CHAPTER IV
FINDING AND DISCUSSION

This chapter consists of two main parts, those are findings and discussions. The findings are divided into four parts, which are the pilot test score analysis, the pretest score analysis, the posttest score analysis, and the research findings of questionnaire. Those findings are then analysed and interpreted in the discussion part.

Findings

4.1 Improvement of the students' speaking skill by using M-U-F framework

4.1.1 Findings from the pretest score analysis

The means and standard deviations of the pretest scores are displayed in appendix 2. The table shows that the mean for the experimental group is 9,75, while the mean for the control group is 9,60. In order to prove that the two means of both groups were not significantly different, Independent *t*-test was implemented. Before *t*-test was implemented, the pretest scores of both experimental and control groups must be approximately normal and homogeneous. Therefore, the calculation of the normal distribution and homogeneity of variance test was implemented to the two groups' scores.

4.1.1.1 The result of the normal distribution test

The Kolmogorov-Smirnov test was employed to check whether the pretest scores of both groups are normally distributed. From the table that can be seen in appendix 2, the results show that *Z* score at the experimental pretest is 0.670 and *Z* score at the control pretest is 0.558. The significance value of experimental (0.760) is higher than the level of significance (0.05). Equally, the significance value of control group (0.814) is higher than the level of significance (0.05). It can be concluded that (H_0) null hypothesis was accepted. In other words, both groups' score are normally distributed.

4.1.1.2 The result of the homogeneity of variance test

The homogeneity of variance test was accomplished after the normal distribution test was conducted. Levene's statistics in IBM SPSS Statistics 20 for Windows was used to analyse the homogeneity of variance of control and experimental group's pretest score. The result is shown on appendix 2.

From the SPSS output results, it represents that the Levene's test is 1.022. It is higher than the level of significance, 0.05 (1.022 > 0.05). Therefore, the (H_0) null hypothesis was accepted. It can be said that the variances of the control and experimental groups are homogeneous or equal.

4.1.1.3 The result of the Independent *t*-test

The Independent *t*-test was implemented to see whether there is a significant difference between the scores of experimental and control group pretest. The hypotheses that were established in this analysis were in the form of null hypothesis and alternative hypothesis. Null hypothesis indicates that the means of two groups are not significantly different, while alternative hypothesis indicates that the means of two groups are significantly different.

Based on the statistical analysis that is illustrated in the Table 4.4 in appendix 2, it can be explained that the significance value of means in both groups for equal variances assumed is 0,876. It is more than level of significance 0.05 (0,876 > 0.05). Therefore, the null hypothesis (H_0) was accepted. In other words, the means of the two groups are not significantly different**.**

4.1.1.4 The result of inter-rater reliability

Based on the statistical analysis that is illustrated in chapter three, it can be explained that the scores of both rater are substantial agreement for the experimental group's pretest and moderate agreement for control group's pretest. It is shown from the result of Cohen's Kappa Statistical Measure value that is 0,663. The value is in substantial agreement range (0,61 - 0,80). For the control group, the value is in moderate agreement range (0,41 – 0,60).

4.1.2 Findings from the posttest score analysis

The posttest scores were analyzed to see whether there is any improvement in the students' final scores after the treatment was given to them. The Table 4.5 in appendix 2 shows the result of the posttest from the statistical computation.

The Table 4.5 shows that the mean of the experimental group is 17,775, while the mean for the control group is 12,800. It is directly stated that the means of the experimental and the control group are different. It can be seen that the means from both experimental and control groups from the posttest scores are different. However, to prove whether the means of both groups are significantly different, the Independent *t*-test was implemented. Before the Independent *t*-test was implemented to the both groups' posttest means, the posttest scores of both groups should be approximately normal and homogeneous. Therefore, the normal distribution test and homogeneity of variance test were calculated to find the means of the experimental and the control group posttest. Furthermore, the effect size was calculated in order to discover the effect of the independent variable which is the M-U-F framework upon the dependent variable which is the students' speaking score.

4.1.2.1 The Result of the Normal Distribution Test

The Kolmogorov-Smirnov test in SPSS 20 for windows was applied to check whether the posttest scores of both groups were normally distributed. The result is presented in the table on appendix 2.

From the table on appendix 2, the result shows that Z score on the experimental group's posttest is 0.160 and Z score on the control group's pretest is 0.125. The significance value of the experimental group's posttest (0.731) is higher than the level of significance (0.05). Similarly, the significance value of the control group's posttest (0.943) is higher than the level of significance (0.05). It is clear that (H_0) null hypothesis was accepted. In other words, both groups' score are normally distributed.

4.1.2.2 The result of the homogeneity of variance test

Levene's statistics in IBM SPSS Statistics 20 for Windows was used to analyze the homogeneity of variance of control and experimental group posttest score. The result is presented in appendix 2.

From the calculation data on appendix 2, it represents that the result of Levene's test is 1.201. The significance value is 0,280. It is bigger than the level of significance which is 0.05 (0,280 > 0.05). Thus, the null hypothesis (H_0) is accepted. It can be concluded that the variances of the control and experimental groups are homogeneous or equal.

4.1.2.3 The result of the independent *t*-test

The Independent *t*-test was implemented to see whether there is a significant difference between the posttest scores of the experimental and the control group. The hypotheses that were established in this analysis were in the form of null hypothesis and alternative hypothesis. Null hypothesis indicates that the means of two groups are not significantly different, while alternative hypothesis indicates that the means of two groups are significantly different. The result is shown in the appendix 2.

Based on the statistical analysis that is illustrated in the Table 4.8 in appendix 2. It can be explained that the significance value of means in both groups for equal variances assumed is 0,000. It is lower than level of significance 0.05 (0,000 < 0.05). It also shows that t_{obt} (7.018) is higher than t_{crit} (1,686). Therefore, the null hypothesis (H_0) was rejected. In other words, the means of the two groups are significantly different**.** It means that the treatment which was implemented in the experimental group, significantly improved the students' speaking skill.

4.1.2.4 The result of inter-rater reliability

The result of inter-rater reliability for posttest scores can be explained that the scores of both raters are substantial agreement for the experimental group's posttest. It is shown from the result of Cohen's Kappa Statistical Measure value

those are 0,704 and 0,601. The value is in substantial agreement range (0,61 - 0,80). For the control group, the value is same, which is in substantial agreement range.

4.1.2.5 The result of the effect size calculation

The calculation of effect size was conducted to prove the influence of the independent variable upon the dependent variable and to discover how efficient the treatment worked. The calculation was performed manually by using the formula that was developed by Coolidge (2000). The data were taken from the calculation of Independent *t*-test on posttest in which the t_{obt} is 6,477 and the *df* is 38. After the data was calculated, the result shows that *r* value is 0.525. The converting *r* value into the effect size table, the obtained value shows medium effect size.

4.1.2.6 The Result of the Dependent t-test

The paired t-test was used to analyze the difference between the means of pre-test and post-test in experimental group. The result of the data calculation is statistically shown on appendix 2.

The result shows that the mean of experimental pretest scores is 9,750 with standard error is 0,726, while the mean of posttest scores is 17,775 with standard error is 0,434. Furthermore, the significance of correlation value from the pretest and the posttest is presented on appendix 2.

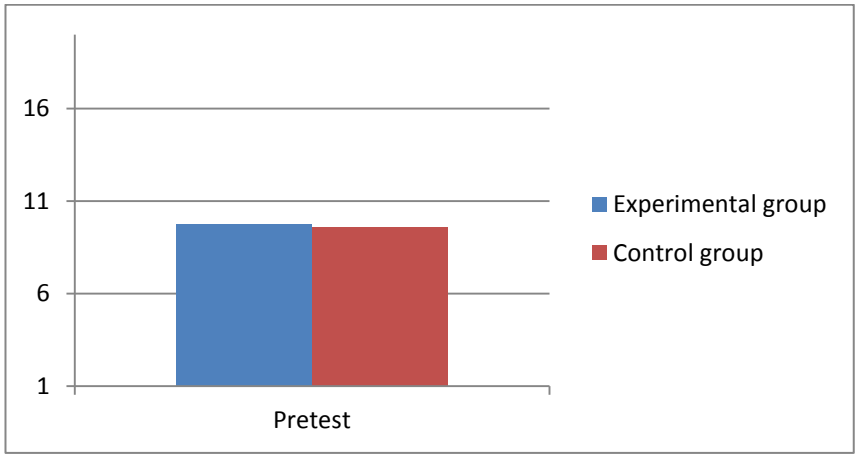
From the obtained data, it is found that the significance of correlation value from the pretest and the posttest is 0.000. It is lower than 0.05. Thus, (H_0) null hypothesis was rejected because there is a significance difference between pretest scores and posttest scores. It means that the data of the pretest and the posttest are dependent.

4.1.3 The differences between experimental and control groups' pretest and posttest

Based on statistical analysis that is explained in the previous parts, it can be explained that the pretest score of experimental and control group has less

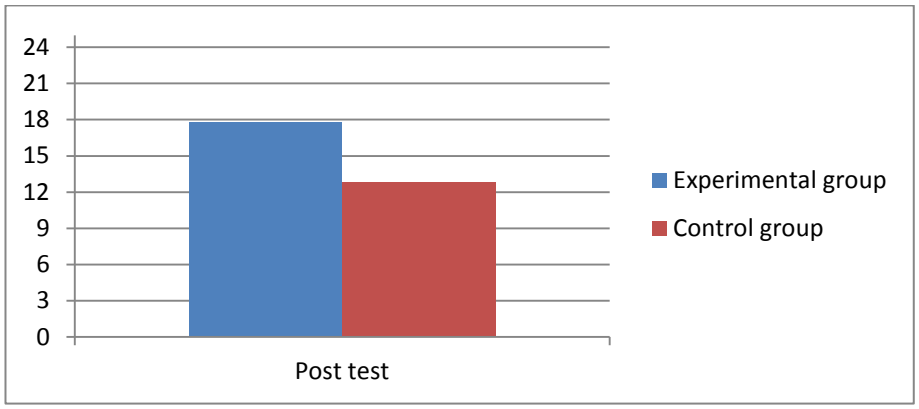
differences. For experimental group's score are 9.60 and control groups' score 9.75. It just has 0.05 score of differences. The illustration of the score is shown below.

Chart 4.1



Different from pretest score, the experimental and control groups' posttest has high difference. The mean of experimental group is 17.775 while control group is 12.800. It is directly stated that the score of both groups are different. The illustration of the score is shown below.

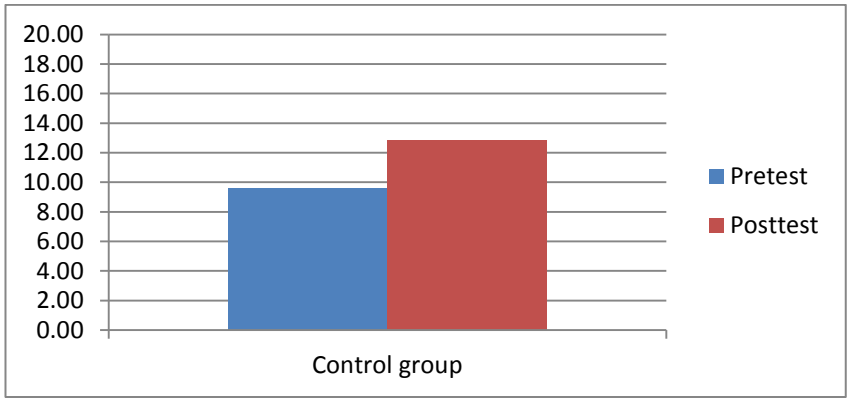
Chart 4.2



4.1.4 The difference between pretest and post test experimental and control group

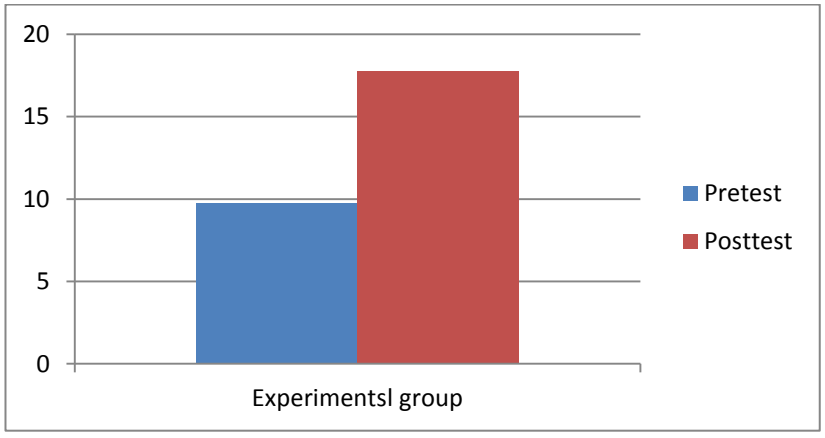
The chart below was created to see whether there are any improvement in the students' posttest score after the treatment was given. As shown in the chart, there are some improvements between pretest and posttest score even the improvement is not significant. There are 9.75 for pretest score and 12.800 for posttest score.

Chart 4.3



In the other side, the significant improvement is shown in the experimental group. After the researcher give them some treatments, the posttest score was significantly improve. There are 9.60 for pretest score and 17.775 for posttest score. The illustration chart is shown below.

Chart 4.4



4.2 The students' response(s) toward M-U-F framework to improve their speaking ability

The questionnaire was conducted in the experimental class after the post-test was given in the same day. Each item of the questionnaires was proposed to investigate the effect of using MUF Framework in improving speaking ability. The questionnaire consisted of six questions which were divided into three categories. Those are the students' responses to speaking in English context, students' responses to the advantages of using MUF Framework to improve students' speaking skill, and students' responses to the use of MUF which was implemented in teaching speaking. The obtained data can be seen in the chart 4.5 – 4.:

Chart 4.5

Statement 1

From the chart 4.1 above, it displays that nearly all of students (55%) in experimental group agreed that they like learning speaking. There were 30% of students strongly agreed with the first statement. In other opinion, there were 15 % of all students disagreed and none of students strongly disagreed with the statement. As the result, most of the students agreed that they like English lesson especially learning speaking.

Chart 4.6

Statement 2

Second, from the chart 4.2 above, 65% of all students answered agree and 25% of the students answered strongly agree. In contrast, there were none of students who answered strongly disagreed, and only 10 % of students who answered disagree with the statement.

Chart 4.7

Statement 3

As can be seen in the chart above, it shows that nearly all of the students in the experimental class felt that the media which is given by teacher is really helpful in helping students to comprehend the material. In detail, there were 45% of the students agreed and 50% of the students strongly agreed with the statement. There

were only 10% of the students who felt that the media which is given by teacher didn't give much effort in helping them to comprehend the material.

Chart 4.8

Statement 4

As showed in the chart 4.4, 55% of all the students and 45% of the students chose to agree and strongly agree with the statement which said that Jigsaw technique helped students in improving students' vocabulary mastery. None of them who stated disagreed and strongly disagreed.

Chart 4.9

Statement 5

As showed in the chart 4.5, most of the students chose to agree and strongly agree with the statement which says that the activities which are given by teacher in the classroom improve students' speaking skill. It was proven by the high percentage

for agree and strongly agree responses which reach 45% for agree and 30% for strongly agree. Only 15% of the students chose to disagree and the rest 10% of the students chose to strongly disagree with the statement.

Chart 4.10

Statement 6

From the chart 4.6, it displays that 40% of the students in experimental group agreed and 55% of the students strongly agree that it was easier for them to comprehend the material by using the implementation of M-U-F framework rather than the conventional technique (just listen to the teacher explanation) in the learning and teaching process. In contrast, there are 10% of the students disagreed with the statement. As the result, most of the students agreed that they liked English lesson.

Discussions

The statistical calculation of the posttest scores showed that the use of M-U-F framework was effective to improve students' scores in speaking. This was proved by the mean of the experimental group which was quite higher than the scores of the control group in which the mean of experimental group was 17.775 while the mean of control group was 12,800. The two means were obvious significantly different, as also proved by the result of the Independent t-test.

Furthermore, the result of the Dependent *t*-test and the effect size test strengthened the conclusion that the treatments worked for improving students' achievement in speaking. Thus, it can be stated that the null hypothesis was rejected.

The obtained data from the findings proved that students were able to speak better. The students were found out of being able to express their ideas and speak more than they had done before the study was carried out. The implementation of M-U-F framework gave certain advantages. First, it contains some joyful technique that make student feel enjoy and fun during learning English. They can get the material from the explanation by the teacher who used some media in delivering the material. By using attractive media, teacher can get the students' attention. Moon (2005), states that the children attention span is fairly short and their concentration is easily distracted. If the teacher cannot provide the activity that students need and want, then it will be hard to teacher to get students' attention.

Second, this framework consists of "meaning" step. In term of meaning, the learning process presented in the meaningful and contextual way, based on what learner need and the situation related to children real life. Contrast with grammar-translation method implemented in control group, teacher was taught and delivered the material without context. In the control group, students did not have enough opportunity to practice the language. As stated by Pinter (2006), young learner can learn best when they have enjoy and fun the lesson if they can work out the message from contextual and meaningful activity. In every treatment given by teacher, it included the context to present the meaning. In addition, the difficulty in creating contexts as supported in delivering the material is a challenge to teachers. As mentioned in chapter 2, children focus on meaning, not on explanation of abstract concept, like sentence patterns (Moon, 2008). It also needs to be highlighted that teaching a language is not to memorize sentence, patterns, and vocabularies, but to use and combine them so they can make a good speaking product.

Last, this framework can draw the students' attention to the grammatical form. As stated before in chapter 2, the last stage of M-U-F framework is Form. In this stage, children are taught how to understand the language form naturally based on the context without just memorized the language pattern or form. In this step, even the focus is delivering and explaining the form of language, teacher should deliver it with the communicative and meaningful explanation in order to help students to understand and participate in the activities.

The use of M-U-F framework increased the interaction among the students. This framework also enabled them to correct each other. It was indicated from the students' participation during the whole process which instructed them to work groups. Basically, all the given tasks would never be done and their speaking skill would never be improved if the students did not participate during the whole process.

From the questionnaire, students show their curiosity in learning the new method that the researcher uses. It is shown in the calculation of the questionnaire that most of them like the way the researcher teach them, because the researcher teach them how to understand the material with child-friendly ways based on students characteristic and their learning style named multiple intelligences that stated by Gardner's theory (as cited in Pinter, 2005 and adapted from Allyn & Bacon, 2002) that there are eight learning styles of children named multiple intelligences.

From the first question, 55% of students in experimental group were enjoy during learning process. When people are interested in one activity, they tend to be more active and dedicated in conducting that activity. As Crow and Crow (2012) stated that interest encourages person to give attention to people, things or activities .As happened to the students in the experimental group, most of them were likely enjoyed the process of learning speaking. It is because the teacher facilitated their learning activity, in which each student was necessary to be an active and participants.

For the second question, the finding was that most of the students perceived that they often found difficulties in speaking English. It was difficult for

them to express their idea clearly in speaking English. It happens because of the different structure or grammatical sentences between their mother tongue and English. It was because they have to think and speak in the same time. They do not have a silent time to think. It was also difficult for them to speak since they only had limited vocabularies.

Third, most of them feel that they can get the new material easily when they are introduced to the new method that providing attractive media. They all agreed that the media which are given by teacher give much effort in helping them to comprehend the material.

The findings in question number four, it is obviously seen that all of students admitted that their vocabularies mastery were improved due to the implementation of M-U-F framework during the teaching and learning process. During the implementation of the treatment, the students were showed some pictures. Actually, it would be easier for students to get the clear visualization about the vocabulary. As the result, the repetition caused the students remembered the vocabularies easily. The next findings strengthened that the use of M-U-F framework was successful. It means that M-U-F framework had successfully improved the students' speaking skill of young learners. For the last question, the students strongly agree that it was easier for them to comprehend the material by using the implementation of M-U-F framework rather than the conventional technique (just listen to the teacher explanation) in the learning and teaching process.

Concluding remark

This chapter has revealed the findings of this study and also its discussion. Findings show that the use of M-U-F framework was effective to improve students' scores in speaking. The two means were obvious significantly different, as also proved by the result of the Independent t-test. Furthermore, the result of the Dependent *t*-test and the effect size test strengthened the conclusion that the treatments worked for improving students' achievement in speaking. Thus, it can be stated that the null hypothesis was rejected. From the questionnaire, most of

students show their interest to the way the researcher teaches them. They like learning by using the new method than the previous method that their teacher is used.