#### **CHAPTER III**

### RESEARCH METHOD

# A. Research Design

As stated in the background of the study, this paper aims to find out the effetcs or significant improvement onlanguage proficiency of the students who are taught by using methodology of English as Medium of Instruction (EMI) in Science Subjects at tenth grade of *SMAN BANUA BBS* South Kalimantan in academic year 2017/2018. Furthermore, this research is to empirically investigate the assumption that language proficiency increases when content delivery takes place in English. It seeks to discover what happens to students' English language skills while studying in English-medium classes in SMAN BANUA and how this compares with the perceptions of instructors and students regarding the students' English proficiency. This chapter explained more detail the methodology of this investigation.

The type of this research is the case of study using descriptive qualitative which is the researcher observe the students in the classrooms while the teaching and learning process is conducted. They are from two classes out of four classes. Two classes are boys and the remains are girls. In this regard, the researcher takes one class from boy and the other class is girl in which the teachers are the same.

### **B.** Research Setting

The research is conducted at *SPK SMAN BANUA* BBS School which is located at the 17<sup>th</sup> kilometer at JL. Ahmad Yani, Gambut, Kalimantan Selatan on February 19<sup>th</sup> 2018 to March 16<sup>th</sup> 2018.

### C. Research Instruments

The instruments that are used in this research are students of SMAN BANUA at 10th grade students and teachers of Senior High School, observation sheet and interview guideline and the researcher herself.

#### 1. Observation

The form of the observation sheet is a table that consists of category and sub-category analysis and the explanations column for the categories. The categories of analysis are the level of the students in doing group work and factors affecting the quality of teaching learning mentioned above. In addition, at the observation time, the researcher entered the classroom, watched the teacher and the students did teaching and learning process. After that, the researcher took a note to memorize and get the data to be processed later. Sometimes, the researcher was not only watching the scene of the learning process, but also she tried to become a part of the classroom, for example being a student, or asking the teacher about the things that should be an addition for this research.

### 2. Interview

In this interview part, the researcher asked four science teachers (Chemistry, Biology, Math, and Physics) in order to get the data. Some questions

are also for the students, in this respect, the researcher took three students as the interviewees. The interview's intruments are in the attachment at the backside of this research.

### 3. Written Test

Due to the speciality of this school, *SMAN BANUA* provides one week of studying about English lessons. It takes in the very beginning of the time before the next period of academic year which is held every year which is called as matriculation time. This kind of system is deliberately provided by the school because the students need to understand the next three years of studying science using English. By doing this, the students later on would not be shocked or get stressed due to the different languages as they did in junior high school before.

Furthermore, for an addition information, the tenth grade students in this school are following the English course in fourteen hours a week after matriculation time. Thus, the written test which is provided by school are; 1) after matriculation time, 2) after one year [two semesters] of academic lessons for the tenth grade. This test is also taken by the researcher to become as the part of the data of this research.

In addition, the students were given 40 questions. The detail explanation would be mentioned below:

Table 3.1. The Guide Line of English Matriculation Score List Test

| Nu | Skills            | Amount | Туре            | Score | Total |
|----|-------------------|--------|-----------------|-------|-------|
| 1  | Listening         | 10     | Multiple Choice | 2,5   | 25    |
| 2  | Writing (Grammar) | 10     | Multiple Choice | 2,5   | 25    |
|    |                   | 10     | Error Analysis  | 2,5   | 25    |

| 3 | Reading | 10 | Multiple Choice | 2,5 | 25  |
|---|---------|----|-----------------|-----|-----|
|   | Total   | 40 |                 |     | 100 |

# D. Subjects and Object of Research

### 1. Subjects of the Research

The subject of this research are the students and the teachers at *SMAN BANUA KALSEL*. The students are XA grade and XC grade and four teachers. Four of them are from science subjects. The total numbers of the subjects in this research can be seen in the table below:

**Table 3.2. List Name of the Research Subjects (Students)** 

| Nu | Students   | Ammount |
|----|------------|---------|
| 1  | XA (boys)  | 24      |
| 2  | XC (girls) | 18      |
|    | Total      | 42      |

Table 3.3. List Name of the Research Subjects (Teachers)

| Nu | Name of the Teachers | Subjects  |
|----|----------------------|-----------|
| 1  | Sri Wantini, M.Pd    | Maths     |
| 2  | Ali KAVAK, M.Pd      | Biology   |
| 3  | Ali SIMSEK, M.Pd     | Physics   |
| 4  | Mahir Martin, M.Sc.  | Chemistry |

# 2. Object of the Research

The object of this research is study the variables measuring language ability in listening, speaking, reading, and writing are measured by a standardized test, and a comparison is made from time 1 to time 2 on the same students in SMAN BANUA.

# E. The Techniques of Collecting the Data

The technique of data collections used in this research are:

- 1. *Observation*: Observing students and the teachers' interaction during the process of teaching. The teachers are asked to use number heads together as the methodology while the students are expect to work in a group.
- 2. Written Test: The students are tested two times; first, at the very beginning of academic year (after they had done matriculation time), second, after one year (two semesters) of academic year or before the final tests were taken by them. This test is held every year because the school want to know the improvement of their students' English language proficiency.
- 3. *Interview*: Interviewing with the school counselor to determine the students with different features to understand students' background and personality and the teachers' proficiency in teaching method.

# F. Data Analysis

There are some procedures in analyzing the data:

- Transcribing all the data by making some observation like taking photos, taking notes, interviewing the teachers and the students, and getting involved towards the students and the teacher in the classroom by not disturbing their teaching and learning process.
- 2. Organizing the data in order to make suitable towards this research including collecting all the score of the students' of English standard recognized test (TOEFL like) from the school to be inserted in this research.
- 3. Coding the data in order to make a balance or suitable applications towards the theoritical review from the experts which is related to this research.

- 4. Validating the data towards the subjects and objects of the research in order that the data are getting fully veracity to ensure the the data are not flawed in terms of accuracy of the methods or designs. Moreover, validation is also to be done due to the reliability which is to extent to which this research procedures produced consistent and dependable results.
- 5. The last, the researcher then analyze the data to make a conclusion, like finding a link between the analyzed data and this research questions or objectives.