a series of questions or statements to the respondent by writing out the answer or selecting the answer.⁴ In this research, the questionnaire is used to collect information from students about the implementation of digital literacy aspects

⁴ Sugiyono, *Metode Penelitian Pendidikan: (Pendekatan Kuantitatif, Kualitatif Dan R & D)* (Bandung: Alfabeta, 2011), 142

during online learning. The aim of using a questionnaire to know students' knowledge about the implementation of digital literacy skills includes three aspects; media literacy, information literacy and ICT literacy during online learning in English classes. The researcher uses an online questionnaire as the instrument by google form that will be shared with the students. For the questionnaire, the researcher is used close-ended questions. A close-ended question has an alternative answer which already available to help the respondent to select the answer. There are twenty-five statements that have five alternative answers; Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), Strongly Disagree (SD).

2. Interview

Interview is used to know more deeply about how students implement digital literacy skills and the challenges students find in online learning. In this study, the researcher used a semi-structure interview to get the data from the interviewer. Semi-structured interviews were used to gain more information and explore the barriers that students find during online learning. In this study, the researcher will interview 10 students to know how they implement digital

literacy aspect and the challenges they find during online learning. According to Dörnyei, the ideal participant to be interviewed in qualitative data is between 6-10 participants.⁵The interview in qualitative data usually requires a relatively small number of respondents to yield the saturated and rich data needed to understand even subtle meanings in the phenomenon under focus.⁶

D. The technique of collecting data

In this research, the data was collected using of some methods and instruments to help the work more accessible, more effective, and efficient. The data is obtained by using questionnaires and interviews. The research was done in SMAN 5 Cilegon for the students in the first semester of eleventh grade. The researcher will conduct the data as follows:

1. Questionnaire

This study uses a questionnaire for knowing students in implementing digital literacy skills that includes three aspects; media literacy, information literacy, and ICT literacy in online learning. The researcher will share and invite students in the

⁵ Z Dörnyei, *Research Methods in Applied Linguistics: Quantitative, Qualitative, and Mixed Methodologies*, Oxford Applied Linguistics (United Kingdom: OUP Oxford, 2007), 144.

⁶ Dörnyei, 127.

WhatsApp group to fill out the questionnaire using a google forms to make it easier for students. The students will fill out the questionnaire distributed based on their experience towards implementing digital literacy skill that includes three aspects. The steps in filling out the questionnaire are:

- The researcher will make a questionnaire by using google form
- The researcher asks a teacher for helping to share the questionnaire link that has been provided
- The students fill out the questionnaire
- The researcher will analyze the result of the questionnaire

Based on the questionnaire result, the researcher will get the data as the answer to the research question. Data from the questionnaire is the primary data.

2. Interview

The interview is usually asked an identical set of questions to the respondent. The researcher will use semi-structure interview to get the data of the challenges of implementing digital literacy skills that include three aspects;

media literacy, information literacy, and ICT literacy. In this research, the researcher used *Bahasa Indonesia* to interview the respondent to avoid misunderstanding and easily understand the respondent. The interview will be conducted online by using the voice call feature from WhatsApp. However, the respondent who will be interviewed is students who have implemented digital literacy aspects during online classes. The steps of the interview were:

- The researcher made some questions as guidance for in-depth interviews with students that is about implementing digital literacy and knowing the challenges that students find in online learning.
- The interview will be collected by using voice call feature in WhatsApp
- The result of the interview will be recorded and transcript as the secondary data

E. The technique of analyzing data

Based on this research design, the data from the questionnaire will be analyzed using a percentage formula and interpreted

qualitatively with the result of the interview. The formulas for analyzing the questionnaire are as below:⁷

$$\frac{f}{n} \times 100\%$$

Noted:

f = The number of students based on the degree of agreement

n = The number of all students

According to Miles and Huberman, the process of analyzing data consisted of three processes; data reduction, data display, and conclusion. Three processes of analyzing the data are as follows:⁸

1. Data reduction

In the research process, the data that has been obtained in the fields is needed to summarize, explain, select the essential things and focus on the important point to the content of data that derives from the field. The data reduction will describe and help the researcher to carry out further data collection. However, in data reduction there are two types of data reduction; living in and living out. Living in is the data that was selected, and living out is the data that was unselected.

⁷ Sugiyono, *Metode Penelitian Pendidikan: (Pendekatan Kuantitatif, Kualitatif Dan R & D)*, 94.

⁸ Sugiyono, *Metode Penelitian Pendidikan: (Pendekatan Kuantitatif, Kualitatif Dan R & D)* (Bandung: Alfabeta, 2011), 246.

In this research, the researcher will collect the data by conducting a questionnaire and interviews to know students' knowledge towards implementing digital literacy skills in online learning. After getting the data, the data will be reduced because not relate to the research question and the objective of the study.

2. Data display

After reducing the data, the next step is displaying the data. In the qualitative research, displaying the data that can show using a flowchart, graphic, in words, narrative, and others. Displaying data help the researcher to organize and compress the assembly information that permits of conducting the conclusion. In this research, the questionnaire will show with tables and graphics. For the interview, the researcher will explain with narrative text along with the result of the questionnaire.

3. Verification and Conclusion drawing

Since the beginning of the research, the researcher makes temporary conclusion and it will change after finding the valid and consistent evidence. The conclusion is made to explain the content of data that uses good and clear

statements. After getting the data, it is analyzed continuously and verified about the validity. The researcher will make the last conclusion is more significant and precise can be gotten.

F. The data validation

According toutama, validity refers to the truth and honesty about description, explanation, interpretation and conclusion that obtained from the report of the research.⁹ Validity should be evaluated concerning to the research objectives, setting and environment. In this research, triangulation will be used to validate the data. Moelong has stated that triangulation is a technique for determining the validity of data that uses something other than the data or as a comparison to the data.¹⁰ Therefore, triangulation is used to ensure that the information obtained by the questionnaire is the same as the information obtained by the interview.

⁹ Sutama, *Metode Penelitian Pendidikan Kuantitatif, Kualitatif, PTK Dan R&D* (Kartasura: Fairuz Media, 2015), 87.

¹⁰ L J Moleong and T Surjaman, *Metodologi Penelitian Kualitatif* (Bandung: Remadja Rosdakarya, 2005), 330.