

CHAPTER III

RESEARCH METHOD

The research method is the approach chosen in solving research problems (Sudjana and Ibrahim, 2007:172). The research method can also be interpreted as a scientific way to obtain data for specific purposes and uses (Sugiyono, 2006:6). In this study, the authors used research methods consisting of research design, data and research sources, data collection techniques, data verification, and data analysis.

3.1. Research Design

In conducting research, we need research design. Research design is the techniques chosen by a researcher to get the data. According to Creswell (2009:3) research design is plans and the procedures for research to detailed methods of data collection and analysis.

In fact, there were two kinds of research approaches namely quantitative and qualitative approach. In this research, the writer used qualitative approach. Ary (2010:424) states that the qualitative inquirer deals with data that are in the form of words or pictures rather than numbers and statistics.

This study used a descriptive qualitative approach and field research design. Researchers use a descriptive qualitative approach on the grounds that this method can be used to find and understand what is hidden behind a phenomenon that is sometimes difficult to grasp satisfactorily.

Qualitative research tends to use analysis and description. While the design used is field research with existing theoretical foundations, used as a guide so that the research focus is in accordance with the facts in the field. Qualitative research makes use of existing theories as explanatory material, and ends with a theory.

3.2. Data and Data Sources

The data in this study are all information related to research. This data will later be processed into answers to the question formulation of the problem in this study.

Sources of data in this study include principals, curriculum staff, E- Learning users, both English teachers, students, and heads of technology science. This data source will produce data that is managed to answer the question formulation problems that have been listed.

3.3. Data Collection Techniques

3.3.1. Observation

The existence of the *COVID -19* requires researchers to use inappropriate observation methods. Researchers conducted participant observation by participating in E-Learning learning activities. Researchers participate in E-Learning learning, for example researchers join in learning English using zoom, google meetings, and so on. As it is known that the data collection method, observation can be interpreted as systematic observation and recording of the elements that appear in a symptom on the object of research (Widoyoko, 2012:46). Recording is made of the object at the place where the event occurred or took place (Surahmad, 1990:2). In contrast to Margono's /opinion, who said that observation is a data collection method used to collect research data through observation and recording and sensing (Margono, 2004:159). Observation, recording and sensing can be through “*Daring*”. Observations that may be made by the teacher in the E-Learning learning process through opening, learning process, and closing.

Table 3.1 Observation

No	Component	Aspects That are Observed	
1	Learning Preparation	1.	Teacher readiness in preparing E-Learning applications
		2.	Teacher readiness in preparing material to be taught
		3.	Students' readiness in learning
		4.	Readiness of the internet network that

			will be used for learning
2	Opening	1.	The way the teacher opens learning.
		2.	Students' readiness before learning, such as praying, sitting in a good place
3.	Learning process	1.	The way the teacher delivers learning material
		2.	How teachers use learning strategies in E-Learning learning
		3.	Student activeness in the E-Learning learning process
		4.	The way the teacher provides learning evaluations with the strategies specified in E-Learning learning.
		5.	Students give questions back to the Teacher
4.	Closing	1.	The way the teacher closes the E-Learning process.
		2.	The teacher provides conclusions about today's material.
		3.	The teacher and students end by praying.
		4.	The teacher delivers material

			information to be studied next week
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2.3.2. Interview

The existence of the *COVID -19* requires researchers to use unusual data collection techniques. Researchers used data collection techniques by means of virtual interviews. Researchers interviewed several people who were the data sources in this study. As it is known that interviews are data collection techniques that use guidelines in the form of questions addressed directly to the subject (Muhajir, 2003:137). Direct questions can be used face to face and can be used virtually. The interviews used in this study were in-depth interviews between researchers and informants in order to obtain more detailed information in accordance with the research objectives (Arifin, 2011:162). Interviews in this study were used to collect data which would later be synchronized with existing theories.

2.3.3. Documentation

Documents are records of events that have passed. In this research what is meant by the documentation method is looking for data about things or variables in the form of notes, transcripts, books, newspapers, magazines, inscriptions, minutes, meetings, lenger, agendas, and so on (Arikunto, 2013:275). Documentation is a method of written reports of an event or incidents whose content consists of an explanation or thought of the event and is written deliberately to store or formulate information about the event.

The author uses the documentation method to obtain data about the general description of the geographic location of SMA Negeri 1 Gondanglegi, which includes the history of the school's establishment and its development, the number of students, teachers, facilities and infrastructure in SMA Negeri 1 Gondanglegi and matters related to this research.

Data collection techniques in this study, using data triangulation techniques. Data triangulation is a combination of existing data and data sources (Fuad and Nugroho, 2014:65). The existence of data triangulation, the researcher can collect data as well as test the credibility of the data, namely checking the

credibility of the data with various data collection techniques and data sources. In this study, the study used participatory observation in-depth interviews and documentation as the data source.

2.4. Analysis Data

After being obtained from several research methods, the stages of selecting and compiling the data were carried out. So that the data has meaning, then it is processed and analyzed in order to find out what is important and what can be learned. The analysis used in this research is qualitative descriptive analysis, which describes and explains the data that has been obtained during the research.

To analyze qualitative descriptive data in this study using an inductive approach, namely a discussion that begins with an event or special situation and then draws general conclusions. This research includes observations about the phenomena that appear in learning activities at SMA Negeri 1 Gondanglegi.

2.4.1. Coding and Classifying

Coding is the process of analyzing data by giving a certain code to the data found in the data sources. In qualitative research, data coding plays an important role in the process of data analysis and determining the quality of data abstraction of research results. Codes in qualitative research are short words or phrases that symbolically summarize, highlighting the message, capturing the essence of a portion of data, this encoding can be based on language or visual data. With simpler language, codes are short words or phrases that contain the essence of a data segment.

According to Lynn (1994), coding lies at the heart of the constant comparative method in that unit of data are compared to each other in terms of their fit in the coding scheme. Coding does not descriptively paraphrase the notes; instead, it identifies the main categories as well as associated subcategories. Coding could be found in a form of lettering, numbering, symboling and others. In this study, the researcher used letters and numbers. Coding was used by researcher to make it easier for researcher to shorten the source names and interviews result.

Table 3.4 Interview Results

No	Coding	Interview result	Coding explaining
1.	UDL	Understanding of distance learning	Teacher's explanation of the understanding of distance learning
2.	IDL	Implementing distance learning during the <i>COVID -19</i> pandemic	Teacher's explanation of the implementation of distance learning during <i>COVID -19</i> pandemic
3.	ADL	Advantages of distance learning	Teacher's explanation of the advantages of implementation distance learning during <i>COVID -19</i> pandemic
4.	DDL	Disadvantages of distance learning	Teacher's explanation of the disadvantages of implementation distance learning during <i>COVID -19</i> pandemic
5.	SDL	Strategies used in distance learning	Teacher's explanation of the strategy in implementation distance
6.	EDL	Evaluation of distance learning during <i>COVID-19</i> pandemic	Teacher's Explanation of the evaluation in distance learning during <i>COVID-19</i> pandemic
7.	DL	Discovery Learning Strategy used in distance learning	Teacher's explanation of the Discovery Learning Strategy in distance learning
8.	IL	Inquiry Learning Strategy	Teacher's explanation of the Inquiry Learning Strategy in distance learning
9.	PBL	Problem Based Learning Strategy	Teacher's explanation of the Problem Based Learning Strategy in distance learning
10.	PJBL	Project Based Learning Strategy	Teacher's explanation of the Project Based Learning Strategy in

			distance learning
11.	SL	Scientific Learning Strategy	Teacher's explanation of the Scientific Learning Strategy in distance learning

Coding of data sources

No	Sources	Coding
1.	English Teacher	ET
2.	English Technology	ETt
3.	Headmaster	HM
4.	Student	S

2.5. Checking the validity of the data

The data validity test technique is a mechanism to overcome doubts about any qualitative research results. The validity test technique used is the data triangulation checking technique (Bungin, 2007:256). Triangulation of data is a re-checking of data from various sources, methods and times.

Source triangulation, which is a data credibility test that is done by checking the data that has been obtained through several sources. Technique or method triangulation is done by checking data from the same source but using different techniques. Time triangulation is done by checking through interviews, observations or other techniques in different times or situations (Sugiyono, 2006:372).

By using data validity techniques, data will be more valid and credible in the research of English Language Teachers' Strategies in using the E-Learning method during the *COVID-19* pandemic.