

CHAPTER III

METHODOLOGY

3.1 Research Design

There are two research questions in this research, related to the effectiveness of student's speaking performance and student's motivation in speaking. From this research question, the researcher designs two research designs to get the answer of the research question. First design is quantitative experiment which is needed two classes as experiment class and control class. Second design is descriptive quantitative to get the result of the student's questionnaire related to speaking ability and speaking class that they have been gotten in the class.

The research designed as experimental design to examine student's performance and student's motivation through project based learning. The present research used the quasi experiment design in two groups learning which are experimental class and control class. The experiment held on experiment class which taught by project based learning method in learning teaching and control class which taught by traditional method. Both class are given the same pre-test and post-test in speaking ability. The test is oral presentation of each students based on the theme. The test is measured by rubric of speaking based on Brown's rubric (2001).

The researcher did the pilot research in the experimental class and control class as Mahasneh and Alwan (2018) stated that both of two classes treated by pre-test in the first meeting. The treatment of the project based learning applied in the experimental class and the control group is taught by traditional technique as teacher-centered, the teacher explained the speaking material. In the last meeting, the researcher gives the post-test for both of two classes. The time of the research was conducted on third meeting until twelfth meeting of second semester of formal learning. In the beginning, the students given the pre-test and the researcher gives the post-test in the end of meeting. So, the meeting to give the

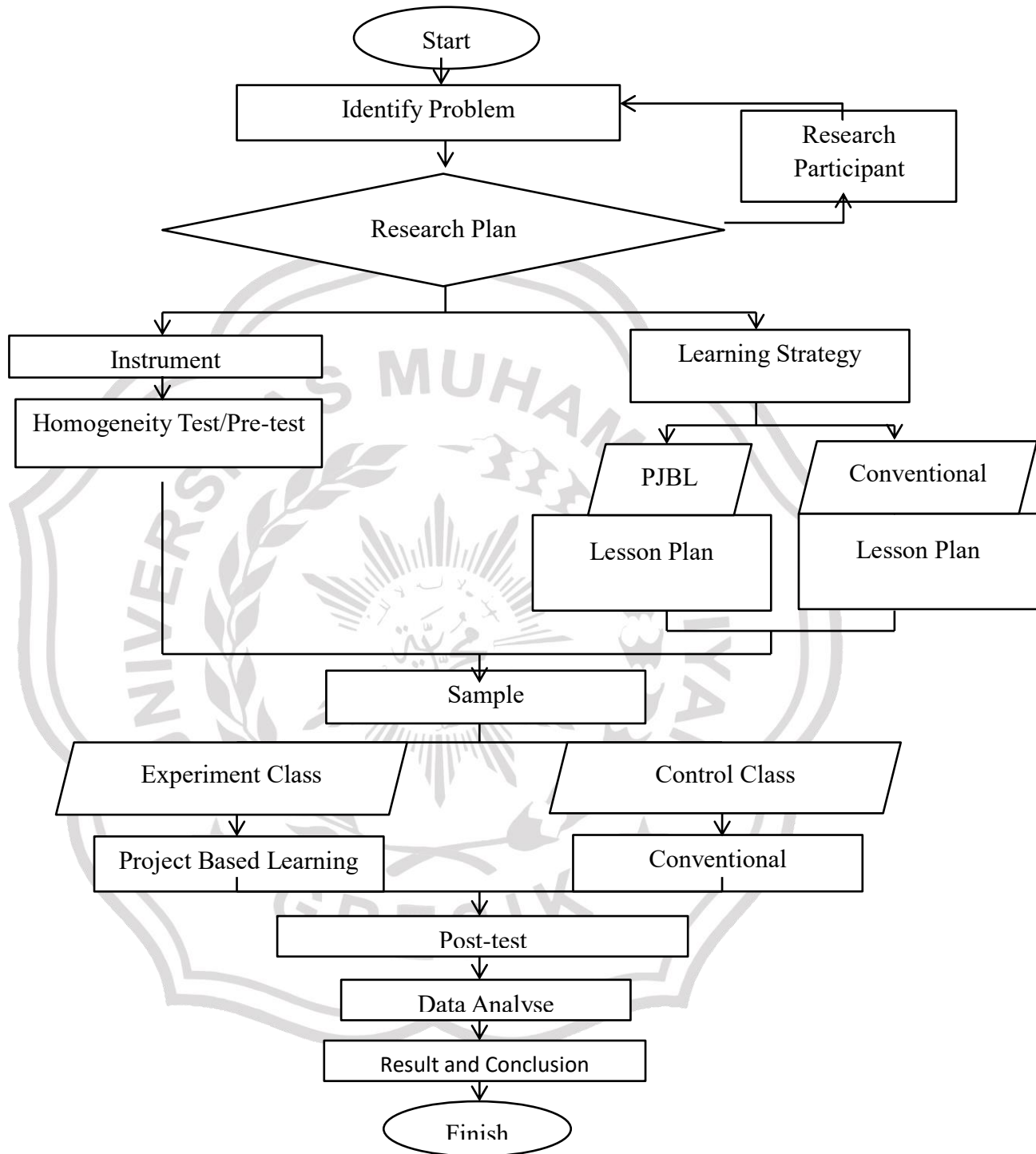
material were ten meeting for both of the classes, experimental class and control class.

The next design of the research is descriptive quantitative design to know student's motivation in speaking class. After the researcher gets the result of the student's questionnaire, the researcher analyses the data of student's questionnaire by using Likert Scale. Then, the researcher describes the result of student's questionnaire by the descriptive quantitative design by percentage of the student's questionnaire result.

3.2. Procedure of Research

In this part, the researcher described the procedure of the research. The researcher conducted the research by two parts. First, the researcher conducted experiment in the classroom learning. Second, the researcher gives the questionnaire to the students about the student's motivation in speaking class.

This is the procedure of the research:



First step, the researcher identify the problem which the researcher got the research problem and research plan for doing the research

Second, the researcher choose the participant as the sample of the research and the researcher also choose the instrument to conduct the research

Third, the researcher conduct the pre-test for the student's sample of research related to the student's speaking sill

Fourth, the researcher doing the experiment in two classes, experiment class and control class. The experiment class is taught by project based learning and the control class is taught by conventional technique. The researcher also makes the lesson plan for both of classes before doing the experiment as the research.

This is the design of the class:

Table 3.1. Design of the class

Class	Students	Teaching Technique	Learning
Experimental Class (IX B)	16	Project Based Learning	
Control Class (IX C)	16	Conventional	

The procedures of the teaching learning are as below:

Table 3.1 Procedure of Teaching in Experimental class and Control class

Meeting	Experimental class	Control class
First meeting	Pre-test	Pre-test
Second and Third meeting	The student identify the theme in their group	The teacher explain the topic and the students are as the listener
Fourth and Fifth meeting	After the students get the idea to do the project, They develop the plan for their project based on the	The teacher reflected the topic by some explanation and examples.

	theme	
Sixth and seventh meeting	The students do their project based on their group.	The teacher show detail the example and explain the term of the topic
Eighth and ninth meeting	The students reflected their project or tried to preparing the presentation.	The teacher asks one of the participant to ask some question related the topic
Tenth and eleventh meeting	The students presented the project in front of the class as their final project	The teacherdiscussed the difficult term of the topic together with the students.
Twelfth meeting	Post-test	Post-test

Fifth, the researcher conducted the post-test for the students in the experiment class and control class. After that, the researcher gives the questionnaire for the students in the experiment class because the researcher was able to know about the student's motivation in their speaking ability.

The last, the researcher analyses the data which gotten related the pre-test, post-test, and questionnaire result which the researcher got. The researcher also get the result and conclusion for the research.

3.2 Population and Sample

To choose the research participant, The researcher choose the sample by randomized technique. The researcher do the research based on the class which have already set by the school. The research conducted on 9th grade at YIMI junior high school. There are four classess there. Then, the researcher taketwo classes. The member of the experimental class were 16 students and the member of the control class were 16 students. From their English teacher, the researcher know that they study English especially in speaking matter using teacher-centered frequently. The english teacher teach them by explain the subject in front of the

class and the students are as listeners. Their speaking ability needed attention to be improved. They also haven't tried by project based learning method in English lesson.

To complete the research, the students do the main role in the experimental class. The role of experimental class is the student-centered learning. The researcher is as the facilitator in the experimental class and control class.

The population of this research was the third grade of YIMI Junior High School which consists of four classrooms.

Table 3.2: Students of third grade of YIMI Junior High School

Class	Students
Class IX A (Female)	16
Class IX B (Female)	16
Class IX C (Male)	16
Class IX D (Male)	16

The researcher takes two classes as samples by randomized technique. The researcher chooses the class IX B and IX C as the sample of the researcher. Therefore, this is the table for experimental and control class.

Table 3.3: Design classes

Class	Students
Experimental Class (IX B)	16
Control Class (IX C)	16

The researcher takes the IX B class as the experimental class and the IX C class as the control class. The researcher teaches the experimental class by using project based learning and teaches the control class by using conventional technique. The sample is IX B and IX C class which is 16 students and 16 students. Then the total of the students are 32 students.

3.3 Technique of Data Collection

The present study used the test to examine the project based learning on student's performance. The students of experiment class divided into several group to do the project which given by the researcher. The students get chance to present the project from the teacher in front of the class one by one. While, the control class was taught by traditional technique which the teacher as the main role in the class. The researcher give the test to measure the students speaking abillitty. The tests are pre-test and post-test. Both of classes, experiment class and control class given same pre-test and post-test by the researcher.

The process of collecting data was conducted by following steps:

First step: the researcher administered pre-test before the researcher held the treatment. In the pre-test, the researcher asked the students to perform the announcement which is given by the researcher.

Second step: the researcher did the treatment for the students in both of experimental class and the control class. The researcher taught the students in experimental class by project based learning and the researcher taught the students in control class by conventional process learning.

Third step: the researcher gives the post-test after giving the treatment to the students. The researcher gives the same post-test both of experimental class and control class. The researcher gives the post-test to find out the result of action that had conducted.

Fourth step: the researcher also used the questionnaire that consists of 10 questionnaire items. It used to measure the changing degree of motivation after they had taught speaking skill by using project based learning.

To examine the student's motivation during the project based learning technique, the researcher give the 10 question. The researcher adopted the questionnaire based on Guilloteaux and Dornyei (2008) to get the result of student's motivation.

3.4 Technique of Data Analysis

In the beginning, the researcher do the normality test to determine the distribution of the responses has a normal distribution or not by descriptive statistics by using pearson product moment formula. The researcher also do the homognity test to know the students homogeneity in speaking ability and the interpretation can be interpreted in at the Sig. (2 tailed).

- If the significance is less than 0,05 (Sig. (2-tailed) < 0,05, the variants differ significantly (not homogeneous)
- If the significance is greater than 0,05 (Sig. (2-tailed) > 0,05, the variants are significantly similar (homogeneous)

To test the research hypothesis and also to know the students capability in speaking activity, the researcher gives the oral test as pre-test and post-test. The test is calculated by Brown Scale (2001) and the result of test from both of class, experiment class members and control class members is analysed by independent t-test formula as below:

$$t = \frac{(\bar{x}_1 - \bar{x}_2) - (\mu_1 - \mu_2)}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

After the researcher get the result of the test both of students in experiment class and control class. The researcher analyses the result by independent formula in SPSS application. The researcher discusses the result in the next chapter.

Then, to know the student's motivation in learning during applying project based learning, the students of experimental class are given the motivation's

questionnaire. The research using the questionnaire based on Guilloteaux and Dornyei (2008). To analyse the result of motivation, the researcher used the Likert Scale.

