

CHAPTER III

RESEARCH METHODOLOGY

A. Research Methodology

1. Research Design

Based on research problems and purpose, the researcher has conducted qualitative research in form of a descriptive study. A descriptive study is a method that describes a situation appearing that is related to the concern of the research. Berg (2007:4) stated that qualitative research referred to the meanings, concepts, definitions, characteristics, metaphors, symbols, and descriptions of things. In line with this, Dornyei (2007: 36) stated that qualitative research is a deal for providing insight into a contextual condition which significantly shaped by social, cultural, and situational factors. Furthermore, according to Donald (2010: 29), the goal of qualitative research is to get a holistic picture and depth of understanding rather than numeric analysis of data. It can be concluded that the qualitative study is relevant to this research.

Descriptive research studies concern with describing the characteristics of a particular individual, or of a group (Kothari, 2009: 37). The main characteristic of this method is that researcher has no control over the variables, the researcher can only report what has happened or what is happening. By using a descriptive study, this research aims to describe all of the phenomena to answer the problems that have been stated in the research problem.

B. Population, Sample and Sampling

As for the importance of research quality, there were many considerations to select the population, sample, and sampling technique in this research. The researcher presents a related explanation below:

1. Population

Sugiyono (2013: 53-60) states that the population is generalization region consisting of object or subject which have a certain quantity and characteristic set by researchers to be studied and then drawn a conclusion. The population in this research were two English teachers in SMP Nurul Islam Sungai Kakap who teach tenth-grade students in the academic year 2020/2021. They were called the information by selected because they faced a problem in implementing a scientific approach in curriculum 2013 in the teaching-learning process.

2. Sample and Sampling

The suitability of the sampling strategy also supports the quality of the research. Cohen *etall.* (2007) said about to select a sample, the researcher needs to deliberate the size of the sample constrained by time, money, stress, administrative, support, the number of researchers, and also resources. The researcher adjusted the sample size based on the descriptive survey method which collected qualitative data in research. The two teachers have been targeted in the investigation.

The researcher applied a non-probability sample design, which specially used a purposive sampling strategy. the strategy was chosen to get appropriate respondents that relevant to the selected criteria to answer the research question. Then, consideration of four convenient criteria leads to the selection of the sample. The four activities will observe samples were activities will observing, questioning, experimenting, associating to give sufficient time to be information. If the subjects fit the criteria, the researcher believed that they were appropriate as the data source.

According to Sugiyono (2011: 81), “The sample is part of the number and characteristics possessed by the population”. So the sample was part of the existing population, while sampling used certain methods based on existing considerations. In this sampling technique, the researcher used a purposive sampling technique. Sugiyono (2011: 84) explains that: "Purposive sampling is a technique of determining samples with certain

considerations." From the statements above the researcher used 2 English teachers in SMP Nurul Islam Sungai Kakap who teach tenth-grade and ninth grade students in the academic year 2021/2022.

C. Technique of Data Collection

This section discusses how researchers collect primary data. This primary data is the most original data in character and has not undergone any statistical treatment. To obtain primary data, researchers must collect it directly through observation, interviews and questionnaires (Khothari, 2000:95). These data were obtained in combination through indirect and direct methods. The first is the indirect method. The University of Hawaii (Manoa, 2015:1) explains that the indirect method is a method that allows collecting data on the problem that being faced by the teacher in teaching English to the implementation of a scientific approach in curriculum 2013. Of course, this method is precisely to determine the level of implementation. To apply an effective indirect method, the researcher used an observation checklist as a tool to collect data. Observation checklists were made face-to-face with teachers and distributed papers to teachers who teach English in schools.

The second was the direct method. The use of the direct method is needed to support inadequate data from the previous method. The University of Hawaii (Manoa, 2015:1) states that direct methods come to collect student performance or products that can be evaluated. Obviously, this method is appropriate for obtaining student performance face to face directly interviews and questionnaires with the problems being faced by the teacher in teaching English to the implementation of scientific approach in curriculum 2013. This study uses interviews as a tool to collect data.

D. Tools of Data Collection

To record certain activities, the researcher is the tool of data collection of this research who record possible activities. It is in line with the statement from Sugiyono (2013:306) who stated that in qualitative research the main

instrument is the researcher himself or a member of the research team. Therefore, another thing is needed to support the researcher in conducting this research as follow:

1. Interview guideline

This study also uses interview guidelines to obtain information related to the research topic. Sugiyono (2013) states that interviews are used to obtain data if researchers want to seek detailed information from research respondents. Researchers conducted interviews with two English teachers of class VIII and IX at SMP Nurul Islam Sungai Kakap. This technique is used to obtain information about teacher problems regarding the application of the scientific approach in the 2013 curriculum. Semi-structured interviews were designed in this study to determine data about teacher beliefs or problems in their implementation. of a scientific approach. There were 10 points in the interview guideline which was fitted with the problems are being faced by the teachers in teaching English to the implementation of the scientific approach in curriculum 2013.

Table 3.1. Table of Specification Interview Guideline

No.	Aspect/ Indicator	No of items
1.	Planning (Lesson Plan)	1. what are the components in writing a lesson plan?
		2. how do you choose a learning method for planning a lesson plan
2.	Choosing Strategy	3. What are the problems faced by teachers when choosing teaching strategies in the curriculum 2013?
		4. What are the components that you know before you choose a learning strategy?
		5. What is the teacher's solution in choosing learning strategies so that students do not feel bored when the teacher explains the material?

3.	Evaluation	6. Why did you choose assessment evaluation using Keeping Track and Find Out in the 2013 curriculum?
		7. What are the aspects needed in the implementation of learning evaluations for students?
		8. What criteria should teachers consider in making learning evaluations?
4.	Conducting class discussion	9. what are the benefits of using the class discussion method in the learning process?
		10. what are your solutions if students have learning difficulties during the discussion?

2. Observation Checklist

This study was an observation checklist in the classroom. An observation checklist in the classroom is a list that contains the activity in the teaching and learning process in the scientific approach. It was divided into five stages, they are observing, questioning, experimenting, associating, and networking. There were 27 points in the checklist which was fitted with the standard implementation from the Ministry of Education and Culture and other experts in Indonesia. It used to observe the whole teaching and learning during online the process of the teacher in implementing the scientific approach.

The second was in collecting primary data from the observation checklist items. Here is the step of the procedure:

- a. attend teaching and learning process designed through an application zoom in the scientific approach of the respondents in several meetings.
- b. observed two teachers in the stage of implementation scientific approach.
- c. Distribute the observation checklist at the end of the meetings and assigned respondents to fill the observation checklist.
- d. collected the data and did the analysis on the observation checklist.

3. Questionnaire

From the response of created paper sheet, the researcher downloaded the result of responses in a new spreadsheet. The raw data from the paper sheet was edited by transforming text data into numerical data and displayed in the table. The researcher recounted the validity and reliability of data to make sure it was valid and reliable to be analyzed as primer data.

The researcher was try to get the data collection by giving a questionnaire for the teacher to know about the problems faced by the teachers in teaching English to the implementation of the scientific approach in curriculum 2013 of SMP Nurul Islam Sungai Kakap questionnaires are a number of questions the author uses to get information from respondents about knowledge, beliefs, etc. Arikunto (in Katili, 2013). This technique is used because it allows the researcher to investigate the views and opinions of participants (Corbetta, 2003 as cited in Marwan, 2016). Besides, this instrument provides the opportunity for researchers to obtain in-depth information about the phenomenon being studied (Creswell, 2005), which is quoted in Marwan. The questionnaire was used to measure the researcher will try to get the data collection by giving a questionnaire for the teacher to know about the problems faced by the teachers in teaching English to the implementation of the scientific approach in curriculum 2013 of SMP Nurul Islam Sungai Kakap questionnaires are a number of questions the author uses to get information from respondents about knowledge, beliefs, etc. Arikunto(in Katili, 2013).

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questionnaire effectively. There are 10 numbered statements in the questionnaire covering all the teachers' and student's activities in the teaching and learning process while implementing a scientific approach implementing. The questionnaire is given in English so that respondents can understand the questionnaire effectively.

E. Technique of Data Analysis

This research is in form of a descriptive study and used qualitative research data analysis. It means that the data collected are in form of words and sentences. It is based on (Kabir, 2016), qualitative data are mostly presented in a non-numerical way and usually about describing phenomena in forms of words. Furthermore, in analyzing the data, the researcher will conduct some procedures.

1. Observation Checklist

The observational checklist was focused on the teachers' problem in teaching English in the implementation of the scientific approach in curriculum 2013. It has 5 stages of the scientific approach that focuses on the checklist. it will be handed to the English teacher and researcher. the sections in the checklist that were checked will consider being problem teachers in teaching English to the implementation of scientific approach in curriculum 2013. the result helped the researcher analyze the activity in the teaching and learning process in the scientific approach.

2. Questionnaire

Questionnaires were designed through a paper sheet. The great advantage of using a questionnaire was of course this method was paperless. In case of distance, the respondents still have possible access to fill out the questionnaire. This instrument will be also easy to reach because the sample, the English teacher of SMP Nurul Islam Sungai Kakap, has a device that is connected to the internet. Kothari (2004, 100) supported this tool, he stated that the questionnaire was sent to a sample that is expected to read and understand the question and answer on their own. For a variety

of the data, the researcher applied two kinds of questionnaires based on the needed data namely a close-ended questionnaire. The close-ended questionnaire was utilized to answer research questions number one and two. In collecting data, the researcher distributed an online questionnaire.

Questionnaire data are data used to find out how things were perceived by problems the teachers in teaching English to the implementation of scientific approach in curriculum 2013. In analyzing the online questionnaire, the first researcher examined the data manually. The measurement scale used is a Likert scale, which is a scale used to measure attitudes, opinions, or groups of people about social phenomena. The form of the online questionnaire used by the researcher was the Likert Scale online questionnaire. On the Likert scale, the variable used as an item of the instrument can be in a form of online questions or statements that needs to be answered by the respondents. (Ridwan, 2002). Any answers were linked to form the following statement:

Table 3.2 Scale of the Items

Score (n)	Scale
1.	Strongly Disagree
2.	Disagree
3.	Agree
4.	Strongly Agree

Observing these benefits, the questionnaire was used in the collection of data. The statements were designed to elicit participants' agreement or disagreement. Participants responded according to a 5 point liker scale ranging from 1 to 5 (1= I strongly disagree; 2= I disagree; 3 = I agree; 4

= I strongly agree. Participants were instructed to circle the response that best corresponded to their level of agreement per each statement. For the collection of data, the Survey perceived by problems the teachers in teaching English to the implementation of scientific approach in curriculum 2013. In analyzing the questionnaire be modified and applied. For the adaption and direct user of this survey, permissions were obtained from the

researchers who designed it.

After the data were collected, the data were summarized, and analyzed with the following calculation:

$$\frac{\text{total stage of problem per questions}}{\text{total respond}} \times 100\%$$

3. Interview

The researchers tried to collect data by interviewing two English teachers at SMP Nurul Islam Sungai Kakap to find out about training teachers whether the teachers at these schools had ever conducted teacher training or not. Then, the researcher interviewed the teacher to find out the teacher's beliefs or problems regarding the application of the scientific approach in the 2013 curriculum. Semi-structured interviews are designed in this study to find out data about teacher beliefs or problems in their implementation. of a scientific approach. Knowing the teacher's beliefs is one of the most important ways to find out the level of implementation. As stated by Barriball and While (1994: 330), "semi-structured interviews are very suitable for problem exploration and respondents' opinions for further information and classification of answers". The researchers also gave interviews to two English teachers about their problems with the implementation of the 2013 curriculum and teacher performance in the teaching and learning process face to face.

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F. Research Procedure

There were some procedures to be followed during the research, in order to find out the valid data to answer the research problems. The procedures are:

1. This qualitative study involved two experienced English teachers at a Junior High School SMP Nurul Islam Sungai Kakap.
2. They were randomly chosen as participants are considered sufficient for a small-scale qualitative as a qualitative study typically does not intend to deal with issues of representativeness: rather what is more important is in the richness of the data.
3. The data was gathered through a interview guideline , questionnaire, and observation checklist with each respondent.
4. The observation checklist focused on exploring the stage of the scientific approach.