CHAPTER III

RESEARCH METHODOLOGY

This chapter discusses the methodology used in this study. It provides information and explanation about the design of the study, site and participants, data collection procedures, and data analysis that explores how the data are analyzed to get the findings of the study.

3.1 Research Design

This study was addressed to investigate students' perception and the obstacles faced by them in the use of collaboration in their writing class. Thus, the study is a qualitative study or natural experiments. As opposed to quantitative research, qualitative tends to give description in the form of words rather than number (Sugiyono, 2009). In this study, the writer observed how the teacher applied collaboration in the classroom and how the students behave toward the method, it was aimed at getting an example of a case in the use of collaboration in a population, they did not set up artificial experiments and goes naturally as people often behave differently in different circumstances (Woods, 2006). As proposed by Bodgan and Biklen in Sugiyono (2009: 9) there are five characteristics of qualitative research. First, qualitative research has the natural setting as the direct source of data and researcher is the key instrument. Second, qualitative research is descriptive. The data collected is in the form of words or pictures rather than number. Three, qualitative research are concerned with process rather than simply with outcomes or products.

Fourth, qualitative research tends to analyze their data inductively. Fifth, "Meaning" is of essential to the qualitative approach.

Since the study explored in qualitative study, the findings were clarified based on the writers' interpretation and tend to be reported in the form of words or pictures rather than number toward all the data collected (Bodgan and Biklen in Sugiyono, 2009) from the sample using observation, questionnaire and interview as the instruments which used in this research.

3.2 Site and participants

The samples were taken based on purposive sampling. Maxwell in Alwasilah (2009) writes four purposes of purposive sampling. First, because its distinctiveness or representativeness of background, individuals, or activities. Second, because heterogeneity in the population. Third, to investigate critical cases toward (confront) the existing theories. Fourth, to find out comparisons for enlighten the reasons for the difference between the background, events, and individual.

As supported by Sugiyono (2009) who suggests that qualitative method research uses purposive sampling method. The populations of this research were students of SMAN 3 Cimahi. Sugiyono (2009) states that the sample is the representative part of the population, so 40 students of XI IPA 1 of SMAN 3 Cimahi were chosen as the sample, it's because they were not disturbed by many additional classes like in the third grade that will face final exam. Then, they seem to have more experience in

writing rather than the first grade, furthermore the writer knows the English teacher who uses this method and willing to be participant on this research.

3.3 Data Collection Procedures

To gain trustworthiness in gaining the findings of the study, the study used a triangulation method to collect the data. Triangulation involves more than one instrument for gaining data toward the same sample to provide evidence for consistency and certainty (Mathinson in Sugiyono, 2009). Thus, the following strategies were used to gain the data:

3.3.1 Direct Observation

In this activity the writer joined the class of XI IPA 1 of SMAN 3 Cimahi for seeing students' activity and observed their activity during the implementation of collaboration method. Trochim (2006: 1) explains direct observation is different from participant observation:

Direct observation is distinguished from participant observation in a number of ways. First, a direct observer doesn't typically try to become a participant in the context. However, the direct observer does strive to be as unobtrusive as possible so as not to bias the observations. Second, direct observation suggests a more detached perspective. The researcher is watching rather than taking part

According to Alwasilah (2009: 211) "observasi penelitian adalah pengamatan sistematis dan terencana yang diniati untuk perolehan data yang dikontrol validitas dan reliabilitasnya". In other words observation is systematic and planned study that intentional to gain the data controlled by validity and reliability. The observation was

conducted during method implementation, started from October, 6th until November, 2nd and the teaching learning process was recorded to be analyzed. The tools needed in observation were notebook to write the symptoms happened to the element of study, video and audio tapes to record the activities as research material. Constable (1993: 55) adds:

One of the primary tools of ethnographic study is the use of field notes. Observers may simply begin with a blank notebook and write down everything that goes on. Others may use audio and/or video tapes. Some observers begin with a list of categories of behavior to be noted. This works best when the research question is already defined; however, categories should be flexible and modifiable throughout the study.

Then, according to Alwasilah (2009), to investigate the use of collaboration method in a class, the writer is recommended to observe the following data. First, observe directly how a teacher teaches in the class. Second, observe directly how the students taught in the class. Third, interview the students about the subject. Fourth, interview the teacher about the subject (syllabus, assignment, teaching technique, evaluation, etc). Fifth, interview another teacher that might know about the subject. Sixth, study the syllabus, assignments, students' answer, the textbook used, research report or evaluation about the subject.

3.3.2 Questionnaires

To avoid measurement bias in collecting data and get the credibility and validity of the study, the writer applied the methodological triangulation that combine more than one instrument in gaining the data: observation, questionnaire, and interview. The questionnaire as the second instrument was used to get more information about the perception and obstacles faced by students in the use of collaboration (Siniscalo and Auriat, 2005; Alwasilah, 2009), in this study the questionnaire was administered in the end of method implementation. As written by Siniscalco and Auriat (2005: 145) that "the main way of collecting this information is by asking people question – either through oral interviews (face to face or telephone), or by self-administered questionnaires, or by using some combination of these two methods".

The questionnaire used in this research was close-ended questionnaire, with 24 statements inside. "Close-ended (or multiple choice) questionnaire asks the respondents to choose, among a possible answers, the response that most closely represent his/her viewpoint. The respondent is usually asked to tick or circle the chosen answer" (Siniscaclo and Auriat, 2005: 126). The main advantages of closed questionnaire are:

- The respondent is restricted to a finite (and therefore more manageable) set of responses,
- They are easy and quick to answer,
- They have response categories that are easy to code, and
- They permit the inclusion of more variables in a research study because the format enables the respondent to answer more questions in the same time required to answer fewer open-ended questions.

The statements in the questionnaire were divided into two kinds of categories. First, students' perception toward the use of collaboration method for statements number 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19. Second, the obstacles faced by students in the use of collaboration for statements number 3, 20,

21, 22, 23, and 24. Finally, the statements were divided into positive and negative statement to get the score of each student.

Table 3.1 Categories of questionnaire given

Item Number	Students' perception toward the use of collaboration	The obstacles faced by students in the use of collaboration	Kind of statement
1	V		Positive
2			Positive
3		V	Negative
4	$\sqrt{}$		Positive
5	V		Positive
6	V		Positive
7	V		Positive
8	V		Positive
9	V		Positive
10	1		Positive
11	V		Positive
12	1		Positive
13	V		Positive
14	V		Positive
15	V		Positive
16	V		Positive
17	$\sqrt{}$		Positive
18	V		Positive
19	V		Positive
20		V	Negative
21		V	Negative
22	BILL		Negative
23			Negative
24	0	V	Negative

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In this questionnaire, participants choose the answer from predetermined answers. Then, the questionnaire was analyzed quantitatively use Likert scale (Harris, 2010). Dumas in Bucci (2003) suggests that Likert scale is the most commonly used question format for assessing participants' opinions of usability. Likert scale uses scala 1-5. The score 1 for Strongly Agree (SA), 2 for Agree (A), 3 for Uncertain (U), 4 for Disagree (D), and 5 for Strongly Disagree (SD). But to avoid mental perception, the option Uncertain (U) here was omitted from predetermined answer. So that the scale now ranges between 1-4.

Table 3.2
Range Score for the Statement

Kind of statement	Answers	Score	Kind of statement	Answers	Score
Z	Strongly Agree (SA)	4		Strongly Agree (SA)	1
Positive	Agree (A)	3	Negative	Agree (A)	2
(+)	Disagree (D)	2	(-)	Disagree (D)	3
\ 0	Strongly Disagree (SD)	1		Strongly Disagree (SD)	4

The questionnaire was given after finishing collaboration method in their writing class on November, 2^{nd} at 09.30 a.m -09.45 a.m. The statements in this questionnaire were written in Bahasa to avoid misunderstanding from the respondents. Then, to get the trusted data, the respondents did not need to write their name on it.

3.3.3 Interview

The last, participants got an in-depth interview to get more detail data about the obstacles faced by students in the use of collaboration in their writing class.

McNamara in Valenzuela and Shrivastava (1999: 2) points out:

Interviews are particularly useful for getting the story behind a participant's experiences. The interviewer can pursue in-depth information around the topic. Interviews may be useful as follow-up to certain respondents to questionnaires, e.g., to further investigate their responses.

In line with that Alwasilah (2009) also adds that qualitative study uses three instruments for collecting data: a writer as main instrument, interview and observation. Interview in this study was used to get in-depth information about students' perception and the obstacles faced by students that may not answered clearly by the respondent in the questionnaire. Kvale (1996: 1) notes that "Interviews allow people to convey to others a situation from their own perspective and in their own words".

The kind of interview used here is informal or unstructured interview, "where no predetermined questions are asked, in order to remain as open and adaptable as possible to the interviewee's nature and priorities; during the interview the interviewer "goes with the flow" (Valenzuela and Shrivastava, 1999: 4)

Burgess (1984: 314) also states that:

There may be just a single question that the interviewer asks and the interviewee is then allowed to respond freely, with the interviewer simply responding to points that seem worthy of being followed up. Unstructured interviewing tends to be very similar in character to a conversation.

There were 5 students interviewed in this study, the writer only interviewed small numbers of interviewee to get more trusted data and for saving time of study. As supported by Boyce and Neale (2006: 3) "In-depth interviewing is a qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, program, or situation." The interview was held on November, 3rd in their class at 09.45 a.m. until 10.10 a.m.

3.4 Data analysis

After getting the data needed from the observation, questionnaire, and interview. The data were analyzed to answer the research questions. Since the writer decided to use qualitative research method the findings would be analyzed based on the explanation and elaboration from the result of the data gained.

The data were formulated to answer the questions. (1) What are students' perceptions toward the use of collaboration in their writing class? (2) What are the obstacles faced by students in the use of collaboration in their writing class?

3.4.1 Observation

After conducting the observation, the writer interpreted the gained data. It would be described into understandable explanation to answer the research questions using the own words. As supported by Constable (1993: 61) that:

The researcher's work culminates in synthesizing and interpreting the data into an understandable and enlightening piece of writing. In analyzing descriptive data, the researcher reviews what was witnessed and recorded, and synthesizes it with the observations and words of the participants themselves.

It is explained here that the point of the study is how the writer writes and explains the data to be a good illustration based on the data from observation, questionnaire, and interview as a main instruments of the study.

3.4.2 Questionnaire

After collecting the data from questionnaire, the results were put on the table and divided into group for evaluating the responses. Before tabulating and percentaging the data gained, it was divided based on maximal and minimal score used formula below:

Maximal score = $n \times 4$ Minimal score = $n \times 1$

n = Number of students

4 = The highest score

1 =The lowest score

Because the numbers of students were 40 students, so the maximal score was 160 and minimum score was 40. Then the total score were categorized using formula below:

Table 3.3
The Formula for Categorizing the Statement

Kind of statement	Range	Categories	Kind of statement	Range	Categories
	139 – 160	SA		139 – 160	SD
Positive (+)	99 – 140	A	Negative (-)	99 – 140	D
	59 – 100	D	riegative ()	59 – 100	A
	40 – 60	SD		40 – 60	SA

The data that have been classified were tabulated and percentage to know the frequency of each answer given by the respondents. Then, the formula below is used to interpret and percentage each category of question (Harris, 2010):

$$P = \frac{\text{fo x } 100\%}{\text{n}}$$

P = percentage

fo = frequency observed

n =the number of sample

3.4.3 Interview

Kvale (1996: 189-190) emphasizes Six steps of analyzing the data:

- 1. Subjects describe their lived world during the interview
- 2. Subjects themselves discover new relationships during the interview, see new meanings in what they see and do.
- 3. The interviewer, during the interview, condenses and interprets the meaning of what the interviewee describes and 'sends' the meaning back, ideally until there is only one possible interpretation left or the multiple understandings of a theme by the subject are known.
- 4. The transcribed interview is interpreted by the interviewer, either alone or with other researchers. The material is first structured. Then follows clarification by for example eliminating digressions and repetitions and distinguishes between the essential and the non-essential. The analysis proper involves developing the meanings of the interviews, bringing the subjects' own understanding into the light as well as providing new perspectives from the researcher on the phenomena.
- 5. A re-interview. The subjects get the opportunity to comment on the interviewer's interpretations as well as elaborate on their own original statements.
- 6. A possible sixth step would be to include action. Subjects begin to act from new insights they have gained during the interview.

3.5 Concluding Remark

This chapter illuminates the methodology of the study. Started with explain design of the study, the respondents and the sample, how the writer collects the data and the technique in analyzing the data. Hereafter, the study presents the findings and the discussions of the study.

