

## CHAPTER III

### A. Research Design

This research involved an experiment research which used the competitive game in teaching speaking skill to know the effectiveness of using the game. Sugiyono (2011:72) explains that experiment research have goal to find the influence of the specific treatment given to the students.

In experimental design, a pre-test is administered and followed by treatment to a number of different classes. After a fixed period of time, a post-test is given. Based on the explanation above, the design of research can be seen in the table following

**Table 3.1 design of the research**

|                  |               |              |                |
|------------------|---------------|--------------|----------------|
| Experiment class | Pre-test (01) | Treatment    | Post-test (03) |
| Control class    | Pre-test (02) | No treatment | Post-test (04) |

In this research design, mainly is quantitative. It means the method and the instrument used numerical measurement and then statistical quantification is conducted. The writer uses quantitative design to analyze the quantitative data gained from test (pre-test and post-test). Besides that, the writer also uses the qualitative design to analyze the qualitative data gained from observation, questionnaire data and related documents.

### B. Research setting

The research conducted at MA Irtiqaiyah. It placed on Bakti Street RT. 32 No. 4 A pemurus dalam, Banjarmasin city, South Kalimantan. This research applied to students in eleventh grade at MA Irtiqaiyah academic 2017/2018.

### **C. Subject and Object**

The subjects of this research were the students of eleventh grade at MA Irtiqaiyah academic 2017/2018. It consisted of 28 students and divided into two classes, class IPA and class IPS. Class IPA was the experiment class and class IPS was the control class. The writer chose the class sample randomly based on the interview result with the English teacher. He said that the speaking skill ability of both classes was average same. The object of this research was the use of competitive game in teaching speaking skill for eleventh grade students at MA Irtiqaiyah.

### **D. Data and Source of Data**

#### **1. Data**

There were two kinds of data that investigated by the writer in this research which consist of primary data and secondary data.

##### **a) Primary data**

The primary data was the data related of the problems, were:

- 1) The effect of applying competitive game in teaching speaking skill for Eleventh Grade Students At Ma Irtiqaiyah Academic 2017/2018. The data gained from the interview that done before and after the treatment is given, from the writer`s observation while the treatment is given and also from the questionnaire result.
- 2) The significant achievement between the students who taught by using competitive game in teaching speaking the students who are

taught without competitive game. The data found of the pre-test and post-test of both classes.

b) Secondary data

To complete the primary data, the researcher also collected the secondary data such as;

- 1) Brief description about MA Irtiqaiyah
- 2) Description about the teacher and the students.
- 3) Description about facilities of MA Irtiqaiyah.
- 4) Lesson plan
- 5) Materials

2. Source of data

- a) Respondents : XI IPA and IPS students of MA Irtiqaiyah
- b) Informant : head master, English teacher and administration staff of MA Irtiqaiyah
- c) Document : all written reports and important documents which have relation with this research.

### **E. Techniques of data collection**

The techniques of data collection used in this research were observation, documentary, spoken test, and questionnaire.

1. Observation

Observation used to collect the primary and secondary data. That was about the while condition of activity during teaching learning process in

classroom and also about the condition of the school included the facilitation of the school.

## 2. Spoken test

This technique used to find out how significant the speaking skill ability of the student after and before given the treatments. In this way, the writer asked of the students to do an interview test one by one. The interview test applied in two stage; pre-test and post-test to both classes; control class and experiment class. There was the scheme for scoring the spoken test

**Table 3.2 the scheme of score rubric for assessing students` speaking ability**

| No. | Name | Score rubric |          |         |        | Comprehens<br>ion | Total | Score |
|-----|------|--------------|----------|---------|--------|-------------------|-------|-------|
|     |      | fluency      | Accuracy |         |        |                   |       |       |
|     |      |              | Gram     | Pronun. | Vocab. |                   |       |       |
| 1.  |      |              |          |         |        |                   |       |       |
| 2.  |      |              |          |         |        |                   |       |       |
| 3.  |      |              |          |         |        |                   |       |       |

## 3. Documentary

Documentary used to support the data. The data gained by taking picture when the teaching learning process running and also collecting some document or report that related with the research.

#### 4. Questionnaire

This technique used to find out the effectiveness of using the competitive game at MA Irtiqaiyah in subjective way. The writer gave the questionnaire were in the form of multiple choices. The information which wanted to be known by the writer from the students are about their interest, motivation of the students, the advantages of the game for them, the relevance of the teaching learning's material and the sustainability of game. To find out the data result, the writer followed these categories. The score of each choices has different since each of which has different quality of the option. The score is based on the following table.

**Table 3.3 the point of ranges**

| Choices | Score | Meaning |
|---------|-------|---------|
| A       | 1     | Low     |
| B       | 2     | Medium  |
| C       | 3     | High    |

Source: Fitriana (2012: 78)

#### F. Design Measurement

The data in this research was the comparison of achievement of students who taught by using competitive game in teaching speaking skill and the students who were taught without competitive game at MA Irtiqaiyah academic 2017/2018. The writer used ten questions to the students to find out the result of their speaking ability. The writer used the indicator of speaking ability

which cited from Azzahra`s thesis to make sure the result was valid such as follows:

### 1. Pronunciation

- 10 = has few traces of foreign accent
- 8 = always intelligible, though one is conscious of definite accent
- 6 = pronunciation problem necessitate concentrated listening and occasionally lead to misunderstanding.
- 4 = very hard to understand because of problem. Most frequently is asked to repeat.
- 2 = pronunciation problem as severe as make speech virtually unintelligible

### 2. Grammar.

- 10 = few errors with no repeated of failure
- 8 = occasional error showing imperfect control of some forms and structures but no weakness that causes misunderstanding.
- 6 = frequent error showing major pattern uncontrolled and causing.
- 4 = constant errors showing control of very few major patterns and frequently preventing communication.
- 2 = grammar almost entirely inaccurate, expect for few frequently repeated phrases

### 3. Vocabulary

- 10 = use of vocabulary and idioms is virtually that of native speaker

- 8 = sometimes use inappropriate terms and or must rephrase ideas because of lexical inadequacies.
- 6 = frequently use the wrong words, conversation somewhat limited because of inadequate vocabulary.
- 4 = misuse of word and very limited vocabulary make comprehension quite difficult.
- 2 = vocabulary limitations so extreme as to make conversation virtually impossible.

#### 4. Fluency

- 10 = appears as fluent and effortless as that of native speaker.
- 8 = speed of speech seems to be slight affected by language problem.
- 6 = speed and fluency are rather strongly affected by language problem.
- 4 = usually hesitant, often forced into silence by language limitations.
- 2 = speech is halting and fragmentally that conversation is virtually impossible.

#### 5. Comprehension

- 10 = appears to understand every things without difficulty.
- 8 = understand nearly every things at normal speed, although occasional repetition may be necessary
- 6 = understand most of what is said. Can comprehend only social conversation spoken slowly and with frequent repetitions.
- 4 = has great difficulty following what is said. Can comprehend only social conversation spoken slowly and with frequent repetitions.

- 2 = can not be said to understand even simple conversational English.

## G. Data Analysis Procedure

### 1. Data processing

In processing the data, the writer used some techniques such as;

#### a) Collecting

The writer collected all of the data needed.

#### b) Scoring

The writer gave a score to the students' answer test numerically.

#### c) Tabulating

The writer composed and put the data into a table and then counted its percentage by using the following formula:

$$P = F/N \times 100\%$$

Note:

P: percentage

F: the frequency of answer from respondents for speaking test.

N: total number of respondents

### 2. Technique of Data Analysis

#### a) Technique of Scoring Test and Interpretation

The writer used rating scale to evaluate the students' achievement in spoken test. The formulating to get the total means score as follow

$$M_{xt} = \frac{\sum fx}{N}$$

Where:



$M_{xt}$  = the mean of total score

$\sum x_t$  = the number of total

$N$  = number of student

Then the result of score in spoken test interpreted by five level categories as follows by David P. Harris

80 – 100 = Excellent

70 – <80 = Good

60 – <70 = fair

50 – <60 = low

0 – <50 = very low

b) Scoring the questionnaire result

To find the mean of the score for each item, the writer used the formula:

$$M = \frac{\sum x}{N}$$

Note:

$M$  : the mean score

$\sum x$  : the sum of item score

$N$  : the number of the students

**Table 3.4 the classification of grading score**

| Range of mean | Students` interest | The advantages           | Students` motivation | The relevancy | sustainability |
|---------------|--------------------|--------------------------|----------------------|---------------|----------------|
| 0.00-1.00     | Low                | Do not help the students | Low                  | Not relevant  | Not necessary  |

|           |        |                             |        |               |                |
|-----------|--------|-----------------------------|--------|---------------|----------------|
| 1.01-2.00 | Medium | Help                        | Medium | Relevant      | Necessary      |
| 2.01-3.00 | High   | Help the students very much | High   | Very relevant | Very necessary |

**Source :** Fitriana, 2012:75

### c) Data Analysis

To conduct an analysis of the formulation of the problem, the writer used the program of SPSS 16 to make easier and the steps as following.

#### 1) Test of normality

Test of normality is the first steps in analyzing the research data. It is the absolute requirement that should be done before move to next step. In other words, normality test also used to know what the next analysis used in forward; it uses the parametric analysis or non-parametric analysis.

There are some outputs of test normality in SPSS 16 program such as Shapiro wilks, Kolmogorov and liliefors. In this research, writer used the because the sample number was included in small group or  $> 30$ .

#### 2) Homogeneity test

Homogeneity test liliefors test used to analyze two independent data that they have homogeny data or not. It is also the requirement test for parametric test. Homogeneity test used after the data had been analyzed by normality test and result is “the distribution of data is normal” so the homogeneity test should done to continue the next

step. But, if the result of normality test is not normal, the homogeneity test can be not used, because the next step of analysis data can make sure used the non-parametric analysis. In statistic non-parametric analysis (Raharjo: 2016) explained that the variant of data can be homogeny and can be not. It is not a problem in paired sample test.

### 3) Hypothesis test

To know the result of difference of pre-test and post-test or to know the significant of the treatment effect we can use *Paired sample T-test* for parametric analysis and *two related samples t-test* for analysis non-parametric. In SPSS program there are some of non-parametric test can be used such as Wilcoxon, Mann Whitney, and Kruskal Wallis.

In this research, writer used the statistical non-parametric analysis the Wilcoxon test because the data which been analyzed were paired sample and distribution of data was not normal (Siegel, 1994: 95).

### 4) N-Gain normalized

After writer analyzed the different of pre-test and post-test of students` score for every class, the writer continued the analysis by counting the how big the students` achievement improved after given the treatment using N-gain normalized. The formula of N-gain cited from Hake (1989) was:

$$g = \frac{\text{posttest score} - \text{pretest score}}{\text{maximum score} - \text{pretest score}}$$

Note.

$g$  = gain score

Posttest score = post-test score

Pretest score = pre-test score

Maximum score = 100

The calculation result then interpreted into the categories below.

**Table 3.5      The Category of N-Gain Score**

| Gain score      | category |
|-----------------|----------|
| $g < 0.3$       | Low      |
| $0.3 < g < 0.7$ | Medium   |
| $g > 0.7$       | High     |

Source: Hake, 1989

## H. Research Procedure

### 1) Preliminary step

- a) To hold a prior observation in this research object.
- b) To discuss the result of previous observation with researcher's advisor.
- c) To make a research design proposal to be submitted to the Tarbiyah and Teachers Training team to have approval.

### 2) Prefatory step

- a) To hold a seminar on the research design proposal.

- b) To ask the team of Tarbiyah and teachers and training faculty for to written mandate to conduct the research.
  - c) To make the data instrument of data collecting.
- 3) Research step
- a) To meet all respondents and informants who were needed to obtain the data.
  - b) To collect all the needed from its source
  - c) To process data in the procedure way, and analyzed them properly while consulted with researcher`s advisor.
- 4) Organizer step
- 1) To arrange and to write the collected data in this first draft.
  - 2) To consult it with the researcher`s advisor to get some comment and contributions.
  - 3) To write the final draft after having approved by the researcher`s advisor.
  - 4) To be examined before the team of the thesis examiner of Islamic Education Faculty