CHAPTER III

RESEARCH METHODOLOGY

This chapter discusses approach and research design, research presence, research location, data and source of data, research instrument, data analysis technique, research validity of findings, and research stages. This chapter explains how the research conducted to gather the relevant data to answer the research objectives and research questions. A number of steps took to maintain the validity and reliability of this research.

A. Approach and Research Design

In this research, the researcher use descriptive qualitative approach as the design of analyzing the data. Descriptive qualitative method is used when the researcher wants to describe the condition and situation specifically.¹ Qualitative research is descriptive.² Qualitative research is concerned with subjective assessment of attitudes, opinions and behaviour.³ The main focus in qualitative research is to understand, explain, explore, discover and clarify situations, feelings, perceptions, attitudes, values, beliefs and experiences of a group of people.⁴ The purpose of the study is primarily to describe a situation,

¹ Ary, Donald. Introduction to Research in Education, (USA:Wadsworth, 2010) p. 452

² Sugiyono, Metode Penelitian Kuantitatif, Kualitatif dan R&D, (Bandung : Alfabete, 2009) p. 14

³ C.R. Kothari. *Research Methodology Methods and Techniques Second Revised Edition*, (India : New Age International Publisher, 20014P.5

⁴ Ranjit Kumar, *Research Methodology a step by step guide for beginners third edition*, (New Delhi : SAGE Publication, 2011)p.104

phenomenon, problem or event.⁵ In conclusion qualitative is a systematical application of the oral and written data.

The researcher described the phenomenon at the seventh semester students of English Education Department at UIN Sunan Ampel Surabaya in academic year 2014-2015 about the cognitive engagement in collaborative writing essay by using Google Docs and benefits that got by seventh semester students in collaborative writing essay using Google Docs of English Education Department at UIN Sunan Ampel Surabaya in Academic year 2014-2015

B. Research Presence

In this research, the researcher acted as the instrument and the collector of the data at once. The rubric, interview guidelines and the documentation are used in definite function to endorse the researcher's task as instrument. Therefore, the researcher analyzed the data that have been done by seventh semester students in academic year 2014-2015. The researcher analyzed the collaborative essay of students through students email. The researcher analyzed the cognitive engagement every students through rubric critical thinking.

In the end, the researcher interviewed the students one by one about the difficulties faced by the students in collaborative writing essay using Google docs

of English Education Department at UIN Sunan Ampel Surabaya in Academic year 2014-2015

C. Setting of the Study

1. Research Subject

The research subject of this research is the seventh semester students who take CALL 2 course in academic year 2014-2015 in English Education Department at UIN Sunan Ampel Surabaya. In this research, the researcher uses purposive sample. Purposive samples are used if description rather than generalisation is the goal.⁶ This sampling method involves purposive or deliberate selection of particular units of the universe for constituting a sample which represents the universe.⁷ In CALL 2 course, there are two classes; A class and B class which the total of the students are 60 students from 2 classes. In collaborative writing essay, those students are divided into 15 groups which every group consist of 3-4 students. Every group produced one essay. Those essays are evaluated by using written communication rubric. Based on the result of written communication rubric, the researcher got the data about essay which have good, moderate and bad score. Based on purposive sampling as the sampling method that the researcher used in this research, the selection or criteria of the essay that would be

⁶ Dr. Catherine Dawson. Practical Research Method. (UK:Oxford)P. 49

⁷ C.R. Kothari. *Research Methodology Methods and Techniques*. (New Delhi: New age International Limited Publisher. 2004).P.15

observed by the researcher are 6 essays from 15 essays. Those essays are stated below:

- a. 2 essays which have good score
- b. 2 essays which have moderate score
- c. 2 essays which have bad score

2. Place

The research conducted in CALL 2 class in English Education Department as the sample of this research. The researcher used CALL 2 course as the sample of this research, because in this class the students learn about how to do collaborative writing essay by using Google Docs. Besides that, the students have done created a collaborative writing essay as one of the assignments in CALL 2 course.

D. Data and Source of Data

According to Arikunto, the source of data is the place or thing in which is the researcher can observe, ask or read about related matter of the object being studied. It can be divided into person, place and documentation.⁸ In research, data and source of the data is the key to answer the problems in the field.

⁸ Suharsimi Arikunto, *Prosedur Penelitian*, (Jakarta : PT Rineka Cipta, 1996) p. 123

1. Types of Data

There are two types of data to answer the problems in the field. They are primary and secondary data. The primary data in qualitative research are words and action, the secondary data such as documents and others. Those data explained in detail below:

a. Primary Data

Primary data is data obtained or collected by the researcher directly from the source. The primary data of this research is data about the cognitive engagement of seventh semester students when did collaborative writing essay through Google Docs. This primary data were obtained by collecting students' rubric of cognitive engagement when they do collaborative writing. In addition, to find the benefits of collaborative writing, the researcher obtained the data by doing interview for the seventh semester students in academic year 2014-2015.

b. Secondary Data

The secondary data was the forms of supporting data obtained from some sources. In this research, the secondary data were documentations; screenshot of students collaborative writing essay in their email, screenshot the students chatting when they discuss or share the opinion and the screenshot of the students activity in editing and sharing the ideas together when construct the collaborative writing essay.

2. Source of Data

The primary source of the data is the documentation of the students' collaborative writing essay. In this research, the researcher took the documentations of students essay in CALL 2 course through Google Docs. It is 10 essays based on purposive sampling. The essay observed by the researcher based on the rubric of cognitive engagement that related to cognitive engagement. Besides that, the students who took CALL 2 course also as primary source of this research. They were interviewed by the researcher based on the questions that would be asked by the researcher about the benefits of collaborative writing essay

The secondary source of this research is the seventh semester students in academic year 2014-2015. It is in order to add some general information about the cognitive engagement of the students, benefits that got by the students and how they do collaborative writing by using Google Docs.

E. Data Collection Technique

Collection of data is very essential in any educational research to provide a solid foundation for it. It is something like the raw material that is used in the

production of data.⁹ Quality of data determines the quality of research. In this research, the researcher used some of data collection technique as follow:

1. Documentation

Documentation is every written forms data or film which will be provided if there is request from investigator.¹⁰ Therefore, the researcher had to ask those sources from the informant. In this research, the researcher used documentation to analyze the collaborative writing essay from the students.

Documentation is used to gather and record information, especially to establish or provide evidence of facts about the cognitive engagement of collaborative writing essay that have been done by the seventh semester students of English Education Department at UIN Sunan Ampel Surabaya in academic year 2014-2015.

In this research, the documentation is used in collecting students' essay. Students' essay acted as documents which represent the important information about the research. After the researcher gather the students' essay, the researcher evaluate the essay by using written communication rubric to categorize which essay have good, moderate and bad essay. After the researcher chose the essay, the researcher would analyze by cognitive engagement rubric.

⁹ Yoges Kumar Singh. *Fundamental of Research Methodology and Statistics,* (New Delhi : New Age International Publishers, 2006).p. 212

¹⁰ Lexy J, Moleong, *Metodologi Penelitian Kualitatif*, (Bandung : PT Remaja Rosdakarya, 1990) p. 161

2. Interview

Interview is a dialogue who is done by the interviewer to get information from informant.¹¹ In this research, the researcher uses interview as the one of the instrument to find the data. Interview is used to ask the students about the benefits that got by the seventh semester students when doing collaborative writing through Google Docs at UIN Sunan Ampel Surabaya in academic year 2014-2015. For efficiency of the time, the writers interview the students orally face to face to get the information about students' benefit in collaborative writing essay using Google Docs.

F. Research Instrument

In qualitative research, the researcher is the key instrument. The researcher must comprehend the research method and the insight of the problems. By having the proper instruments, the researcher will result the valid data on the research. To collect data that needed for this study, there are two kinds of instruments that writer used, namely rubric and interview guidelines. There are two rubrics; writing communication rubric and cognitive engagement rubric.

1. Written communication rubric

The researcher uses writing communication rubric as a guide to analyze the essay of seventh semester students when they do collaborative

¹¹ Suharsimi Arikunto, *Prosedur Penelitian Suatu Pendekatan Praktik, Ed Revisi VI*, (Jakarta : PT Rineka Cipta, 2006) p. 155

writing essay by using Google Docs. This instrument was used by the researcher to analyze and categorized which essay had good, moderate and bad score. The researcher used the written communication rubric, because written communication rubric is the development and expression of ideas in writing. Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies, and mixing texts, data, and images.¹² So that way, the researcher use this rubric to measure the essay of the students because the essay is developed by different students who have different style in writing. Based on the rubric, the researcher would categorize the essay: 2 essays which have good score, 2 essays which have moderate or common score and 2 essays which have bad score.

The written communication is attached in appendix 2. For the result of rubric the researcher also used the written communication rubric to measure the essay: The measuring as follow:¹³

 ¹² AACU (Association of American Colleges and Universities). accessed on 8 August 2016.
 ¹³ Ibid.,

Table3.1			
Grading criteria to evaluate students'	essay		

Grade	Criteria
4	Capstone (Good)
3	Milestone (Moderate)
2	Milestone (Moderate)
1	Benchmark (Bad)

2. Cognitive Engagement Rubric

The researcher uses cognitive engagement rubric as a guide to assess the cognitive engagement of the seventh semester students when they do collaborative writing essay by using Google Docs. This rubric is adapting from Wenyi Zhou, et al in their journal Google Docs in an Out-of Class Collaborative Writing Activity."¹⁴ Besides that, the researcher also use " San Diego University Cabrillo Tidepool Study Collaboration Rubric" as the resource of this research.¹⁵ This instrument was used by the researcher to know how is the cognitive engagement of seventh semester students when they do collaborative writing essay by using Google Docs. The cognitive engagement

¹⁴ Wenyi,Z.,Elizabeth, S.,Denise,P. International Journal of Teaching and Learning in Higher

Education: Google Docs in an Out-of-Class Collaborative Writing Activity . 24 (3),2012. 359-375

¹⁵ Retrieved from http://edweb.sdsu.edu/triton/tidepoolunit/Rubrics/collrubric.html

rubric is attached in appendix 3. For the result of the rubric, the researcher use Leuven Scale to measure the engagement. The Leuven scale as follow:¹⁶

No	Level	Criteria
1.	5	Extremely High Engagement
2.	4	High Engagement
3.	3	Moderate
4.	2	Low Engagement
5.	1	Extremely Low Engagement

Table 3.2Criteria in categorizing students level of engagement

3. Interview guidelines

The researcher used interview guidelines as an instrument after assessing the essay of students through critical thinking rubric. The interview guideline was written as a guidance to obtain as much as information about the benefits that got by students in collaborative writing activity using Google docs. The interview guideline is attached in appendix 4.

In the interview guidelines, every questions measure the benefits of collaborative writing. The question number 2 measure students' responsibility

¹⁶ Professor Ferre Lavers, Leuven University, Belgium HMIE Good Practice Conference: *Dynamic Learning in the Early Years*, 2008

toward the task. Question number 3 measured students' enthusiasm in collaborative writing. Question 4 measured about promoting the sharing of new information and allowing the sharing expertise. The question number 5 measured about the benefits of collaborative writing in allowing the students to discuss together through online collaboration tool. The question number 6 measured benefits of collaborative writing in helping narrow down information. Question 7 measured collaborative writing in negotiating successfully by using Google Docs, WA and BBM. Question 8 measured the other benefits that students got from collaborative writing.

G. Data Analysis Technique

After data is gathered from the result of collecting data, and then the researcher had to read and analyzed the data. Data analysis is the process of elaborating data formally to find out the theme and hypothesis. It purpose to organize the data as follow controlling, organizing, grouping, giving the code and categorizing, therefore the process of data analysis include of the researcher attitude toward respondent.¹⁷ For qualitative data, the researcher might analyze as the research progresses, continually refining and reorganizing in light of the emerging results.¹⁸

¹⁷ Lexy J, Moleong, *Metodologi Penelitian Kualitatif*, (Bandung : PT Remaja Rosdakarya, 1990) p.
248

¹⁸ Dr. Catherine Dawson, *Practical Research Methods A User Friendly Guide to Mastering Research*, (UK : Oxford, 2002) p. 111

Those data gathered and classified then analyzed by qualitative description approach and finally, found the conclusion as in the end of the research process.

There are processes of data analysis. They are:¹⁹

a. Data reduction

Data reduction is process of simplification and transformation data from the written form data through some stages, as follow: making summary, coding, writing theme and making memo in this research. In collecting essay stage, after collecting the data, the researcher selected the most important information about the students' essay. It can be called the choosing process. In this stage, after the researcher gets the essay of the students, the researcher chooses the essay based on written communication rubric. So, the researcher had 6 essays. After that the researcher gives code for every essay. Code A and B for good essay, C and D for moderate essay and E and F for bad essay. The researcher also gives the code of the students in a group, such as: A1, A2, A3, A4 for student who in group A, B1, B2, B3, B4 for student in group B and so on.

Besides that, in collecting collaborative writing benefit, the researcher interviewed the students based on essay that the researcher would observe. For example: there are 6 essays that would be observed by the researcher, so the researcher would interview the students from the 6 essays.

¹⁹ Lexy J, Moleong, *Metodologi Penelitian Kualitatif*, (Bandung : PT Remaja Rosdakarya, 1990) p. 246-253

b. Data Display

The orderly information gives impossibility in order to make conclusion and take action. In this step, the researcher will present the data with table of level cognitive engagement. Besides that the researcher also presented the table of the students' interview result about the benefits of collaborative writing. The function of this way is for connecting the information and knowing what goes on in that research. In addition, the researcher will be easier to describe and make the conclusion of the research

c. Conclusion drawing (verification)

The meanings that was tested the validity, strength and exactly in the really as a data validity. The conclusion of a research thesis reaffirms the thesis statement, discusses the issue and reaches a final judgment. There are several ways to make conclusion, they are: implicitly restate the thesis, emphasize the importance of your subject by placing it in a larger context, offer suggestions for the future based on what you have argued, end of relevant and powerful quote or anecdote that serves to sum up the paper.²⁰

In this stage, the researcher makes conclusion about the data that was gathered to draw the conclusion based on the findings and discussion. The

²⁰ Matthew Lye. *How to Write an Effective Conclusion A writing Centre Handout.* Laurier Writing Center, www.wlu.ca /writing, accessed on 10 August 2016.

conclusion will cover the cognitive engagement of the students and the benefits of collaborative writing.

H. Checking Validity of Findings

In this research, the researcher checked the validity of findings by using triangulation technique. Triangulation is the most common way used to increase the validity of the data in qualitative research. Triangulation is a technique to check the validity of the data which utilized something besides the data. It used to check or compare the validity of data.²¹

Triangulation compares the observed data with the results of interview and results of documentation. Thus it will be evidence when compared to similar data which obtained from other different source.²²

In this research, the researcher compares the documentation data of the essay and interview data of the benefits of collaborative writing.

I. Research Stages

In qualitative approach, there are some stages done by the researcher. There are three research stages; they are previous knowledge and intensive analysis.²³

²¹ Ibid, p.178

²² Ibid, p. 179

^{23 23} Lexy J, Moleong, *Metodologi Penelitian Kualitatif*, (Bandung : PT Remaja Rosdakarya, 1990) p. 84

The researcher also writes the research report as the last stages.²⁴ In this research, the researcher uses some stages, they are:

1. Previous knowledge

In the previous knowledge, the researcher formulated research title and research questions, examined related literature, choose the research location based on the suitability of research question, determine research subjects and choose collecting data instruments.

2. Research Design

In the research design stage, the researcher did some activities, they were wrote research proposal, decided research instruments, constructed research instruments and prepared research activity.

3. Research activity

In this study the researcher did some activities dealing with the description of research activity in the field. The description itself is divided into three parts, they are:

a. Recognizing research background and self preparation

in this part the researcher choose the main focus of the research that were supported by the fact of the data such as the percentage of online

²⁴ Ibid, p.84

technology in the university, cognitive engagement on students environment and the other. Besides that, the researcher adjusted the paradigm with the related theory, explored the research instruments, observed the research place, and asked permission to the research object

b. Doing the research

doing the research include collecting the data about cognitive engagement in collaborative writing essay by using Google Docs on seventh semester student and also the challenges that faced by the students. The data was collected by cognitive engagement rubric to assess the cognitive engagement of the students when did collaborative writing essay by using Google docs and interview guidelines to know the challenges faced by students in collaborative writing. And also documented the information such as the screen shoot of students collaborative writing essay.

c. Intensive Analysis

In the intensive analysis stage, the researcher discovered and analyzed the data.

- First, the researcher collected the data by assessing collaborative writing essay through written communication rubric.
- \blacktriangleright Second, the researcher chose 6 essays.

- Third, the researcher analyze students engagement through 6 essays by using cognitive engagement rubric
- Fourth, the researcher categorized the students who have high engagement, moderate, and low engagement in doing collaborative writing
- Six, through the interview data, the researcher collected data about the benefits of collaborative writing.
- Seventh, the researcher analyzed the result of interview data about the benefits of collaborative writing through Google Docs
- 4. Writing the research report

In the study, the researcher considered some aspects related to the writing of research report, they are design of the report, basic content of the report, parts of the complement and written system of the reports.