

CHAPTER III

METHODOLOGY

This chapter comprises the methodology applied in the research covering overview of methodology, participants, data collecting methods, data analysis methods, and establishment of trustworthiness.

3.1. Overview of Methodology

Writing is complex and complicated that draws on thinking, language, and memory (Kellogg, 2006). The three notions are cognitive functions that exist in mind. It was suggested that human mind was “black box” that could not be studied by scientific methods. However, this proposition is then rejected by qualitative researchers. It then makes this study a qualitative research.

Further, it is also argued that thinking process happening within the composing made it a phenomenon to be worth investigated explanatorily. This character can be provided by qualitative research. The character of qualitative research covers four main requirements, namely particularistic, descriptive, heuristic, and inductive (Alwasilah, 2008, p. 104).

3.2. Participants

Qualitative study is not aimed at generalization; it intends to a specificity of a context and tries to explore it in-depth. Consequently, the study should provide times, setting, and individuals that could provide the information needed

(Maxwell, 1996, p. 70). It means that the participants should be chosen purposively.

Mc Milan (2001, p. 401) states that purposeful sampling is done to increase the usefulness of information obtained from small samples. Purposeful sampling requires that information about variations among sub-units should be obtained before the sample is chosen. Among various kinds of sub-units, it is then assumed that debaters tend to have an arsenal of cognitive strategies since they are used to involve in arguing. Further there is a tight correlation between debate and argumentative writing since both of them contain an element what so called argument. However, in order to have an in-depth exploration, the debaters involved in the study were only those who belong to English Debate Community of English Students' Association. Furthermore, the participants of the study were selected purposively in the preliminary observation owing to their knowledge on arguing and writing argumentative text, as well as their positive attitude on writing.

3.3. Data Collecting Methods

As stated above, in gaining data, there was first a preliminary study which was aimed at selecting participants purposively and deciding what theme to be taken in writing session. It took questionnaire as the instrument. Further, the data for the study were also collected through think aloud protocol, interviewing, and collecting some documents that were needed for the study. It is a generally accepted notion that each of method and instruments for collecting data has its

own advantages and disadvantages. Therefore, the study used more than one method, namely think aloud protocol, interviewing and related documents, to cover the disadvantages each method has.

3.3.1. Preliminary Study

The preliminary study serves as a preparation to step on the study. It was conducted to have the intended participants by gaining the information of the debaters' view on writing and basic knowledge on argumentative writing. Furthermore, it was also aimed at establishing rapport, and at introducing the participants with the general information of the purpose of the study. However, the explanation on the study did not include any detail information of what the study looking for in order to gain the natural behaviour of participants. Regarding this, Fraenkel and Wallen (1990) contend that the natural behaviour is important to have a representative data. Besides collecting data on the intended participants, the study was aimed to gain the appropriate theme as well.

To gain all of the above intended information, the study took two questionnaires (see appendix 1). The first questionnaire was an open ended questionnaire and was divided into three sections comprising writing experience (1-11), knowledge in argumentative writing (12-17), and experience in learning English (18-21). From the questionnaire, it was found that all of the respondents have a positive view on writing and are familiar with argumentative text. All of them said that they like writing though they just do it for writing assignment and they do it both in Indonesia or English. RK, for example, even though she is not

getting used to writing and do it only for assignment, she was satisfied with the score she got in writing course. Alike, though HN and HF felt unsatisfied with the score they got and stated that they rarely write, at least they have a diary. However, from five respondents, six of them (WL, HF, RM, NF, SY and EN) could be categorized into an active writer in a sense that they often write, have almost always got good results for writing and language subject, as well as ever joined some writing competitions. Accordingly, it made them suit to be the sample for the study. However, besides the match between the characteristic the study intended to and the participant, the study should deem the availability of the participants as well. By considering the hedging and access to the participants, the study then took three students, SY, EN, and RM as the participants.

However, the second one was a rank order questionnaire where the respondents should arrange 12 points on the questionnaire in rank order from 1 to 12 within two categories of likability and easiness. The two categorizations were chosen in light of the notion that writing may be affected by affect and cognition. The 12 points within the questionnaire, however, represent themes that in turn to be used in verbalization. Furthermore, the themes used in the survey were chosen since the themes relate to education, moral, and culture that the respondents may be familiar with. It is suggested by previous research (e.g., Manchon, Murphy, & Roca de Larios, 2005) that topic familiarity could enhance participants' involvement. The themes are as follows:

1. Should university students take English classes? Why?
2. Success in education is influenced more by the student's home life and training as a child than by the quality and effectiveness of the educational program. Do you agree or disagree?

3. Some people think that good students are those who are excellent in their academic work. Others think that good students are those who are well rounded in intellectual, moral, and physical development. What is your opinion?
4. When people move to another country, some of them decided to follow the customs of the new country. Others prefer to keep their own customs. Which one do you prefer? Support your answer with specific details?
5. Do you agree or disagree with the following statement? With the help of technology, people nowadays can gain more information and learn it more quickly. Use specific reasons and details!
6. Should the primary purpose of a college education be job preparation?
7. Should schools attempt to teach spiritual and moral values?
8. Should college admission be based solely on academic achievement?
9. Should college students work part time?
10. Should self-expression and self-development take priority over family and social responsibilities?
11. Is Facebook beneficial?
12. Is PPL or PLA beneficial?

However, as it was a rank order questionnaire, therefore each rank represents the scale of rate it has. The theme placed in the first rank is 1 in value and the theme placed in the twelfth rank is 12 in value. Accordingly, the least accumulative score the theme has the more likeable and the easier it is. From the preliminary study it was found that the most likeable theme was the fourth theme (When people move to another country, some of them decided to follow the customs of the new country. Others prefer to keep their own customs. Which one do you prefer? Support your answer with specific details?), and the easiest theme was the first theme (Should university students take English classes? Why?). The rank order of the questionnaire administered on the preliminary study is as follows:

Rank	Response	Total Score	Percentage of Total (%)
1	Theme 1	61	5.21%
2	Theme 3	72	6.15 %
3	Theme 2	83	7.09 %
4	Theme 5	87	7.44 %
5	Theme 4	93	7.95 %
6	Theme 6	97	8.29 %
7	Theme 10	97	8.29 %
8	Theme 7	101	8.63 %
9	Theme 11	103	8.80 %
10	Theme 9	110	9.40 %
11	Theme 8	125	10.68 %
12	Theme 12	140	11.97 %
		1170 (n=15)	100 %

Table 3.1 (Rank Order of Likeable Theme)

Rank	Response	Total Score	Percentage of Total (%)
1	Theme 11	32	2.73 %
2	Theme 1	34	2.91 %
3	Theme 10	81	6.92 %
4	Theme 3	97	8.29 %
5	Theme 4	105	8.97 %
6	Theme 7	106	9.06 %
7	Theme 5	107	9.15 %
8	Theme 2	110	9.40 %
9	Theme 6	121	10.34 %
10	Theme 10	125	10.68 %
11	Theme 8	126	10.77 %
12	Theme 12	130	11.11 %
		1170 (n=15)	100 %

Table 3.2 (Rank Order of Easy Theme)

Since the rank order of the two criteria was different whereas the themes used were same, it should therefore take a personal consideration on deciding what theme to be taken both in elicitation and the real verbalization. However, as theme 11 is the easiest theme, but on the third quarter of likable theme, the theme was therefore taken to be the theme to be used in gaining the protocol for elicitation. Further, theme 1 and 3 were taken to be the themes for real verbalization since the themes were on the first quarter for both the category. As

to gain a further data, theme 4 and 7 which were on the second quarter for both categories were also taken as the theme for verbalization. The comparison of the two categories is as follows:

Theme	Likeability		Easiness	
	Total Score	Rank Order	Total Score	Rank order
A	61	2	34	2
B	83	4	110	8
C	72	3	97	4
D	93	5	105	5
E	30	1	107	7
F	97	6	121	9
G	101	8	106	6
H	125	11	126	11
I	110	10	81	3
J	97	7	125	10
K	103	9	32	1
L	140	12	130	12

Table 3.3

(Comparison of the categories of two categories of likeability and easiness)

3.3.2. Think Aloud Protocol

The main data gained for the study was reached through think aloud protocol or verbalization. The method was chosen since it is believed that it would afford a more accurate picture of the participants' on-line processing. It is argued as a useful method to reveal what actually happen within the writer's mind while she writes (Smagorinsky, 1989 in Yuki, 1998). Further, it is also proposed that concurrent think-aloud is the only way available to develop some understanding of learners' mental processing (Chamot, 2005, in Hu & Chen, 2007).

However, in order to prevent the interference of the method and to reduce the threats to validity associated with the methodology, there was a training

session for the protocol so called elicitation of the verbalization. The elicitation is conducted before the real practice of think aloud protocol.

3.3.2.1 Training Session / Elicitation of the Verbalization

A short training session was held before the task was given to the participants. Within the session, the participants were asked to write a minimum 100 – word argumentative essay within a time limit of one hour, while verbalizing their thought.

They were instructed to verbalize anything that was in their minds including false starts, repertoire, or rereading of the text or even thoughts not related to what they were writing. The participants were also advised not to introspect into what they were doing.

The participants were also allowed to think aloud in any language they felt comfortable with. Regarding this, Cohen (1994, in Hu & Chen, 2007) pointed out, language choice in think-aloud might call for participants' recoding of information, which then could cause information loss or alter the original thought processes. The problems could then be explained as a result of such constraints as memory capacity and poor command of the language used for reporting.

The task, however, were administered in a place that participant feel comfortable to do the writing. The theme used within this session was taken from the result of preliminary study, namely the theme 11, 'Is Facebook beneficial?'. The theme was chosen since the preliminary showed it was the easiest theme yet quite unlikeable. Further, to keep the participants out from such a refrainment

from forming excessive expectations and interpretations about what was required of them and the type of information they should report, the elicitation of the verbalization was then supported by cautiously selecting the wording of the instructions so that (de Larios et al., 2008). The wording addressed was adopted from their study. It was as follows:

I'd like you to write a composition on a topic that we are going to give you now. While you write your composition, I would like you to say aloud anything and everything that goes through your mind. You have to do everything that you would normally do when writing a composition, the only difference being that today you are going to do it talking aloud. You may use any language that you normally use when writing. You will have a maximum of 1 hour to complete the task.

3.3.2.2 Actual Practice Session

After the training session, the three chosen participants were asked to carry out the writing task while similarly thinking aloud. The argumentative task was chosen in the hope that it would lead participants to take on to a more problem-solving behavior. By the expected problem-solving behavior that would emerge within the participants' cognitive activity toward the accomplishment of the task, the more useful and informative protocols would be obtained. Furthermore, as the above explanation, the theme used was obtained from preliminary study, namely "Should university students take English classes? Why?".

The participants, however, did the task at home since "writing under pressure is a very unnatural situation and perhaps cannot lead to work that is truly representative of anyone's best capabilities" (Kroll, 1991, p. 141). In line with Kroll, Sanders and Littlefield (1975, in Kroll, 1991) states that "Unfortunately, the rigidly controlled essay test situation surely represents the ultimate in an artificial

writing situation; as such, it is exactly the kind of situation shunned in many modern composition courses”. This is also the reason aspiring teacher to conduct such a portfolio system. Finally, after the participants complete the task, they were asked to collect the think – aloud protocols, along with all drafts and final products.

However, since there was a problem with the protocol from the second participant, the study took the other two themes from the second, middle layer as the themes to be used in think aloud protocol. The themes were ‘Should schools attempt to teach spiritual and moral values?’ and ‘When people move to another country, some of them decided to follow the customs of the new country. Others prefer to keep their own customs. Which one do you prefer? Support your answer with specific details’

3.3.3. Interviewing

Since the study was intended to have an in-depth data, therefore semi-structured interviews were conducted with all of the participants in order to have a different source of strategies. Consequently, verbal data gain from communication is a valuable means of collecting data since it is the most natural, basic and human communication mode (Alwasilah, 2008, p. 191). Further, in an attempt to have a good communication, he also states that it should be planned to gain information or data correlated with the aim of the study. Accordingly, the interview should be planned in terms of time of interview, the duration of the interview, the interviewee, preliminary action and type of the question.

However, considering the flexibility of mind, the interview applied in this study was semi-structured interview that was conducted after think aloud protocol. The semi-structured interview focused on participants' opinions and attitudes toward writing, writing experiences, and writing process that took place particularly when they compose for the study, resulting in better understanding of their writing process. The interview questions used in this study are based on Mu's (2005) study. Altogether, there were 6 main interview questions. All of the questions were utilized to gain data on the participants' attention during writing as well as the process, strategy and clarification of the protocol. The questions 1-3 were adopted from Mu's post writing session interview questions. On the other hand, question 4 was the clarification on the protocol.

Although specific questions were prepared beforehand, however, follow-up questions were also incorporated depending on the participants' responses in the interview.

3.4. Data Analysis Method

According to Bogdan and Biklen (1992):

“data analysis is the process of systematically searching and arranging the interview, transcripts, field notes, and other materials that you accumulate to increase your own understanding of them and to enable you to present what you have discovered to others. Analysis involves working with data, organizing them, breaking them into manageable units, synthesizing them, searching for patterns discovering what is important and what is learned, and deciding what you will tell others.”
(p.153)

In keeping with qualitative research methods, analytic induction was used to analyze the transcribed interview data, the result of preliminary study,

participants' paper and drafts, and their verbalization. Analytic induction gives a more chance for a deeper identification of phenomena (Alwasilah, 2008).

The analysis and interpretation of data were carried out in three parts. The first part dealt with the analysis and interpretations of the participants' think-aloud protocols and draft as well as finished written texts, while the second part dealt with the analysis of the analysis of interviews.

Each of the part consisted of coding and categorization. Coding and recoding are required for categorization. It is hard to do categorization without preliminary coding. Every coding was done as soon as the data had been gathered. The faster coding was conducted, the easier categorization to be conducted (Alwasilah, 2008, p. 229). Coding, however, is "efficient data-labelling and data-retrieval device. They empower and speed up analysis" (Miles and Huberman, 1994, in Alwasilah, 2008, p. 230)

On the other hand, categorization was done in convergent and divergent way. First, the data gathered were classified based on the similarity on its characteristic. The classified data were then classified based on the differences. After the categorization had all been completed, the data were then contrasted and compared in order to find the relation between the process and the factors. The last analysis was conducted to compare and contrast process and factors of the participants.

3.4.1 The Analysis of Think Aloud Protocol

The verbatim transcription may be used to increase the reliability of subsequent data coding (Hu & Chen, 2007). The resulting protocols, therefore, were transcribed verbatim. First, the protocols were reread and color coded based on the strategies emerged. The colors used were brown representing planning, peach representing monitoring, green representing humming, purple representing self-questioning, dark brown representing rereading, and blue representing using of first language (L1). As has been described within the first chapter, the classification of strategies used here was that of Wenden (1991).

Afterwards, the protocol was also coded by using number. The numbers used represented the type of problem. 1 represented intention, 2 represented procedure, 3 represented gist, 4 represented organization, and 5 represented language use. The classification of problem used in this study was that one proposed by Cumming (1989) and used on the study from Boshier (1998).

However, in this study, time spent on each behavior or act was neither coded nor analyzed because none of the participants measured time.

3.4.2 The Analysis of Interview

The interviews that contained responses from the participants were first analyzed through transcription by carefully reading, underlining the important information based on the classification of problem used in the analysis of think aloud protocol. Finally, the data were sorted in line with the classification of strategies previously examined through the participants' protocol.

3.5. Establishment of Trustworthiness

The validity and reliability in qualitative research are comprised by the term of establishing trustworthiness. Internal validity or credibility reflects the truth value of a study and the external validity or fittingness reflects the applicability of a study. Further, the degree of validity is determined by the level of how the study can face the validity threats as bias and reactivity. However, the reliability or auditability refers to the consistency of a study. Both of validity and reliability can be obtain by employing various techniques of data collection (Alwasilah, 2008, p. 175, 187). In this study triangulation was used in order to establish trustworthiness.

3.5.1 Triangulation

Triangulation refers to two concepts, namely plural and stability dimensions. Combination of various sources, methods, and techniques will enhance credibility. In this study, think – aloud protocol, interview, and questionnaire were used to ensure the credibility. Think aloud protocol was done to record process happen within the participants' mind during composing. However, interview and questionnaire were done to find opinion, perception, intuition and their memories about their experience of writing in order to answer the second research question.

This study employed three methods to collect data, namely questionnaire, a think-aloud method, and a semi – structured interview. This triangulation of the methods not only allowed for the exploration of the phenomenon of interest in this

study effectively during the short period of time, but also enhanced credibility of the study.

