CHAPTER III

RESEARCH METHODOLOGY

This chapter discussed the method of this research. Further, this chapter consisted of data collection technique, reliability and validity of data, and data analysis.

3.1. Method of Research

This study was conducted in natural setting. The researcher only observed teaching and learning process in one classroom. Moreover, there was no treatment given during the observation. Then, the result of the observation would be reported. In consequence, this study used descriptive method. This was inline with Moleong's (2007: 5) argument that descriptive method was to interpret or describe phenomena. In further, this study used qualitative method as analytical framework. Denzin and Lincoln (cited from Moleong, 2007) stated that qualitative research employs natural setting to describe phenomena involving various methods. So, this research aimed is to describe the implementation of multiple intelligences.

Specifically, this study was conducted to find out teacher's knowledge about multiple intelligences, to find out the activities during learning and teaching process, to describe the implementation of English teaching to young learners using multiple intelligences theory, and to find out the barriers faced by the teachers.

3.2. Research Site

This study was conducted at *TK Pondok Anak Pintar*, Kota Baru Parahyangan, Cimahi. The research took place in this school since this school had implemented multiple intelligences since last semester and used English as the first language between the teacher and the students. It meant they learned English everyday as they spoke Indonesian outside school. In particular, kindergarten class was chosen to be observed as there are more interaction between the teacher and the students comparing to playgroup and preschool class. There was more the use of spoken language in the classroom.

3.3 Respondents

The respondents of this observation were one female teacher and kindergarten students whom she taught. The teacher was chosen as she has experienced for seven years in teaching young learners. Specifically, she used multiple intelligences to teach her students and used English as the source language. However, she often switched English to Indonesian as most of the students did not understand English well. Moreover, those students were chosen to be the respondents since they used or learned English everyday. The observation was conducted during the teaching and learning process.

3.4. Techniques of Data Collection

There are some steps taken to collect the data. The first step taken was conducting observation. During the observation, the questionnaire was administered to the teacher to identify teacher's knowledge on multiple intelligences. Then, the interviewed with the teacher was conducted. This was needed to complete data collection. In specific, the interview was conducted at the end of the observation. However, the researcher also collected students' worksheet, lesson plan and other related documents at the end of the observation. The explanation about data collection was elaborated further as follows.

3.4.1. Observation

To investigate the implementation and activities of multiple intelligences in the classroom and to find out the difficulties faced by the teachers in implementing MI, the observation was conducted. Specifically, nonparticipant observation was chosen as the observer did not participate in the activity being observed. During the observation, a necessary note was made. The observation was recorded to review and to be replayed for analysis.

3.4.2. Questionnaire

Questionnaire was administered to teacher to obtain additional information related to teacher knowledge about multiple intelligences. The questionnaire used closed questionnaire type and Likert-scale. The respondent marked SS (*Sangat Setuju*) if she strongly agrees, ST (*Setuju*) if she agrees, RG (*Ragu-Ragu*) if she hesitates, TS (T*idak Setuju*) if she does not agree, and STS (*Sangat Tidak Setuju*) if she does not truly agree.

The questionnaire was constructed based on multiple intelligences theory. Specifically, it consisted twenty-six statements and divided into three parts. The eight first questions were about main characteristics of multiple intelligences. For the second part, there were nine questions in numbers. They were about theories of the multiple intelligences. The last part of the questionnaire consisted nine questions. The questions were constructed around the activities or teaching strategies that could be implemented in multiple intelligences classroom. The questionnaire used closed questionnaire and consisted of some questions related to teacher's knowledge about multiple intelligences.

To check the validity of the questionnaire, the researcher asked feedback from the supervisors. This was inline with Alwasilah (2002: 176) stated that it was good to ask feedback to promote higher validity.

3.4.3. Interview

To obtain additional information related to research questions, interview was applied to the teacher. The interview was audio taped and transcribed.

The interview was semi structured in which the combination of structured and unstructured interview. According to Moleong (2007: 190), structured interview was an interview in which the questions had been determined. In contrast, unstructured interview was an interview in which the questions had not been determined yet for the questions was flowing like a daily conversation. So, the writer employed those kinds of interview to gain in-depth information.

The outline of questions for interview was constructed around teacher's barrier in implementing MI and the difficulties in implementing it.

3.4.4. Documents

Lesson plan, students' work job, and other related documents were collected to enrich the data during and after the observation. However, lesson plan not only functioned to enrich the data but also to be an example for English teachers who wanted to implement multiple intelligences in teaching English to their young students. On the other hand, students' worksheets served as a proof of students' achievement on the day of the observation. However, students' worksheets were only in form of copy not the original one. This happened because the original must be kept in students' folder. Then, all of the worksheets would be given to parents and children inform of portfolio at the end of second semester.

3.5. Reliability and Validity of Data Collection

Reliability and validity were employed in this research to check the credibility of the data. Fraenkel and Wallen (1990: 379) suggested that validity referred to the appropriateness, meaningfulness, and usefulness of the conclusion based on the data collected, meanwhile reliability referred to the consistency of the conclusion.

To examine the validity and reliability in this research, some strategies would be employed. They were feedback, triangulation, member check, and rich data. The explanation would be discussed as following.

3.5.1. Feedback

The advantageous of feedback was to identify threat of validity, biases and assumptions of research; and also flaws in logical thinking of the research.

Alwasilah (2002: 176) stated that it was better to ask feedback from many people. This was done to promote higher validity and the interpretation of data. Therefore, the writer asked feedback from friends and lecturer during the research.

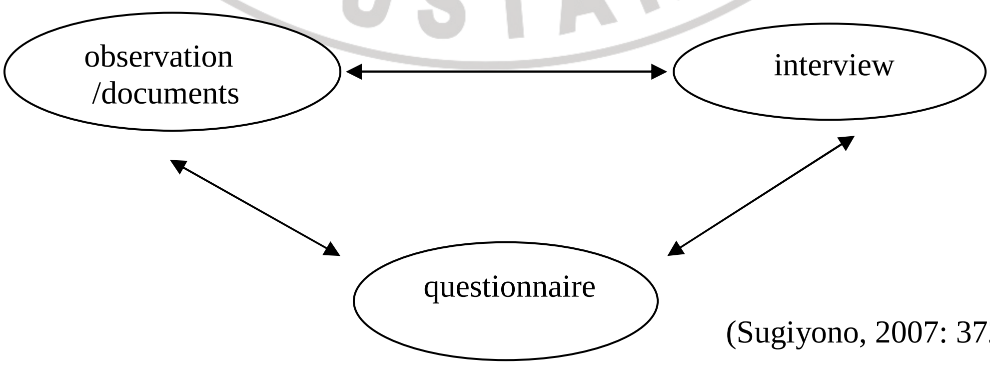
Feedback from supervisors and friends was conducted before and after the observation. Feedback from supervisors, specifically, was conducted to promote the validity of the questionnaire. Then, feedback from supervisors and friends was conducted again after the observation to promote higher interpretation of the data.

3.5.2. Triangulation

Triangulation referred to data collection from many sources with some methods. Further, William Wiersma as cited in Sugiyono (2007: 372) argued that triangulation was qualitative cross-validation. Triangulation was gained from multiple data sources or multiple data collection procedures. This kind of strategy was benefit to decrease the differences of data. Using triangulation, the data could be re-checked by comparing it with another data.

Figure 3.1

Triangulation in technique of data collection



(Sugiyono, 2007: 372)

Based on the figure above, the multiple data of this research were taken from observation and the documents (students' worksheet, lesson plan, etc.) during the observation, interview, and questionnaire. The researcher conducted three of them to obtain rich data. Then, they would be selected for the need of analysis.

3.5.3. Member Check

Member check was almost similar with feedback; the difference was the source of the data. The source of feedback was the respondent itself. The objective of member check was to check data or information gained whether it was already suitable with the respondent itself or no. So, misunderstanding of information could be minimized.

Therefore, ongoing dialogue with the respondent was conducted, specifically the teacher. Member check was also conducted after the observation. This was done for two reasons. The first reason was the same as aforementioned, namely to check data with the teacher as the respondent. The second reason was to show the transcript to the observation as the teacher wanted to. So, the teacher read the analysis or findings of the research. Then, the researcher asked her opinion whether there was something to be added or deleted.

3.5.4. "Rich" Data

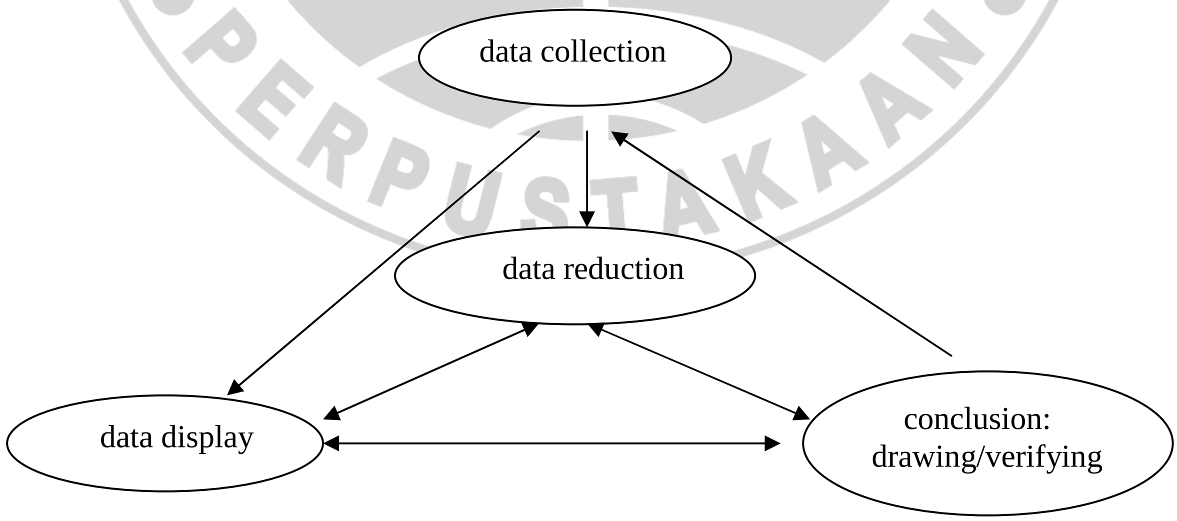
Maxwell (cf Alwasilah, 2002) stated that the usefulness of "rich" data was to test the developed theory, not just to provide written proof of conclusion. Rich data also could be function to reveal what was going on during research. Thus, transcript of observation would be presented in appendix. In addition, researcher administered questionnaire and interview to the teacher to enrich "rich" data. The result of interview would be transcribed. Then, it could be seen in appendix together with the questionnaire.

3.6. Data Analysis

In qualitative study, data analysis was done during observation and data collecting (Sugiyono, 2007). It meant that data analysis was ongoing activity throughout the investigative process. The writer used Miles and Huberman model in analyzing data. Miles and Huberman (1984) as cited in Sugiyono (2007) suggested that data analysis in qualitative research was done interactively and ongoing until getting the surfeited data. According to Miles and Huberman, there were three steps in analyzing the data as shown by the following figure.

Figure 3.2

The components of data analysis



(Sugiyono, 2007: 338)

3.6.1. Data Reduction

There would be so many data collected during the research. Therefore, the data needed to be written well and in detail. This would help the researcher in reviewing it, and then selecting the data needed to answer statements of problem. For that reason, data reduction meant that there would be some data used and disused.

After collecting all the data, the researcher gathered all of the data. Therefore, the result from interview and the record of the observation were transcribed. Then, all of them would be selected and coded based on the statements of problem. This was done to help the researcher to be focused on the important data. If the data were not suitable, it would not be analyzed. After doing so, further data collection will be conducted if it is needed to find additional data to complete the information of the study.

3.6.2. Data Display

To display the data, the writer used narrative text or sentences. This was in accordance with Miles and Huberman's (cf Sugiyono, 2007) statement that the most frequent form of data display of qualitative research in the past had been narrative text. They also stated that display data helped us to understand what was happening and to do further analysis or caution based on that understanding. So, the researcher started to process the data in this step. The researcher started writing down the findings to answer the research problem.

3.6.3. Conclusion Drawing/Verification

After displaying the data, conclusion was taken. This was the last step in analyzing the data. The beginning conclusion would be credible if it was supported by sufficient data. So, the finding after processing the data would be processed more here. The finding would be compared with one data to another data. After that, the conclusion of the finding would be discussed with friends and supervisors. This was done so to produce the valid and reliable findings.