

CHAPTER III

METHODOLOGY

A. Variable of the Research

The researcher used the dependent variable and independent variable. The "dependent variable" represents the output or effect, or is tested to see if it is the effect. The "independent variables" represent the inputs or causes, or are tested to see if they are the cause¹. In this case, the Multiple Intelligence Profiles of textbooks used by the first graders was considered as the independent variable. While the Multiple Intelligence Profiles of first graders at Intensive Classes was considered as the dependent variable. The result of this study described whether the independent variable in accordance with the dependent variable.

B. Research Design

This study constituted Document or Content Analysis which was included in qualitative approach since this research focused on analyzing and interpreting recorded material to learn about human behavior. Content analysis usually begins with a question that the researcher believes can best be answered by studying documents². The recorded materials analyzed can be written or visual materials such as textbooks, newspapers, web pages, speeches, television programs, advertisements, musical

¹ Dependent and Independent Variables (<http://en.wikipedia.org/wiki>, accessed on May 15, 2013)

² Donald Ary – Lusy Cheser Jacobs, op. cit., 29-30.

compositions, etc. The main purpose of document/content analysis is to identify or to discover specified characteristics of the material. In this case, the researcher analyzed the textbooks used by first graders at SMA Wachid Hasyim 2 Taman Sidoarjo through the application of Multiple Intelligence Theory proposed by Howard Gardner.

C. Research Subject

The research was held at SMA Wachid Hasyim 2 Taman Sidoarjo. There are three grades; Class X, Class XI (Science, Social and Language Classes), and Class XII (Science, Social and Language Classes). At this institution, the classes are divided into three categories: Intensive, Aliyah and Regular. The students of Class X from the three classes (Intensive, Aliyah, and Regular) hereinafter referred to as First Graders. In this research, the data was gathered from the first graders at Intensive Classes i.e. X-1. The researcher gathered the data from the mentioned classes by giving a questionnaire which possibly takes an hour of lesson time as the schedule of English lesson in each class. The researcher was expected to get the various data from all Intensive Classes of first graders so that the data would definitely describe them in terms of their Language-Learning Intelligences or Multiple Intelligence Profiles.

It was very important to determine the school for the participation of this research. The researcher chose the school which had these criteria: 1) the researcher chose a senior high school especially a private school rather than vocational high school. 2) The school should have an intensive program which enables the researcher

to gather the data from the students who have good capabilities on English Lesson. 3) The school has at least two textbooks used by students to accommodate them in English Language Learning i.e. Students' Workbook (Lembar Kerja Siswa) and Supplementary Book (Buku Penunjang). In this case, the researcher decided SMA Wachid Hasyim 2 Taman Sidoarjo as the subject of the research.

At this institution, there are many professional English Teachers who have good capabilities on English Language Teaching and Learning. The teachers enabled the researcher to share the students' ability in English Learning and the difficulties in the teaching process. It was also possible for the researcher to ask the teacher to explain each statement in the questionnaire used for gathering the data of Students' Multiple Intelligence Profiles and to help the researcher to analyze the activities in the textbooks based on seven kinds of Multiple Intelligence.

One of the main focuses of this research was the foreign-language textbooks used at SMA Wachid Hasyim 2 Taman Sidoarjo and how they respond to Multiple Intelligence Profiles of first graders at Intensive Classes. Thus, the researcher analyzed the contents of the foreign-language textbooks based on the seven kinds of intelligence proposed by Howard Gardner. Each activity in the textbooks would be analyzed carefully by the researcher guided by checklist for activities evaluation adapted from some sources. One activity might be able to cater for more than one type of intelligence.

D. Data Collection Techniques and Instrument

1. Data Collection Technique

The first step of this research was to determine the Multiple Intelligence Profile of First Graders at Intensive Classes. In this case, the researcher needed to permit and make an appointment with the English Teachers for planning the time schedule to enter the Intensive Classes for conducting the research. It was possible for the teachers to give their hands in order to conduct the research smoothly. When it was possible to begin, the researcher would explain his intention of conducting the research and then immediately give them a questionnaire. It took approximately 2 hours of English lesson for accomplishing the questionnaire. Finally, the researcher immediately analyzed the questionnaire done by First Graders at Intensive Classes to determine their Multiple Intelligence Profiles.

Since the subject of this research was the First Graders at Intensive Classes, it enabled the researcher to select the textbooks used by them. The textbooks were chosen in order to provide information about the application of MI by analyzing the activities which cater for certain types of intelligence. By undertaking this pace, the researcher would be able to determine the intelligence profiles of the textbooks used by First Graders at Intensive Classes. Briefly, the researcher would identify which types of intelligences were included, which intelligences were

predominant and which ones were less common or not included in the following textbooks:

- 1) *Students' Workbook* (Lembar Kerja Siswa) ***BAHASA INGGRIS KREATIF*** (Kreasi Belajar Siswa Aktif) written by Nuning Widyaningsih, S. S. and published by Viva Pakarindo, Klaten, Jawa Tengah. It has 80 pages in 5 units. The researcher evaluated the tasks/activities and excluded “summary/grammar review”, “test/evaluation in each unit, and “final test” by using checklist for activities evaluation. This checklist guided the researcher to determine if each activity caters for one or several kinds of intelligences.
- 2) *Supplementary Book* (Buku Penunjang) entitled ***ENGLISH ZONE*** for Senior High School Students Year X and published by Penerbit Erlangga, Jakarta in 2010. It was written by Eka Mulya Astuti and contains 182 pages in 6 units, each of which contains two or three lessons. Each lesson has the following features:
 1. Warm Up (introduction, opening activities)
 2. Hear This Out (listening activities)
 3. Between The Lines (reading activities, equipped with fun and thought-provoking reading texts)
 4. Speak Up (speaking activities)
 5. Easy Essay (step-by-step writing)

6. Chat Time (pair work, group discussions)
7. Grammar Focus (grammar, theory and practice)
8. Cultural Note (Cultural information)
9. Collocation Note (English words and phrases)
10. You Know What (essential information and related to the currently-discussed topics)

Meanwhile, not all of the features above contain tasks/activities which would be evaluated by the researcher. The last 3 features were excluded since they just contain information and grammar review.

2. Instrument

To collect the data of students' Multiple Intelligence Profiles, the researcher used a questionnaire adapted from www.businessballs.com by V Chislett MSc and A Chapman which enabled the researcher to describe individual intelligence of students. The questionnaire published in 2005-2006 was used by the researcher to determine students MI profiles since the items in the questionnaire were arranged based on Howard Gardner's MI model. (See *Appendix A*)

The researcher used also an indicator to analyze activities overall the textbooks used by first graders at Intensive Classes. The indicator contains many kinds of activities regarding to the seven kinds of intelligence proposed by Howard

Gardner which was previously used by Nigera Ibragimova on the research of textbook evaluation used by students in EPS Intermediate Classes. In this case, the researcher used such indicator to evaluate textbooks used by first graders of Intensive Class at SMA Wachid Hasyim 2 Taman Sidoarjo since it was arranged by referring to some experts such as Berman, Brougher, Campbell and Dickinson, Checkley, Mary Ann Christison, Govendo & Gibson, and Soares³. It was also possible for the researcher to adapt from various sources for the sake of the perfectness of analyzing the textbooks. (See *Appendix C*)

E. Data Analysis Procedures

The questionnaire would describe the individual intelligence of First Graders at Intensive Classes. To find the predominant intelligence at each class, the researcher calculated the percentages of each type of intelligence. While for analyzing the activities in the textbooks dealing with Multiple Intelligence, the researcher used an indicator to identify kinds of intelligence of each activity in the textbooks. The indicator was primarily adapted from Maria Do Rozario De Lima Botelho. Botelho had used such checklist as an indicator to analyze the current textbooks used in Brazilian Language Institutes. Thus, the indicator would guide the researcher to determine if

³ Berman, 1998; Brougher, 1997; Campbell, Campbell and Dickinson, 1996/1999; Checkley, 1997; Christison, 1996; Govendo and Gibson, 2000; Soares, 2000. In: Nigera Ibragimova, Thesis for the Degree of Master of Arts in English Language Teaching: *“Multiple Intelligences Theory in Action in EFL Classes: A Case Study”* (Gazimağusa, North Cyprus: Eastern Mediterranean University, January 2011), 46.

Multiple Intelligence Theory was included in those books and identify the intelligence profiles of the textbooks.

Focusing on the textbook analysis was included in document/content analysis “which may involve just the frequencies and percentages in the various categories or may involve more descriptive accounts”⁴ on the data analysis procedure. The textbooks analysis was started by counting the number of activities (N) that the workbook contains and then decided for each activity which intelligence types it caters for⁵. The percentages of each type of intelligence were calculated as used by Nigera Ibragimova to know the frequencies of intelligence type in each activity. After that, the researcher put them in the right order from the highest to the lower percentage. The data then would be compared to the percentage of students’ Multiple Intelligence profiles and would be interpreted by the researcher to know how the textbooks corresponded to the MI theory.

⁴ Donald Ary – Lusy Cheser Jacobs, *Introduction to Research in Education; 8th Edition* (Canada: Wadsworth Cengage Learning, 2006) 458.

⁵ Rolf Palmberg, *Multiple Intelligence Revisited* (Finland: Palmsoft Publications, 2011), 25.