

CHAPTER III

RESEARCH METHOD

This chapter discuss about the method used by the researcher in conducting this study. The discussion covers research design, setting and subject of the study, data and data source, technique of data collection, technique of data verification, data analysis.

A. Research Design

Research design were the specific procedures involved in the research process included data collection, data analysis, and report writing (Creswell, 2012:20). Here, descriptive qualitative research was the design of this research to answer the research question. According to Merriam (2009:5) descriptive design were intended to systematically describe the facts and characteristics of a given phenomenon.

Therefore, this research was intended to describe a process of the teaching practice about the implementation CLIL in teaching Science at fourth grade BCP of MI Al Azhaar Bandung. It was started from the process of planning, implementing and assessing systematically. The researcher describes the facts and characteristics related to the phenomenon while the research conducted in the implementation of CLIL in Science class by Science teacher. The researcher presented the result of this research about the implementation of CLIL in teaching practice conducted by Science teacher in descriptively. It was appropriate to the design of this research that used descriptive qualitative approach.

B. Setting and subject of the study

The setting of the present research conducted at MI Al Azhaar Bandung, which is located at Bandung, District of Tulungagung. This school chosen because MI Al Azhaar Bandung is the one of Islamic Elementary Schools in which English used in teaching Science throughout the classes. For this reason, this study was conducted there. This study has been done for one month and 10 days starting from April 16th to May 26th 2016. The researcher did interview the Science teacher four times and did the observation the teaching and learning process in “Electricity and Magnetism” theme in the fourth grade BCP once.

The subject of this research was the coordinator of Bilingual Class Program or BCP at MI Al Azhaar Bandung who teaches Science using English for grade 1 and 4. There were two Science teachers in Bilingual Class Program or BCP at MI Al Azhaar Bandung Tulungagung. The researcher was selected one Science teacher as the coordinator of BCP who has long experience in teaching and learning Science and has special strategies. The Science teacher who applied CLIL in the teaching and learning process only could explain this research. The Science teacher provided the information about the implementation of CLIL in the Science subject. Beside, the Science teacher was selected because she has joined training for teacher and headmaster as the coordinator of BCP annually. According to Hightower *et al.* in Sari (2015),

Quality teacher are life-long learners in their subject areas, teach with commitment, and are reflective upon their teaching

practice. They transfer knowledge of their subject matter and the learning process through good communication, diagnostic skill, understanding of different learning styles and cultural influences, knowledge about child development, and the ability to marshal abroad array of techniques to meet student needs.

Besides that, the Science teacher also selected by the headmaster to be respondent and the main source or informant as they adequate experience in teaching Science using English as means of communication.

C. Data and Data Source

In this research, the researcher got the data from the information about teaching practice conducted by Science teachers including teachers plan, implement and assessment of the implementation CLIL at fourth grade BCP of MI Al Azhaar Bandung and doing observation during teaching and learning process using CLIL that focus on “Electricity and Magnetism” theme. In this research, interview transcript, observation transcript, lesson plan and recording were the primary data. As the secondary data the researcher got from collected the documentation such as Cambridge curriculum, transcript of student value, student holistic assessment sheet, textbook, pictures during the implementation of CLIL in the classroom, and write the field note during doing observation.

The data source of this research was taken from the science teacher. The Science teacher was selected as the source of data because CLIL implemented in her class. Beside, the Science teacher who applied CLIL in the teaching and learning process only could explain this research. The Science teacher

provided the information about the implementation of CLIL in the Science subject. Then, she has long experience in teaching science and teaching science through English. Besides, she has joined training for teacher and headmaster as the coordinator of BCP annually. Different with the other teacher who teaches in BCP like Math teachers only joined for teacher training and not training for headmaster from Teacher Training Education Development Institute (T2EDI) from Malang. Hence, the Science teacher provides the rich information about the implementation of CLIL in teaching practice that need by the researcher in her study. Additionally, she has long experience both of teaching practice and of joined training. The secondary data sources of this research were gotten from the students. The researcher selected three students from grade 4A Bilingual Class Program (BCP). They were two boys and girl.

Before conducted this research, the researcher was selected fourth grade as the purposive sample of the research. Here, in the Islamic Elementary School there were fourth class started from grade 1, 2, 3 and 4 that using English in teaching Science. The Science teacher as the primary source taught Science using English in two classes; they were grade 1 and grade 4. Based on the observation that was conducted by the researcher then she selected the fourth grade as the sample of observation. This class was selected because of the students was taught science using English started from 2012 until now then the atmosphere of the class was conducive and communicative.

D. Technique of Data Collection

The data collecting method and instrument were necessary to get the data in the research. According to Lincoln and Guba (1985) in Ary *et al.*, (2010:424) says “Qualitative research studies about human experience and situations, researchers need an instrument flexible enough to capture the human experience.” It means that the instrument to collect the data should be flexible and not use formal instrument to capture the data. In this study, the researcher used some methods to collect the data; they were observation, interview, and documentation. Those methods described as followed:

1. Interview

Interview used to collect the information from the resource. Ary *et al.*, (2010:438) stated that Interview is one of the most widely used and basic methods for obtaining qualitative data. Interviews were used to gather data from people about opinions, beliefs, and feelings about situations in their own words. In this research, the researcher conducted interview before and after doing observation. The first interview conducted at April 16th 2016, the researcher asked about the teachers’ experience in applied CLIL. Second interview conducted after doing observation in teaching Science that focus on “Electricity and Magnetism” theme at April 20th 2016. The researcher interview the Science teacher about how the Science teacher plan, implement and assess the student ability in teaching science using CLIL that focus on

“Electricity and Magnetism” theme in BCP. The third interview conducted at May 2nd 2016, the researcher interview about the difficulty and the benefit that faced by the teacher during teaching science through English. The last interview about teacher experience followed training and continued to interview students’ perception about the implementation CLIL in the class and the assessment that conducted at May 26th 2016. The interview conducted by used semi or partially structured interview. In semi or partially structured interview, the researcher prepared the list of the questions to be asked to the resource.

In the interview process, the researcher asked and communicated in relaxed situation and friendly. The researcher prepared the list of question as a guidance to know how the Science teacher implemented CLIL in fourth grade BCP class including teachers plan, implement and assess the students’ ability.

2. Doing Observation as observer

Observation is one methods used to collect qualitative data. According to Lodico *et al.*, (2006:117) says that “Observation in qualitative approach as a tool of research requires systematic and careful examination of the phenomena being studied.” It means that the observation was collected the data in systematic way to understand the interaction or event that being studied.

The observation method used by the researcher to collect the information about how the Science teacher implement of CLIL in BCP

at fourth grades of MI Al Azhaar Bandung Tulungagung that could be got from interview. To get the data from observation the researcher used video recording and filed notes. Audio data were sufficient and the use of audio is highly recommend and needed as visual corroboration will increase the validity of the data (Wray *et al.*, 2001:154) in Islamiyah (2012). The researcher observed and recorded the activity of teaching and learning process in the Science class used video-recorded starting from opening the class until closed. Besides recording the activity in the class, the researcher also written field notes. The observation itself was conducted in the fourth grade BCP and Science teacher observed for this study. This study starting from April and was done in May 2016. The details schedule of observation conducted by the researcher in three times. The first observation at April 20th 2016, the researcher come to the fourth grade BCP class at 7.am and join in the class to observe the process of teaching and learning using CLIL that focus on “Electricity and Magnetism” theme. The teaching and learning process starting at 7.am and finish at 8.30 am. During the observation the researcher, write the field note that did not capture in video record and take pictures about the situation in the class. The next observations May 4th and 11th 2016. The researcher observes the students test or evaluation. There are two kinds of test that allowed by the student at fourth grade BCP: the first test called Centre Progress Test (CPT) and International Progression Test (IPT).

3. Using Field note

Field note use in the research during the observation to record the data that not covered when conducted observation. According to Ary *et al.*,(2010:435) stated that the most common method of recording the data collected during observation is field note. Field not contain what the researcher has seen and hear. They are two kinds of component from field note; the first descriptive part, which include a complete description of the setting, the people of their reaction. The second, reflective part, which includes personal feeling, comment.

4. Documentation

Documentation and artefacts were another form of qualitative data collection tool. According to Ary *et al.*,(2010:442) stated that documents refers to a wide range of written, physical, and visual materials including what other authors may terms artefact. Documentation divided in two, they are written or text-based artefact (lesson plan, Cambridge Curriculum, textbook, assessment sheet, and transcript of interview) and non-written records. (Photograph, recorder, video recorder in teaching and learning process.). In this research, the documents included the pictures during observation in teaching and learning process conducted by the Science teacher in the BCP (Bilingual Class Program), the lesson plans, and Cambridge curriculum document and assessment sheets used.

E. Technique of Data Verification

Qualitative research needed the technique of data verification to make sure that the finding and interpretation of the research were accurate. According to Ary *et al.*, (2010:498) Validity concerns the accuracy or truthfulness of the findings. Validating findings means that the researcher determines the accuracy or credibility of the findings through strategies as member checking or triangulation. In the qualitative research triangulation is the process of corroborating the evidence from different individual, different types of data, and different methods of data collection. It means that the study will be accurate because the information draws on multiple sources of information, individuals, or process (Creswell, 2012:283).

In this study the researcher, choose triangulation technique to get the trustworthiness of the data. The kinds of the triangulation technique used by the researcher were data sources triangulation and methodological triangulation.

1. Data sources triangulation

In this study the data were taken from several sources, they were Science teacher and students. According to figure 3.1 the data of research question number 1 was taken from Science teacher who was the main subject. The same as the research question number 2 was taken from the Science teacher also. In research question number 3 and 4 were taken from Science teacher and students. The research question number 5 were taken from Science teacher and students. The last research question

number 6 were taken from Science teacher and students. Through this interview, the researcher could get any information and knew the implementation of CLIL in teaching practice.

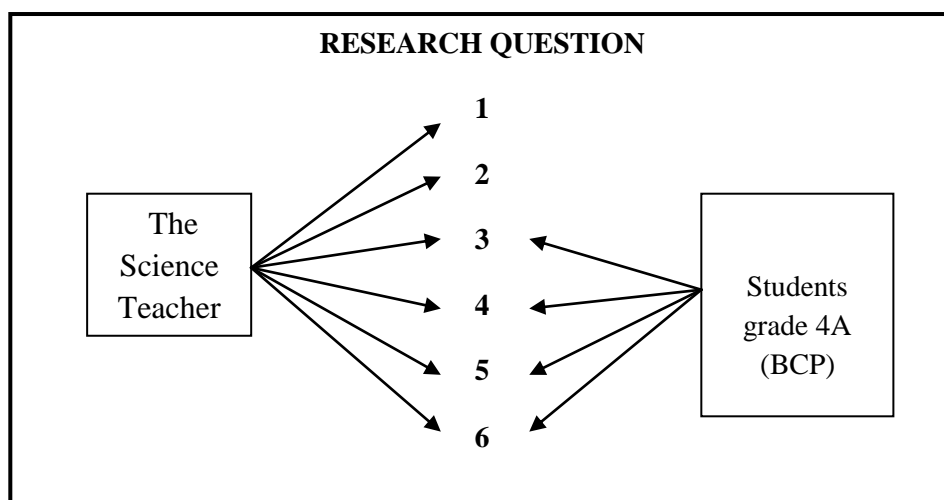


Figure 3.1 Data Source Triangulation

2. Methodological triangulation

In this research, the methods of collection data were done by checking data getting from same unit different methods. In this research, used four different type of data or methods of collected the data. They were interview, observation, made documentation, field note. All of the research problems were answered through some methods as presented on figure 3.2 below. According to the figure 3.2, the data to answer the research question number 1 and 2 that included teacher plan the content and the language in CLIL were gotten from interview and documentation. Next, the research question number 3 and 4 could be answer by conducted interview, field note and did observation. Besides, the research question

number 5 and 6 taken from interview and documentation. From the explanation above it was certainly said that the research question number 1, 2, 3, 4, 5 and 6 were triangulated.

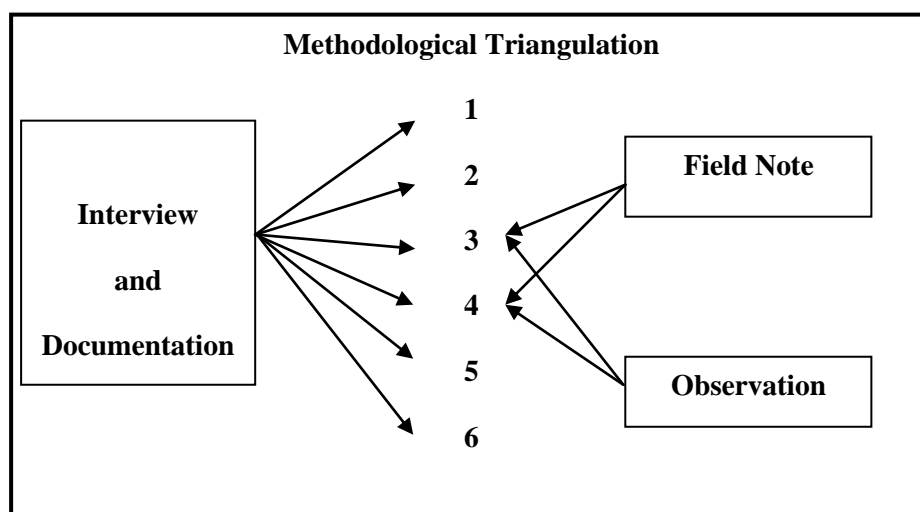


Figure 3.2 Data Collecting Technique Triangulation

F. Data Analysis

The researcher tried to describe the approach in data analysis. The researcher analyse systematically from raw data that gotten from interview and observation. According to Ary *et al.*, (2010:481) Analysis involves reducing and organizing the data, synthesizing, searching for significant patterns, and discovering what is important. It means that after the researcher collected the data from observing, interview, then the researcher should analyzed the data.

In this study the researcher used data analysis method suggested from Miles and Huberman (1994:11), they state that data analysis consist of “three concurrent activity” the activity covering data reduction, data display, and conclusion drawing/verification.

1. Data reduction

Data reduction in this research was classified into two categorized based on the major and minor research problems. The data that had been categorized would be discarded if it were not suitable with the major and minor research problem. Firstly, the data that related to the major research problem about the implementation of CLIL in teaching practice conducted by the Science teacher including interview and observation were transcribed then organized the related data to display. Second, the data that related to the minor research problems involved the information about the teachers' plan the language and content (interview) were transcribed and the other data about lesson plan, Cambridge curriculum analyzed. The data that related to the implementation CLIL and assessing the students' ability (observation) were transcribed. Besides the data about the teachers' activity in the outside of class including teacher's training and teacher's meeting to prepare teaching using CLIL were transcribed and then displayed.

2. Data display

In the data display, it was the time for the researcher to displays the selected data that related to the major and minor research problems. The researcher displays the selected data in descriptively. The first, the researcher displays the information, observation, and documentation in descriptively about the implementation of CLIL conducted by the science teacher. Second, the researcher also display about teachers' preparation

before conducted teaching practice including teachers' plan the language, content, lesson plan and teachers' training. The researcher displays the teaching practice about the implementation of the content and the language in descriptively. The last, the researcher displays about the information from the science teacher in assessing the content and language in CLIL descriptively.

3. Conclusion drawing/verification

The last step in conducted qualitative research suggested from Milles and Huberman (1994:11) was conclusion drawing/verification. In this step after the data that related into two formulated research problems was selected in data reduction then displayed it in the form of descriptively, finally the conclusion was made. The conclusion of this research was drawn from the one major and six minor research problems. The first conclusion in this research was drawn from the major research problem about how is the implementation of CLIL in Fourth grade BCP was formulated. The second conclusion was drawn from the minor research problem included how Science teacher's plan the language, content, the implementation of language and content then the last about the how teacher's assess the student ability both of in language and content in Fourth grade BCP were formulated.